# Final 2006 Integrated Report to Congress on the Condition of Water Resources in Kentucky

Volume II. 303(d) List of Surface Waters





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### TABLE OF CONTENTS

| P | a | g | e |
|---|---|---|---|
|   | u | ← | · |

| Summary of the 2006 303(d) List of Impaired Waters                              | 1   |
|---|-----|
| Chapter 5. Status of TMDLs Under Development Prior to 2006                      | . 4 |
| 5.1. Kentucky River Basin Unit  | 4   |
| 5.1.1. Benson Creek Watershed Nutrient and Sediment TMDLs                       | 4   |
| 5.1.2. Boone Creek/Baughman Fork Nutrient, Organic Enrichment, and Pathogen     |     |
| TMDLs   |     |
| 5.1.3. Cane Run into North Elkhorn Creek Organic Enrichment TMDL 2006           | 5   |
| 5.1.4. Eagle Creek Watershed Pathogens TMDL 2006                                |     |
| 5.1.5. Elkhorn Creek into Kentucky River  | 6   |
| 5.1.6. Herrington Lake Nutrient TMDL  | 6   |
| 5.1.7. Hickman Creek Watershed Nutrient, Organic Enrichment and Pathogen        |     |
| TMDLs   | 6   |
| 5.1.8. Lower Howard Nutrient and Organic Enrichment TMDL                        | 7   |
| 5.1.9. McConnell Run Nutrient and Sedimentation TMDL                            | 7   |
| 5.1.10. Pathogen TMDL Development   | 7   |
| 5.1.11. Potter Fork Organic Enrichment TMDL                                     |     |
| 5.1.12. South Elkhorn Creek/Town Branch/Wolf Run Pathogen TMDL                  |     |
| 5.1.13. South Elkhorn Creek/Town Branch/Wolf Run Nutrient and Organic           |     |
| Enrichment TMDL   | 8   |
| 5.1.14. Swift Camp Creek Nutrient and/or Sediment TMDL                          | 9   |
| 5.1.15. Tate Creek Nutrient and Organic Enrichment TMDL                         |     |
| 5.2. Salt and Licking River Basins  |     |
| 5.2.1. Brooks Run Nutrient, Organic Enrichment, and Pathogen TMDLs              | 9   |
| 5.2.2. Fern Creek/Northern Ditch Nutrient and Organic Enrichment TMDLs          | 10  |
| 5.2.3. Hardins Creek Nutrient, Organic Enrichment and Sediment TMDLs            | 10  |
| 5.2.4. Beargrass Creek Organic Enrichment and Pathogen TMDLs                    | 11  |
| 5.2.5. Woolper Creek Nutrient, Organic Enrichment, Suspended Solids and         |     |
| Sediment TMDLs  | 12  |
| 5.2.6. Banklick Creek Nutrient, Organic Enrichment, Sediment, and Pathogen      |     |
| TMDLs   |     |
| 5.2.7. Elk Fork Sediment TMDL   |     |
| 5.2.8. Fleming Creek Nutrient and Organic Enrichment TMDL                       | 13  |
| 5.2.9. Hinkston Creek Nutrient and Sediment TMDL                                | 14  |
| 5.2.10. Little Stoner Creek Pathogen TMDL                                       |     |
| 5.2.11. Strodes Creek Nutrient, Organic Enrichment, Pathogen, and Sedimentation | n   |
| TMDL  | 14  |
| 5.2.12. Three Mile Creek Nutrient, Organic Enrichment and Pathogen TMDL         |     |
| 5.3. Green and Tradewater River Basins  | 15  |
| 5.3.1. Bacon Creek Pathogens TMDL   | 15  |
| 5.3.2. pH TMDL Development  | 15  |
| 5.4. Upper Cumberland, Lower Cumberland, Mississippi, and Tennessee River       |     |
| Basins  | 16  |

| 5.4.1. Little River Watershed TMDLs                                       | 16 |
|---|----|
| 5.4.2. Roundstone Creek Pathogen TMDLs                                    | 18 |
| 5.4.3. Bayou Creek Beta Particles and Metals TMDLs                        | 18 |
| 5.4.4. Clarks River Watershed Nutrient, Organic Enrichment, and Pathogen  |    |
| TMDLs   | 19 |
| 5.5. Big Sandy, Little Sandy, and Tygarts Basins                          | 19 |
| 5.6. Ohio River Mainstem  | 20 |
| Chapter 6. TMDLs Planned for Development During 2006                      | 21 |
| 6.1. Kentucky River Basin   |    |
| 6.1.1. Dix River Watershed  | 21 |
| 6.1.2. Eagle Creek Watershed  | 21 |
| 6.1.3. Pathogen TMDLs   | 22 |
| 6.2. Salt and Licking River Basins  | 22 |
| 6.3. Green and Tradewater River Basins                                    | 23 |
| 6.3.1. Hopkins County TMDLs   | 23 |
| 6.3.2. Pathogen TMDLs   | 23 |
| 6.3.3. Panther Creek and Long Falls Creek Watersheds                      | 24 |
| 6.4. Upper Cumberland, Lower Cumberland, Mississippi, and Tennessee River |    |
| Basins  | 25 |
| 6.4.1. Upper Cumberland/Rockcastle River Organic Enrichment TMDLs         | 25 |
| 6.4.2. Lower Cumberland Pathogen TMDLs                                    | 26 |
| 6.5. Big Sandy, Little Sandy, and Tygarts Basins                          | 26 |
| Chapter 7. TMDLs Planned for Development During 2007                      | 27 |
| 7.1. Kentucky River Basin   | 27 |
| 7.1.1. Cane Run Creek TMDLs   | 27 |
| 7.2. Salt/Licking River Basin   | 27 |
| 7.2.1. Gunpowder Creek TMDLs  | 27 |
| 7.3. Green/Tradewater Basin   | 28 |
| 7.3.1. Pathogen TMDLs   | 28 |
| 7.3.2. Valley Creek Watershed TMDLs                                       | 28 |
| 7.3.3. Deer Creek Watershed TMDLs   | 28 |
| 7.3.4. Bacon Creek Watershed TMDLs  | 29 |
| 7.3.5. Clear Creek Watershed TMDLs  | 29 |
| 7.4. Tennessee/Mississippi/Cumberland Basin                               | 30 |
| 7.4.1. Pathogen TMDLs   |    |
| 7.4.2. Pleasant Grove Creek Watershed TMDLs                               |    |
| 7.4.3. Laurel River Watershed TMDLs                                       | 30 |
| 7.5. Big Sandy, Little Sandy, and Tygarts Basin                           |    |
| 7.5.1. Elkhorn Creek Watershed TMDLs                                      |    |
| 7.5.2. Right Fork Beaver Creek Watershed TMDLs                            |    |
| Chapter 8. Kentucky River Basin Unit 303(d) List                          |    |
| 8.1 Kentucky River Basin Streams  |    |
| 8.2 Kentucky River Basin Lakes  |    |
| Chapter 9. Salt-Licking Basin Unit 303(d) List                            |    |
| 9.1 Licking River Basin Streams   |    |
| 9.2 Licking River Basin Lakes   | 91 |

| 9.3 Ohio River Basin Streams  | 92                        |
|---|---------------------------|
| 9.5 Salt River Basin Streams  |                           |
| 9.6 Salt River Basin Lakes  | 121                       |
| Chapter 10. Tennessee-Mississippi-Cumberland Basin Unit 303(d) List   |                           |
| 10.1 Lower Cumberland River Basin Streams   |                           |
| 10.2 Lower Cumberland River Basin Lakes   | 132                       |
| 10.3 Mississippi River Basin Streams  | 133                       |
| 10.4 Mississippi River Basin Lakes  | 140                       |
| 10.5 Ohio River Basin Streams   | 141                       |
| 10.6 Ohio River Basin Lakes   | 143                       |
| 10.7 Tennessee River Basin Streams  | 144                       |
| 10.8 Upper Cumberland River Basin Streams   | 151                       |
| 10.9 Upper Cumberland River Basin Lakes   | 167                       |
| Chapter 11. Green-Tradewater Basin Unit 303(d) List   |                           |
| 11.1. Green River Basin Streams   |                           |
| 11.2. Green River Basin Lakes   | 201                       |
| 11.3. Ohio River Basin Streams  | 203                       |
| 11.4. Ohio River Basin Lakes  | 206                       |
| 11.5. Tradewater River Basin Streams  | 207                       |
| 11.6. Tradewater River Basin Lakes  | 213                       |
| Chapter 12. Big Sandy-Little Sandy-Tygarts Basin Unit 303(d) List   | 214                       |
| 12.1 Big Sandy River Basin Streams  | 214                       |
| 12.2 Big Sandy River Basin Lakes  | 235                       |
| 12.3 Little Sandy River Basin Streams   | 236                       |
| 12.4 Little Sandy River Basin Lakes   | 241                       |
| 12.5 Ohio River Basin Streams   | 242                       |
| 12.6 Tygarts Creek Basin Streams  | 243                       |
| Chapter 13. Ohio River Basin Unit 303(d) List   | 245                       |
| TABLES  |                           |
| Table 1. Summary of Impairments by BMU  Table 3.2-1. Reporting categories assigned to surface waters during the ass process  Table 3.2-2. List of those impairments or causes considered pollution by the summary of Impairments or causes considered pollution by the summary of Impairments or causes considered pollution by the summary of Impairments or causes considered pollution by the summary of Impairments or causes considered pollution by the summary of Impairments by BMU | sessment<br>E.1<br>ne DOW |
| (ADB numerical codes listed)  | •                         |
| Table 3.2.1-2 Biological criteria for assessment of warm water aquatic habi   |                           |
| (streams) use support   |                           |
| Table 3.2.1-1. Criteria for lake/reservoir use support classification   |                           |

### **APPENDICES**

- Appendix A. Table of Category 5A Listings for the 5 BMUs
- Appendix B. Table of Category 5A Listings for the Ohio River Mainstem
- Appendix C. Table of Category 5B Listings for the 5 BMUs
- Appendix D. Table of Category 4A Listings for the 5 BMUs
- Appendix E. Assessment Methodology

### Summary of the 2006 303(d) List of Impaired Waters

The 1972 Federal Water Pollution Control Act, commonly known as The Clean Water Act, requires States to assess and report current water quality conditions to Congress biannually. While many agencies and individuals contribute assessment data, the Division of Water (DOW) of the Kentucky Department for Environmental Protection is responsible for Section 305(b) and Section 303(d) reporting requirements for surface waters.

The 2006 Integrated Report (IR) replaces the 305(b) report and 303(d) report previously prepared by DOW. The 305(b) portion of the report (Volume I) lists all water quality assessment results for surface waters (streams and lakes or reservoirs) in Kentucky. The 303(d) portion of the report (Volume II) is a subset of these assessed waters including all waters not supporting one or more designated uses and requiring the development of a Total Maximum Daily Load (TMDL).

Since 1998, Kentucky has monitored surface waters using a five-year rotating watershed management approach in which each of the five major Basin Management Units (BMUs) receives intensive monitoring in sequential years over the five-year cycle. To make the 303(d) list reflective of the current 305(b) assessment results, the 2006 303(d) list contains new listings of impaired waters from assessments made in 2003 through 2005 from the Big Sandy-Little Sandy-Tygarts BMU, the Kentucky River BMU and the Salt-Licking BMU. The 2003 assessment results from the Big Sandy-Little Sandy-Tygarts BMU were reported in the 2004 305(b) report but were not completed in time for the 2004 303(d) report, so these results as well as the 2004 and 2005 assessment results appear for the first time in the 2006 IR. Because the Big Sandy-Little Sandy-Tygarts BMU had not been monitored intensively since the five-year watershed management approach began in 1998, the number of impaired waters reported in this Volume has increased notably over the number reported in the 2004 303(d). However, this increase in impaired waters does not represent a declining trend but instead is a result of increased monitoring efforts in regions that previously had only a few monitoring stations on larger rivers and streams.

In previous 303(d) report submittals, an impaired waterbody or segment of a waterbody was reported along with each individual cause of the impairment; this pairing

of segment and cause is known as a "waterbody/pollutant combination." In the 2006 IR, the term "cause" has been replaced by the word "impairment." Another change is all listed waterbody/pollutant combinations are now placed into Category 5A, which is synonymous with the 303(d) list and contains all impaired waters requiring a TMDL. Category 4C is reserved for nonsupporting waters where no pollutant can be identified; instead the impairment is caused by pollution. Examples of pollution would be a stream with a biological community stressed by drought or a lake that contains exotic aquatic plants, such as Eurasian water milfoil. Waters placed in Category 4C do not require a TMDL.

Kentucky's impaired waters now total 5163 miles on 910 stream segments and 98,391 acres on 45 lakes and reservoirs. Table 1 summarizes these impairments by BMU.

Table 1. Summary of Impairments by BMU

|                  | Impaired St | reams            | Impaired Lakes |                  |
|------------------|-------------|------------------|----------------|------------------|
|                  | Stream      | Stream Number of |                | Number of Lakes/ |
| BMU              | Miles       | Segments         | Lake Acres     | Reservoirs       |
| Kentucky         | 1101        | 166              | 6456           | 12               |
| Salt/Licking     | 1321        | 205              | 12365          | 13               |
| Four Rivers      | 852         | 200              | 51599          | 7                |
| Green/Tradewater | 1108        | 198              | 24220          | 10               |
| Sandy/Tygarts    | 782         | 141              | 3751           | 3                |

There are 280 waterbody/pollutant combinations for which a TMDL is currently under development. While the DOW is responsible for submitting TMDLs to EPA, many are being developed by other agencies, including the Ohio River Valley Water Sanitation Commission (ORSANCO), universities, consultants, and municipalities. The DOW is committed to beginning TMDL development on at least 100 waterbody/pollutant combinations annually over the next five years; thus the pace of TMDL development is expected to significantly increase.

To date, DOW has submitted and EPA has approved TMDLs for 76 waterbody/pollutant combinations. EPA has also approved delisting requests for 179 waterbody/pollutant combinations. Delisting approval is granted when DOW has demonstrated that a listed segment is no longer impaired by a specific pollutant. When delisting approval is granted, a TMDL is no longer required for the specific waterbody/pollutant combination, although the segment may still be listed as impaired for other pollutants.

Accompanying the 303(d) list is the assessment methodology from Section 3.2 of Volume I of the IR. This section describes the assessment process for the various designated uses. Further discussion also is provided of the categories into which assessed waters are placed and the difference between pollutants and pollution.

Unless otherwise stated, DOW identifies listed segments as first priority for TMDL development if any impairment causes the segment to be in nonsupport. Other listed segments that are in partial support are identified as second priority.

Chapter 5. Status of TMDLs Under Development Prior to 2006

### 5.1. Kentucky River Basin Unit

### 5.1.1. Benson Creek Watershed Nutrient and Sediment TMDLs

| Stream Name                   | County   | River Miles | Pollutant   |
|-------------------------------|----------|-------------|---|
| Benson Cr. into KY River      | Franklin | 0.0 to 4.6  | Sedimentation/siltation                           |
| Benson Cr. into KY River      | Franklin | 4.6 to 6.7  | Sedimentation/siltation                           |
| Benson Cr. into KY River      | Franklin | 6.7 to 13.4 | Sedimentation/siltation                           |
| Goose Cr. Into Benson Cr.     | Shelby   | 0.0 to 1.8  | Sedimentation/siltation                           |
| N. Benson Cr. into Benson Cr. | Franklin | 0.8 to 2.0  | Sedimentation/siltation                           |
| N. Fk. N. Benson Creek        | Franklin | 0.0 to 2.2  | Sedimentation/siltation                           |
| Benson Cr. into KY River      | Franklin | 4.6 to 6.7  | Nutrient/eutrophication biological indicators     |
| Benson Cr. into KY River      | Franklin | 6.7 to 13.4 | Nutrient/eutrophication biological indicators     |
| Goose Cr. into Benson Cr.     | Shelby   | 1.9 to 4.2  | Impairment unknown                                |
| N. Benson Cr. into Benson Cr. | Franklin | 0.8 to 2.0  | Organic enrichment (sewage) biological indicators |

The Kentucky Division of Water (KDOW) has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the sediment TMDL once data collection is completed.

## 5.1.2. Boone Creek/Baughman Fork Nutrient, Organic Enrichment, and Pathogen TMDLs

| Stream Name               | County  | River Miles | Pollutant                   |
|---------------------------|---------|-------------|-----------------------------|
|                           |         |             | Organic enrichment (sewage) |
| Boone Creek into KY River | Fayette | 0.0 to 7.4  | biological indicators       |
|                           |         |             | Nutrient/eutrophication     |
| Boone Creek into KY River | Fayette | 7.4 to 12.6 | biological indicators       |
| Boone Creek into KY River | Fayette | 7.4 to 12.6 | Pathogens                   |

| Stream Name                  | County  | River Miles | Pollutant                   |
|------------------------------|---------|-------------|-----------------------------|
|                              |         |             | Nutrient/eutrophication     |
| Baughman Fork into Boone Cr. | Fayette | 0.0 to 2.7  | biological indicators       |
|                              |         |             | Organic enrichment (sewage) |
| Baughman Fork into Boone Cr. | Fayette | 0.0 to 2.7  | biological indicators       |

KDOW completed sample collection during 2004. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.1.3. Cane Run into North Elkhorn Creek Organic Enrichment TMDLs 2006

| Stream Name                  | County  | River Miles | Pollutant |
|------------------------------|---------|-------------|-----------|
| Cane Run into N. Elkhorn Cr. | Scott   | 3.0 to 9.6  | Pathogens |
| Cane Run into N. Elkhorn Cr. | Fayette | 9.6 to 17.4 | Pathogens |

The Kentucky Water Resources Research Institute (KWRRI) is developing the pathogen TMDLs for Cane Run. Completion of these TMDLs has been delayed due to the extensive karst influences in the watershed that have necessitated more advanced modeling efforts and subsequent data collection.

#### **5.1.4. Eagle Creek Watershed Pathogens TMDL 2006**

| Stream Name | County | River Miles  | Pollutant |
|-------------|--------|--------------|-----------|
| Eagle Creek | Owen   | 15.3 to 28.5 | Pathogens |

An EPA Region 4 104(b)3 grant was awarded for TMDL development for pathogens in this watershed. The TMDL is being developed by The Tracy Farmer Center for the Environment. Public notice is anticipated for 2007.

### 5.1.5. Elkhorn Creek into Kentucky River

| Stream Name                 | County   | River Miles | Pollutant |
|-----------------------------|----------|-------------|-----------|
| Elkhorn Creek into KY River | Franklin | 0.0 to 18.2 | Pathogens |

The KWRRI received PRIDE funding to collect pathogen data on this stream segment. The KDOW will use this data to develop the pathogen TMDL or delist the segment if no impairment is found. A draft TMDL is anticipated for 2008.

### **5.1.6.** Herrington Lake Nutrient TMDL

| Stream Name     | County  | Lake Acres | Pollutant                                     |
|-----------------|---------|------------|---|
| Herrington Lake | Garrard | 2940       | Dissolved oxygen                              |
| Herrington Lake | Garrard | 2940       | Nutrient/eutrophication biological indicators |

Additional sampling on Herrington Lake will be performed during 2006. A draft TMDL is anticipated for 2007.

### 5.1.7. Hickman Creek Watershed Nutrient, Organic Enrichment and Pathogen TMDLs

| Stream Name                       | County    | <b>River Miles</b> | Pollutant               |
|-----------------------------------|-----------|--------------------|-------------------------|
| East Hickman Cr. into Hickman Cr. | Fayette   | 4.2 to 10.2        | Pathogens               |
|                                   |           |                    | Nutrient/eutrophication |
| East Hickman Cr. into Hickman Cr. | Fayette   | 4.2 to 10.2        | biological indicators   |
| East Hickman Cr. into Hickman Cr. | Fayette   | 12.6 to 14.0       | Pathogens               |
|                                   |           |                    | Nutrient/eutrophication |
| Hickman Creek into KY River       | Jessamine | 0.0-6.0            | biological indicators   |
|                                   |           |                    | Nutrient/eutrophication |
| Hickman Creek into KY River       | Jessamine | 6.0 to 25.5        | biological indicators   |
|                                   |           |                    | Organic enrichment      |
|                                   |           |                    | (sewage) biological     |
| West Hickman Cr. into Hickman Cr. | Jessamine | 0.0 to 3.0         | indicators              |
| West Hickman Cr. into Hickman Cr. | Jessamine | 0.0 to 3.0         | Pathogens               |
|                                   |           |                    | Organic enrichment      |
|                                   |           |                    | (sewage) biological     |
| West Hickman Cr. into Hickman Cr. | Jessamine | 3.0 to 8.6         | indicators              |
| West Hickman Cr. into Hickman Cr. | Jessamine | 3.0 to 8.6         | Sedimentation/siltation |

KDOW has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the sediment TMDL once data collection is completed.

### 5.1.8. Lower Howard Nutrient and Organic Enrichment TMDL

| Stream Name              | County | River Miles | Pollutant                   |
|--------------------------|--------|-------------|-----------------------------|
| Lower Howard Cr. into KY | ,      |             | Nutrient/eutrophication     |
| River                    | Clark  | 2.7 to 6.2  | biological indicators       |
| Lower Howard Cr. into KY |        |             | Organic enrichment (sewage) |
| River                    | Clark  | 2.7 to 6.2  | biological indicators       |

KDOW completed sample collection during 2004. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

#### 5.1.9. McConnell Run Nutrient and Sedimentation TMDL

| Stream Name                       | County | River Miles | Pollutant               |
|-----------------------------------|--------|-------------|-------------------------|
| McConnell Run into N. Fk. Elkhorn |        |             | Nutrient/eutrophication |
| Cr.                               | Scott  | 0.0 to 4.4  | biological indicators   |
| McConnell Run into N. Fk. Elkhorn |        |             |                         |
| Cr.                               | Scott  | 0.0 to 4.4  | Sedimentation/siltation |

KDOW has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the sediment TMDL once data collection is completed.

#### 5.1.10. Pathogen TMDL Development

| Stream Name                         | County  | River Miles  | Pollutant |
|-------------------------------------|---------|--------------|-----------|
| Cane Creek into Red River           | Powell  | 0.0 to 3.1   | Pathogens |
| North Elkhorn Cr into Elkhorn Creek | Fayette | 66.0 to 73.8 | Pathogens |

KDOW collected <u>E. coli</u> data during the primary contact recreation season of 2005. Additional data was collected for North Elkhorn during 2006. A draft pathogen TMDL is anticipated for Cane during 2006 and North Elkhorn during 2007.

### 5.1.11. Potter Fork Organic Enrichment TMDL

| Stream Name                | County  | River Miles | Pollutant                   |
|----------------------------|---------|-------------|-----------------------------|
|                            |         |             | Organic enrichment (sewage) |
| Potter Fork into Boone Cr. | Letcher | 0.0 to 4.4  | biological indicators       |

KDOW completed sample collection during 2004. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.1.12. South Elkhorn Creek/Town Branch/Wolf Run Pathogen TMDL

| Stream Name                        | County  | River Miles  | Pollutant |
|------------------------------------|---------|--------------|-----------|
| South Elkhorn Cr. into Elkhorn Cr. | Fayette | 16.6 to 34.5 | Pathogens |
| Town Br. into South Elkhorn Cr.    | Fayette | 0.0 to 12.1  | Pathogens |
| Wolf Run into Town Br.             | Fayette | 0.0 to 4.1   | Pathogens |

The Kentucky Water Resources Research Institute is developing the pathogens TMDL for South Elkhorn, Town Branch and Wolf Run. A draft TMDL has been submitted to KDOW and revisions will be made prior to public notice. Public Notice is anticipated for early Spring 2007.

### **5.1.13.** South Elkhorn Creek/Town Branch/Wolf Run Nutrient and Organic Enrichment TMDL

| Stream Name                     | County  | River Miles  | Pollutant                   |
|---------------------------------|---------|--------------|-----------------------------|
| South Elkhorn Cr. into Elkhorn  |         |              | Nutrient/eutrophication     |
| Cr.                             | Fayette | 16.6 to 34.5 | biological indicators       |
|                                 |         |              | Nutrient/eutrophication     |
| Town Br. into South Elkhorn Cr. | Fayette | 0.0 to 11.5  | biological indicators       |
|                                 |         |              | Organic enrichment (sewage) |
| Town Br. into South Elkhorn Cr. | Fayette | 0.0 to 11.5  | biological indicators       |
|                                 |         |              | Nutrient/eutrophication     |
| Wolf Run into Town Br.          | Fayette | 0.0 to 4.1   | biological indicators       |

As part of a 104(b)3 contract, the Kentucky Water Resources Research Institute is developing the TMDL for South Elkhorn and Town Branch. Since the awarding of the contract, Wolf Run has also been listed for nutrients. A draft TMDL has been submitted to KDOW. Revisions will be made to the document to include a TMDL for Wolf Run. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.1.14. Swift Camp Creek Nutrient and/or Sediment TMDL

| Stream Name                     | County | River Miles | Pollutant               |
|---------------------------------|--------|-------------|-------------------------|
| Swift Camp Creek into Red River | Wolfe  | 0.0 to 13.8 | Impairment unknown      |
| UT to Swift Camp Cr. at RM 11.7 | Wolfe  | 0.0 to 1.5  | Sedimentation/siltation |

Nutrient and suspended sediment data have been collected to attempt to define the cause of the unknown impairment. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for sediment TMDL development and will develop the TMDL once data collection is complete.

5.1.15. Tate Creek Nutrient and Organic Enrichment TMDL

| Stream Name            | County  | River Miles | Pollutant                   |
|------------------------|---------|-------------|-----------------------------|
|                        |         |             | Nutrient/eutrophication     |
| Tate Cr. into KY River | Madison | 0.0 to 6.5  | biological indicators       |
|                        |         |             | Organic enrichment (sewage) |
| Tate Cr. into KY River | Madison | 0.0 to 6.5  | biological indicators       |

KDOW completed sample collection during 2004. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.2. Salt and Licking River Basins

### 5.2.1. Brooks Run Nutrient, Organic Enrichment, and Pathogen TMDLs

| Stream Name                | County  | River Miles | Pollutant                   |
|----------------------------|---------|-------------|-----------------------------|
|                            |         |             | Organic enrichment (sewage) |
| Brooks Run                 | Bullitt | 0.0 to 2.5  | biological indicators       |
|                            |         |             | Organic enrichment (sewage) |
| Brooks Run                 | Bullitt | 2.5 to 4.1  | biological indicators       |
| Brooks Run                 | Bullitt | 2.5 to 4.1  | Pathogens                   |
|                            |         |             | Organic enrichment (sewage) |
| Brooks Run                 | Bullitt | 4.1 to 6.1  | biological indicators       |
| Brooks Run                 | Bullitt | 4.1 to 6.1  | Pathogens                   |
| UT to Brooks Run at RM 4.1 | Bullitt | 0.0 to 2.0  | Pathogens                   |
|                            |         |             | Organic enrichment (sewage) |
| UT to Brooks Run at RM 4.1 | Bullitt | 0.0 to 2.0  | biological indicators       |

KDOW has completed data collection for these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

5.2.2. Fern Creek/Northern Ditch Nutrient and Organic Enrichment TMDLs

| Strea | m Name                    |      | County    | River Miles | Pollutant               |
|-------|---------------------------|------|-----------|-------------|-------------------------|
| Fern  | Cr./Northern Ditch into   | Pond |           |             |                         |
| Cr.   |                           |      | Jefferson | 0.0 to 1.3  | Ammonia (unionized)     |
| Fern  | Cr./Northern Ditch into 1 | Pond |           |             | Nutrient/eutrophication |
| Cr.   |                           |      | Jefferson | 0.0 to 1.3  | biological indicators   |
|       |                           |      |           |             | Organic enrichment      |
| Fern  | Cr./Northern Ditch into   | Pond |           |             | (sewage) biological     |
| Cr.   |                           |      | Jefferson | 0.0 to 1.3  | indicators              |
|       |                           |      |           |             | Organic enrichment      |
| Fern  | Cr./Northern Ditch into   | Pond |           |             | (sewage) biological     |
| Cr.   |                           |      | Jefferson | 1.3 to 4.4  | indicators              |
|       |                           |      |           |             | Organic enrichment      |
| Fern  | Cr./Northern Ditch into   | Pond |           |             | (sewage) biological     |
| Cr.   |                           |      | Jefferson | 4.4 to 5.9  | indicators              |

KDOW completed sample collection during 2005. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

5.2.3. Hardins Creek Nutrient, Organic Enrichment and Sediment TMDLs

| Stream Name              | County       | <b>River Miles</b> | Pollutant                   |
|--------------------------|--------------|--------------------|-----------------------------|
| Hardins Cr. into Sinking |              |                    |                             |
| Cr.                      | Breckinridge | 0.0 to 5.0         | Sedimentation/siltation     |
| Hardins Cr. into Sinking |              |                    | Nutrient/eutrophication     |
| Cr.                      | Breckinridge | 0.0 to 5.0         | biological indicators       |
| Hardins Cr. into Sinking |              |                    | Organic enrichment (sewage) |
| Cr.                      | Breckinridge |                    | biological indicators       |

KDOW has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most

important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

### 5.2.4. Beargrass Creek Organic Enrichment and Pathogen TMDLs

| Stream Name                                 | County    | <b>River Miles</b> | Pollutant   |
|---|-----------|--------------------|---|
| Middle Fk. Beargrass Cr. into Beargrass     |           |                    |   |
| Cr.   | Jefferson | 0.0 to 2.0         | Pathogens   |
| Middle Fk. Beargrass Cr. into Beargrass Cr. | Jefferson | 0.0 to 2.0         | Organic enrichment (sewage) biological indicators |
| Middle Fk. Beargrass Cr. into Beargrass     |           |                    | Pathogens   |
| Cr.   | Jefferson | 2.0 to 2.9         |   |
| Middle Fk. Beargrass Cr. into Beargrass Cr. | Jefferson | 2.9 to 5.8         | Pathogens   |
| Middle Fk. Beargrass Cr. into Beargrass     |           |                    | Pathogens   |
| Cr.   | Jefferson | 5.8 to 15.3        |   |
| Muddy Fork into Beargrass Creek             | Jefferson | 0.0 to 6.9         | Pathogens   |
| South Fork Beargrass Creek                  | Jefferson | 0.0 to 2.7         | Pathogens   |
| South Fork Beargrass Creek                  | Jefferson | 0.0 to 2.7         | Organic enrichment (sewage) biological indicators |
| South Fork Beargrass Creek                  | Jefferson | 2.7 to 13.6        | Pathogens   |
| _   |           |                    | Organic enrichment (sewage) biological            |
| South Fork Beargrass Creek                  | Jefferson | 2.7 to 13.6        | indicators  |

The Metropolitan Sewer District (MSD) along with the KWRRI are developing these TMDLs. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.2.5. Woolper Creek Nutrient, Organic Enrichment, Suspended Solids and Sediment TMDLs

| Stream Name                 | County | River Miles  | Pollutant                   |
|-----------------------------|--------|--------------|-----------------------------|
|                             |        |              | Nutrient/eutrophication     |
| Woolper Cr. into Ohio River | Boone  | 11.9 to 14.0 | biological indicators       |
|                             |        |              | Organic enrichment (sewage) |
| Woolper Cr. into Ohio River | Boone  | 11.9 to 14.0 | biological indicators       |
| Woolper Cr. into Ohio River | Boone  | 11.9 to 14.0 | Total suspended solids      |
|                             |        |              | Nutrient/eutrophication     |
| Allen Fork into Woolper Cr. | Boone  | 2.0 to 4.6   | biological indicators       |
| Allen Fork into Woolper Cr. | Boone  | 2.0 to 4.6   | Sedimentation/siltation     |

KDOW has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

**5.2.6.** Banklick Creek Nutrient, Organic Enrichment, Sediment, and Pathogen TMDLs

| Stream Name    | County | River Miles | Pollutant                                     |
|----------------|--------|-------------|---|
| Banklick Creek | Kenton | 0.0 to 3.5  | Pathogens                                     |
|                |        |             | Organic enrichment (sewage) biological        |
| Banklick Creek | Kenton | 0.0 to 3.5  | indicators                                    |
| Banklick Creek | Kenton | 0.0 to 3.5  | Sedimentation/siltation                       |
| Banklick Creek | Kenton | 3.5 to 8.2  | Pathogens                                     |
|                |        |             | Organic enrichment (sewage) biological        |
| Banklick Creek | Kenton | 3.5 to 8.2  | indicators                                    |
| Banklick Creek | Kenton | 3.5 to 8.2  | Sedimentation/siltation                       |
| Banklick Creek | Kenton | 3.5 to 8.2  | Nutrient/eutrophication biological indicators |
| Banklick Creek | Kenton | 8.2 to 19.2 | Nutrient/eutrophication biological indicators |
|                |        | 8.2 to 19.2 | Organic enrichment (sewage) biological        |
| Banklick Creek | Kenton |             | indicators                                    |
| Banklick Creek | Kenton | 8.2 to 19.2 | Pathogens                                     |

Sanitation District #1has collected data for these stream segments. KDOW will explore the option of having these TMDLs developed by a third party. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

5.2.7. Elk Fork Sediment TMDL

| Stream Name                  | County | River Miles  | Pollutant               |
|------------------------------|--------|--------------|-------------------------|
| Elk Fork into Licking River  | Morgan | 0.0 to 4.9   | Sedimentation/siltation |
| Elk Fork into Licking River  | Morgan | 4.9 to 10.5  | Sedimentation/siltation |
| Elk Fork into Licking River  | Morgan | 4.9 to 10.5  | Turbidity               |
| Elk Fork into Licking River  | Morgan | 12.6 to 14.7 | Sedimentation/siltation |
| Elk Fork into Licking River  | Morgan | 12.6 to 14.7 | Turbidity               |
| Straight Creek into Elk Fork | Morgan | 0.0 to 1.8   | Sedimentation/siltation |
| Straight Creek into Elk Fork | Morgan | 0.0 to 1.8   | Turbidity               |

KDOW has collected suspended sediment data on these streams. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

5.2.8. Fleming Creek Nutrient and Organic Enrichment TMDL

| Stream Name                    | County  | River Miles  | Pollutant   |  |
|--------------------------------|---------|--------------|---|--|
|                                |         |              | Organic enrichment (sewage)                       |  |
| Allison Cr. into Fleming Cr.   | Fleming | 0.0 to 4.9   | biological indicators                             |  |
| Allison Cr. into Fleming Cr.   | Fleming | 0.0 to 4.9   | Nutrients (phosphorus)                            |  |
| Craintown Br. into Fleming Cr. | Fleming | 0.0 to 3.6   | Nutrients (phosphorus)                            |  |
| Doty Cr. into Fleming Cr.      | Fleming | 0.0 to 2.3   | Nutrient/eutrophication biological indicators     |  |
| Fleming Cr. into Licking River | Fleming | 0.0 to 12.8  | Nutrients (phosphorus)                            |  |
| Fleming Cr. into Licking River | Fleming | 0.0 to 12.8  | Pathogens   |  |
| Fleming Cr. into Licking River | Fleming | 0.0 to 12.8  | Nutrient/eutrophication biological indicators     |  |
| Fleming Cr. into Licking River | Fleming | 12.8 to 16.0 | Pathogens   |  |
| Fleming Cr. into Licking River | Fleming | 12.8 to 16.0 | Nutrient/eutrophication biological indicators     |  |
| Fleming Cr. into Licking River | Fleming | 20.8 to 39.4 | Pathogens   |  |
| Fleming Cr. into Licking River | Fleming | 20.8 to 39.4 | Nutrient/eutrophication biological indicators     |  |
| Fleming Cr. into Licking River | Fleming | 20.8 to 39.4 | Nutrients (phosphorus)                            |  |
| Fleming Cr. into Licking River | Fleming | 20.8 to 39.4 | Organic enrichment (sewage) biological indicators |  |
| Logan Run into Fleming Cr.     | Fleming | 0.0 to 2.3   | Nutrient/eutrophication biological indicators     |  |

A draft TMDL was developed by Tetra Tech and was submitted to KDOW.

KDOW will revise the TMDL. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.2.9. Hinkston Creek Nutrient and Sediment TMDL

| Stream Name                         | County     | <b>River Miles</b> | Pollutant               |
|-------------------------------------|------------|--------------------|-------------------------|
| Hinkston Cr. into S. Fk. Licking R. | Montgomery | 51.5 to 65.9       | Sedimentation/siltation |
|                                     |            |                    | Nutrient/eutrophication |
| Hinkston Cr. into S. Fk. Licking R. | Montgomery | 51.5 to 65.9       | biological indicators   |

KDOW has collected nutrient and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

### **5.2.10.** Little Stoner Creek Pathogen TMDL

| Stream Name                           | County | River Miles | Pollutant |
|---------------------------------------|--------|-------------|-----------|
| Little Stoner Creek into Stoner Creek | Clark  | 0.0 to 5.0  | Pathogens |

KDOW began sample collection on this stream during the primary contact recreation season for 2005. Due to the drought conditions, additional sampling was performed during 2006. A draft TMDL is anticipated for 2007.

### 5.2.11. Strodes Creek Nutrient, Organic Enrichment, Pathogen, and Sedimentation TMDL

| Stream Name                     | County  | River Miles | Pollutant               |
|---------------------------------|---------|-------------|-------------------------|
|                                 |         |             | Nutrient/eutrophication |
| Strodes Creek into Stoner Creek | Bourbon | 2.7 to 19.3 | biological indicators   |
|                                 |         |             | Organic enrichment      |
|                                 |         |             | (sewage) biological     |
| Strodes Creek into Stoner Creek | Bourbon | 2.7 to 19.3 | indicators              |
| Strodes Creek into Stoner Creek | Bourbon | 2.7 to 19.3 | Pathogens               |
| Strodes Creek into Stoner Creek | Bourbon | 2.7 to 19.3 | Sedimentation/siltation |

KDOW has collected nutrient, pathogen and suspended sediment data on these streams. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

### 5.2.12. Three Mile Creek Nutrient, Organic Enrichment and Pathogen TMDL

| Stream Name                      | County   | <b>River Miles</b> | Pollutant                   |
|----------------------------------|----------|--------------------|-----------------------------|
|                                  |          |                    | Organic enrichment (sewage) |
| Threemile Cr. into Licking River | Campbell | 0.1 to 4.7         | biological indicators       |
| Threemile Cr. into Licking River | Campbell | 0.1  to  4.7       | Pathogens                   |

KDOW completed data collection for this stream during 2005. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### 5.3. Green and Tradewater River Basins

#### 5.3.1. Bacon Creek Pathogens TMDL

| Stream Name                  | County | River Miles  | Pollutant |
|------------------------------|--------|--------------|-----------|
| Bacon Creek into Nolin River | Hart   | 26.3 to 31.2 | Pathogens |

Western Kentucky University has been contracted to collect data for this stream. Sampling will continue through the 2008 primary contact recreation season. KDOW will develop the TMDL. A draft TMDL is anticipated for 2009.

### **5.3.2.** pH TMDL Development

| Stream Name                 | County     | River Miles  | Pollutant |
|-----------------------------|------------|--------------|-----------|
| Cypress Creek               | Muhlenburg | 22.9 to 25.0 | рН        |
| Cypress Creek               | Muhlenburg | 25.0 to 33.3 | рН        |
| Flat Cr into Pond River     | Hopkins    | 0.0 to 10.6  | рН        |
| Pond Creek into Green River | Muhlenburg | 9.4 to 13.6  | рН        |
| Pond Creek into Green River | Muhlenburg | 13.6 to 16.3 | рН        |
| Pond Creek into Green River | Muhlenburg | 16.3 to 20.0 | рН        |
| Pond Creek into Green River | Muhlenburg | 20.0 to 23.8 | рН        |

The KWRRI has submitted draft pH TMDLs to KDOW. The TMDLs are being revised. Public notice is anticipated for Spring 2007.

### **5.4.** Upper Cumberland, Lower Cumberland, Mississippi, and Tennessee River Basins

### **5.4.1. Little River Watershed TMDLs**

| Stream Name                            | County    | River Miles  | Pollutant                   |
|--|-----------|--------------|-----------------------------|
|  |           |              | Nutrient/eutrophication     |
| Little River into Cumberland River     | Trigg     | 23.6 to 33.1 | biological indicators       |
| Little River into Cumberland River     | Trigg     | 23.6 to 33.1 | Iron                        |
|  |           |              | Nutrient/eutrophication     |
| Little River into Cumberland River     | Trigg     | 33.1 to 34.4 | biological indicators       |
| Little River into Cumberland River     | Trigg     | 33.1 to 34.4 | Pathogens                   |
|  |           |              | Nutrient/eutrophication     |
| Little River into Cumberland River     | Trigg     | 34.4 to 48.4 | biological indicators       |
| Little River into Cumberland River     | Trigg     | 34.4 to 48.4 | Pathogens                   |
|  |           |              | Organic enrichment (sewage) |
| Little River into Cumberland River     | Trigg     | 34.4 to 48.4 | biological indicators       |
|  |           |              | Nutrient/eutrophication     |
| Little River into Cumberland River     | Christian | 48.4 to 61.0 | biological indicators       |
|  |           |              | Organic enrichment (sewage) |
| Little River into Cumberland River     |           |              | biological indicators       |
| Little River into Cumberland River     | Christian | 48.4 to 61.0 | Pathogens                   |
| N. Fork Little River into Little       |           |              |                             |
| River                                  | Christian | 0.0 to 0.3   | Pathogens                   |
| N. Fork Little River into Little       |           |              | Nutrient/eutrophication     |
| River                                  | Christian | 0.0 to 0.3   | biological indicators       |
| N. Fork Little River into Little       | a         |              | Organic enrichment (sewage) |
| River                                  | Christian | 0.0 to 0.3   | biological indicators       |
| N. Fork Little River into Little       | G1        | 0.2          | Nutrient/eutrophication     |
| River                                  | Christian | 0.3 to 6.9   | biological indicators       |
| N. Fork Little River into Little       | C1 · · ·  | 0.24 6.0     | Organic enrichment (sewage) |
| River                                  | Christian | 0.3 to 6.9   | biological indicators       |
| N. Fork Little River into Little River | Christian | 0.3 to 6.9   | Dathogons                   |
| N. Fork Little River into Little       | Christian | 0.3 10 0.9   | Pathogens                   |
| River                                  | Christian | 11.6 to 12.3 | Pathogens                   |
| N. Fork Little River into Little       | Cinistian | 11.0 to 12.3 | i unogens                   |
| River                                  | Christian | 12.3 to 16.2 | Pathogens                   |
| N. Fork Little River into Little       | CINIGUAN  | 12.0 to 10.2 | Nutrient/eutrophication     |
| River                                  | Christian | 6.9 to 11.6  | biological indicators       |
| N. Fork Little River into Little       |           |              | Organic enrichment (sewage) |
| River                                  | Christian | 6.9 to 11.6  | biological indicators       |

| Stream Name                      | County    | River Miles  | Pollutant               |
|----------------------------------|-----------|--------------|-------------------------|
| N. Fork Little River into Little |           |              |                         |
| River                            | Christian | 6.9 to 11.6  | Pathogens               |
| S. Fork Little River into Little |           |              |                         |
| River                            | Christian | 0.0 to 10.5  | Pathogens               |
| S. Fork Little River into Little |           |              | Nutrient/eutrophication |
| River                            | Christian | 0.0 to 10.5  | biological indicators   |
| S. Fork Little River into Little |           |              |                         |
| River                            | Christian | 10.5 to 19.9 | Pathogens               |
| S. Fork Little River into Little |           |              | Nutrient/eutrophication |
| River                            | Christian | 10.5 to 19.9 | biological indicators   |
| N. Fork Little River into Little |           |              |                         |
| River                            | Christian | 0.0 to 0.3   | Sedimentation/siltation |
| N. Fork Little River into Little |           |              |                         |
| River                            | Christian | 6.9 to 11.6  | Sedimentation/siltation |
| S. Fork Little River into Little |           |              | Sedimentation/siltation |
| River                            | Christian | 0.0 to 10.5  |                         |
| S. Fork Little River into Little |           |              | Sedimentation/siltation |
| River                            | Christian | 10.5 to 19.9 |                         |
| N. Fork Little River into Little |           |              |                         |
| River                            | Christian | 6.9 to 11.6  | Impairment unknown      |
| S. Fork Little River into Little |           |              | Other                   |
| River                            | Christian | 10.5 to 19.9 |                         |
| Sinking Fork into Little River   | Trigg     | 2.2 to 5.6   | Impairment unknown      |
| Skinner Creek into Casey Creek   | Trigg     | 0.0 to 5.8   | Impairment unknown      |

KDOW received 319(h) funding for sample collection and TMDL development in the Little River Watershed above Lake Barkley. Data collection was completed in 2002. The nutrient, organic enrichment and Pathogens TMDLs are currently under development by EPA Region 4. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

### **5.4.2. Roundstone Creek Pathogen TMDLs**

| Stream Name                         | County     | River Miles | Pollutant |
|-------------------------------------|------------|-------------|-----------|
| Brush Creek into Roundstone Creek   | Rockcastle | 1.1 to 7.6  | Pathogens |
| Crooked Creek into Roundstone Creek | Rockcastle | 1.0 to 6.4  | Pathogens |

KDOW collected <u>E. coli</u> data on these segments during the primary contact recreation season of 2005. A final TMDL has been developed and has been submitted to EPA for approval.

### **5.4.3.** Bayou Creek Beta Particles and Metals TMDLs

| Stream Name                     | County    | River Miles | Pollutant                          |
|---------------------------------|-----------|-------------|------------------------------------|
| Bayou Creek into Ohio River     | McCracken | 0.0 to 6.5  | Metals (copper)                    |
| Daviou Crook into Ohio Divon    | McCracken | 0.0 to 6.5  | Beta particles and                 |
| Bayou Creek into Ohio River     | 2.5 00 1  | 0.0 to 6.5  | photon emitters                    |
| Bayou Creek into Ohio River     |           | 0.0 to 6.5  | Metals (mercury)                   |
| Bayou Creek into Ohio River     | McCracken | 0.0 to 6.5  | Metals (lead)                      |
| Little Bayou Cr. into Bayou Cr. | McCracken | 0.0 to 6.5  | Metals (copper)                    |
| Little Bayou Cr. into Bayou Cr. | McCracken | 0.0 to 6.5  | Beta particles and photon emitters |
| Little Bayou Cr. into Bayou Cr  | McCracken | 0.0 to 6.5  | Metals (lead)                      |

The KWRRI has been contracted by the Paducah Gaseous Diffusion Plant to develop these TMDLs. Additional metals data will be collected. Initial data for the Beta particles listing indicates that the streams are now meeting water quality standards for this pollutant. If no contrary data is produced, a delisting will be pursued for the beta particles. A draft metals TMDL is anticipated for 2007.

# **5.4.4.** Clarks River Watershed Nutrient, Organic Enrichment, and Pathogen TMDLs

| Stream Name                        | County    | River Miles  | Pollutant                                     |
|------------------------------------|-----------|--------------|---|
| Bee Creek into Clarks River        | Calloway  | 0 to 1.8     | Pathogens                                     |
| Blizzard Pond into W. Fk. Clarks   | -         |              | Pathogens                                     |
| R.                                 | McCracken | 0 to 3.7     |   |
| Camp Creek into W. Fk. Clarks R.   | McCracken | 0 to 5.4     | Pathogens                                     |
| Chestnut Creek into Clarks River   | Marshall  | 0 to 3.0     | Pathogens                                     |
| Clarks River into Tennessee River  | Calloway  | 50.9 to 59.9 | Pathogens                                     |
|                                    |           |              | Organic enrichment                            |
|                                    |           |              | (sewage) biological                           |
| Clarks River into Tennessee River  | Calloway  | 50.9 to 59.9 |   |
|                                    |           |              | Nutrient/eutrophication                       |
| Clarks River into Tennessee River  | Calloway  |              | biological indicators                         |
| Clarks River into Tennessee River  | Calloway  | 59.9 to 61.9 | Pathogens                                     |
| Clayton Creek into Clarks River    | Calloway  | 3.3 to 7.1   | Pathogens                                     |
| Damon Creek into W. Fk. Clarks     | Calloway  |              | Pathogens                                     |
| R.                                 |           | 0 to 1.8     |   |
| Middle Fork Creek into Clarks R.   | Marshall  | 0.2 to 6.6   | Pathogens                                     |
| Middle Fork into Clarks River      | Calloway  | 0 to 2.7     | Pathogens                                     |
| Middle Fork into Clarks River      | Calloway  | 0 to 2.7     | Nutrient/eutrophication biological indicators |
| Middle Fork into Clarks River      | Calloway  | 2.7 to 4.9   | Nutrient/eutrophication biological indicators |
|                                    |           |              | Nutrient/eutrophication                       |
| Spring Creek into W. Fk. Clarks R. | Graves    | 0 to 1.8     | biological indicators                         |
| West Fork Clarks River             | Graves    | 12.8 to 16.8 | Pathogens                                     |
| West Fork Clarks River             | McCracken | 2.6 to 10.1  | Pathogens                                     |
| West Fork Clarks River             | Calloway  | 22.7 to 27.3 | Pathogens                                     |

KDOW has contracted Murray State University to conduct sampling and develop TMDLs for these segments. Sampling began in 2005 and a draft TMDL is anticipated for 2009.

### 5.5. Big Sandy, Little Sandy, and Tygarts Basins

No TMDLs under development prior to 2006. See TMDLs planned for 2006 and 2007.

### **5.6. Ohio River Mainstem**

The Ohio River Valley Water Sanitation Commission is collecting data for PCBs, Dioxin, and Pathogen TMDL development for the mainstem of the Ohio River. A multistate agreement has been reached to have EPA Region 5 take the lead in producing the pathogen TMDLs. EPA Region 5 will contract the pathogen TMDL development to a third party.

### Chapter 6. TMDLs Planned for Development During 2006

### 6.1. Kentucky River Basin

#### 6.1.1. Dix River Watershed

| Stream Name               | County  | River Miles | Pollutant                   |
|---------------------------|---------|-------------|-----------------------------|
|                           |         |             | Organic enrichment (sewage) |
| Clarks Run into Dix River | Boyle   | 0.0 to 4.3  | biological indicators       |
|                           |         |             | Organic enrichment (sewage) |
| Clarks Run into Dix River | Boyle   | 4.3 to 6.6  | biological indicators       |
| Hanging Fork into Dix R.  | Lincoln | 0.0 to 15.0 | Pathogens                   |

Third Rock has been contracted to collect data for Clarks Run and Hanging Fork. Third Rock will develop the TMDL for Clarks Run. A draft is anticipated for 2008. KDOW will develop the TMDLs for Hanging Fork. A draft pathogen TMDLs is anticipated for 2007. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### **6.1.2.** Eagle Creek Watershed

| Stream Name                     | County | River Miles  | Pollutant                                     |
|---------------------------------|--------|--------------|---|
|                                 |        |              | Nutrient/eutrophication                       |
| Eagle Creek into Kentucky River | Grant  | 31.6 to 36.5 | biological indicators                         |
| Eagle Creek into Kentucky River | Grant  | 31.6 to 36.5 | Sedimentation/siltation                       |
| Eagle Creek into Kentucky River | Owen   | 50.8 to 58.5 | Nutrient/eutrophication biological indicators |
| Eagle Creek into Kentucky River | Owen   | 50.8 to 58.5 | Sedimentation/siltation                       |
| Stevens Creek into Eagle Creek  | Owen   | 14.4 to 17.3 | Nutrient/eutrophication biological indicators |
| Stevens Creek into Eagle Creek  | Owen   | 14.4 to 17.3 | Sedimentation/siltation                       |

KDOW began collecting nutrient and TSS data for these streams during Spring of 2006. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated. KDOW will determine which stream morphology parameters are most important to complete the data collection for the sediment TMDL development and will develop the TMDLs once data collection is completed.

### 6.1.3. Pathogen TMDLs

| Stream Name                          | County  | River Miles    | Pollutant |
|--------------------------------------|---------|----------------|-----------|
| Muddy Creek into KY River            | Madison | 0.0 to 20.2    | Pathogens |
| Paint Lick Creek into KY River       | Garrard | 0.0 to 7.5     | Pathogens |
| Silver Creek into KY River           | Madison | 0.0 to 11.1    | Pathogens |
| Hardwick Creek into Red River        | Powell  | 0.0 to 3.2     | Pathogens |
| KY River into Ohio River             | Owen    | 11.6 to 53.4   | Pathogens |
| KY River into Ohio River             | Madison | 150.2 to 190.0 | Pathogens |
| Dix River into Kentucky River        | Garrard | 33.3 to 36.01  | Pathogens |
| Goose Creek into S. Fork KY River    | Clay    | 0.0 to 8.3     | Pathogens |
| Red Bird River into S. Fork KY River | Clay    | 0.0 to 15.0    | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data or will request delisting if a segment shows full support for pathogens. Draft TMDLs are expected in 2007.

### 6.2. Salt and Licking River Basins

| Stream Name                           | County   | River Miles | Pollutant               |
|---------------------------------------|----------|-------------|-------------------------|
| Houston Creek into Stoner Creek       | Bourbon  | 0.0 to 9.0  | Pathogens               |
| Locust Creek into Ohio River          | Bracken  | 0.0 to 4.1  | Pathogens               |
| Snag Creek into Ohio River            | Bracken  | 0.5 to 5.5  | Pathogens               |
| Townsend Creek into S. Fk. Licking R. | Harrison | 0.0 to 4.9  | Pathogens               |
|                                       |          |             | Nutrient/eutrophication |
| Houston Creek into Stoner Creek       | Bourbon  | 9.0 to 12.7 | biological indicators   |

KDOW began collecting nutrient and pathogen data for these streams during Spring of 2006. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

### **6.3.** Green and Tradewater River Basins

### **6.3.1. Hopkins County TMDLs**

| Stream Name                        | County  | River Miles | Pollutant              |
|------------------------------------|---------|-------------|------------------------|
| Caney Creek into Tradewater River  | Hopkins | 0.0 to 8.8  | рН                     |
| Copper Creek into Richland Creek   | Hopkins | 0.0 to 1.1  | рН                     |
| Copper Creek into Richland Creek   | Hopkins | 0.0 to 1.1  | Iron                   |
| Copper Creek into Richland Creek   | Hopkins | 0.0 to 1.1  | Zinc                   |
| Copper Creek into Richland Creek   | Hopkins | 0.0 to 1.1  | Total dissolved solids |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | рН                     |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | Cadmium                |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | Iron                   |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | Nickel                 |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | Zinc                   |
| Copperas Creek into Caney Creek    | Hopkins | 0.0 to 3.1  | Total dissolved solids |
| Hurricane Creek into Tradewater R. | Hopkins | 0.7 to 2.2  | рН                     |
| Hurricane Creek into Tradewater R. | Hopkins | 0.7 to 2.2  | Iron                   |
| Hurricane Creek into Tradewater R. | Hopkins | 0.7 to 2.2  | Zinc                   |
| Hurricane Creek into Tradewater R. | Hopkins | 0.7 to 2.2  | Total dissolved solids |

KDOW began collecting data for these streams during Spring of 2006. Draft TMDLs are anticipated for 2007.

### 6.3.2. Pathogen TMDLs

| Stream Name                          | County     | River Miles  | Pollutant |
|--------------------------------------|------------|--------------|-----------|
| Big Creek into Russell Creek         | Adair      | 3.0 to 8.2   | Pathogens |
| Big Pitman Creek into Green River    | Green      | 0.0 to 13.6  | Pathogens |
| Big Reedy Creek into Green River     | Butler     | 7.5 to 13.6  | Pathogens |
| Billy Creek into Valley Creek        | Hardin     | 0.0 to 5.9   | Pathogens |
| Buck Fork into Pond River            | Christian  | 14.0 to 20.0 | Pathogens |
| Butlers Fork into Russell Creek      | Adair      | 2.3 to 4.0   | Pathogens |
| Casey Creek into Green River         | Adair      | 3.7 to 4.7   | Pathogens |
| Claylick Creek into Green River      | Warren     | 2.0 to 3.1   | Pathogens |
| Elk Pond Creek into Pond River       | Muhlenberg | 0.0 to 4.5   | Pathogens |
| Glens Fork into Russell Creek        | Adair      | 0.0 to 8.0   | Pathogens |
| Jarrels Creek into Pond River        | Muhlenberg | 0.0 to 1.6   | Pathogens |
| Little Barren River into Green River | Green      | 0.0 to 8.8   | Pathogens |

| Stream Name                          | County     | <b>River Miles</b> | Pollutant |
|--------------------------------------|------------|--------------------|-----------|
| Mill Creek into Smith Creek          | Ohio       | 0.0 to 3.8         | Pathogens |
| Nolin River into Green River         | Hardin     | 44.0 to 93.2       | Pathogens |
| Pettys Fork into Russell Creek       | Adair      | 0.0 to 6.0         | Pathogens |
| Plum Creek into Pond Creek           | Muhlenberg | 2.5 to 4.3         | Pathogens |
| Poplar Grove Branch into Brush Creek | Taylor     | 0.0 to 3.0         | Pathogens |
| Russell Creek into Green River       | Adair      | 40.0 to 41.5       | Pathogens |
| Valley Creek into Nolin River        | Hardin     | 0.0 to 3.5         | Pathogens |
| Valley Creek into Nolin River        | Hardin     | 10.3 to 11.8       | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data. Draft TMDLs are expected in 2007.

### **6.3.3. Panther Creek and Long Falls Creek Watersheds**

| Stream Name                          | County  | River Miles | Pollutant                   |
|--------------------------------------|---------|-------------|-----------------------------|
| Brush Fork into Long Falls Creek     | McLean  | 0.0 to 3.8  | рН                          |
| Brush Fork into Long Falls Creek     | McLean  | 0.0 to 3.8  | Sulfates                    |
| Burnett Fk. into N Fk. into Panther  |         |             |                             |
|                                      | Daviess | 0.0 to 1.3  | Nitrogen (total)            |
| Burnett Fk. into N Fk. into Panther  |         |             |                             |
| Cr.                                  | Daviess | 0.0 to 1.3  | Phosphorus (total)          |
| Cane Run into S. Fk. into Panther    |         |             |                             |
| Cr.                                  | Daviess | 0.0 to 3.6  | Phosphorus (total)          |
| Cane Run into S. Fk. into Panther    |         |             | Organic enrichment (sewage) |
| Cr.                                  | Daviess | 0.0 to 3.6  | biological indicators       |
| Crooked Creek into Panther Creek     | Daviess | 0.0 to 2.9  | Pathogens                   |
| Deserter Cr. into S. Fk. Panther Cr. | Daviess | 0.0 to 3.1  | Pathogens                   |
| Ford Ditch into Rhodes Creek         | Daviess | 0.0 to 2.6  | Phosphorus (total)          |
| Ford Ditch into Rhodes Creek         | Daviess | 0.0 to 2.6  | Total Dissolved Solids      |
| Ford Ditch into Rhodes Creek         | Daviess | 0.0 to 2.6  | Sulfates                    |
| Knoblick Cr. into Panther Cr.        | Daviess | 0.0 to 2.1  | Pathogens                   |
| Long Falls Cr into Green River       | McLean  | 0.0 to 7.5  | Pathogens                   |
| Long Falls Cr into Green River       | McLean  | 0.0 to 7.5  | Total Dissolved Solids      |
| Long Falls Cr into Green River       | McLean  | 0.0 to 7.5  | Sulfates                    |
| Long Falls Cr. into Green River      | McLean  | 7.5 to 11.8 | Pathogens                   |
| Long Falls Cr. into Green River      | McLean  | 7.5 to 11.8 | рН                          |
| Long Falls Cr. into Green River      | McLean  | 7.5 to 11.8 | Total Dissolved Solids      |
| N. Fk. Panther Cr. into Panther Cr.  | Daviess | 4.2 to 6.0  | Pathogens                   |
| N. Fk. Panther Cr. into Panther Cr.  | Daviess | 9.5 to 12.7 | Phosphorus (total)          |

| Stream Name                         | County  | River Miles  | Pollutant   |
|-------------------------------------|---------|--------------|---|
| Panther Creek into Green River      | Daviess | 17.1 to 19.5 | Phosphorus (total)                                |
| Panther Creek into Green River      | Daviess | 2.7 to 5.6   | Pathogens   |
| Rhodes Creek into Panther Cr.       | Daviess | 0.0 to 7.3   | Phosphorus (total)                                |
| Rhodes Creek into Panther Cr.       | Daviess | 0.0 to 7.3   | Organic enrichment (sewage) biological indicators |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 0.0 to 2.3   | Organic enrichment (sewage) biological indicators |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 0.0 to 2.3   | Phosphorus (total)                                |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 0.0 to 2.3   | metals (copper)                                   |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 0.0 to 2.3   | Pathogens   |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 13.5 to 17.7 | Pathogens   |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 9.5 to 13.5  | Phosphorus (total)                                |
| S. Fk. Panther Cr. into Panther Cr. | Daviess | 9.5 to 13.5  | Pathogens   |
| Sweepstakes Br. into S. Fk.         |         |              | Organic enrichment (sewage)                       |
| Panther                             | Daviess | 1.0 to 3.8   | biological indicators                             |
| Wolf Br. Ditch into Rhodes Cr.      | Daviess | 0.0 to 4.1   | Phosphorus (total)                                |
| Wolf Br. Ditch into Rhodes Cr.      | Daviess | 0.0 to 4.1   | Organic enrichment (sewage) biological indicators |

KDOW has contracted Western Kentucky University to collect samples and develop these TMDLs. Draft TMDLs are anticipated for 2010.

# 6.4. Upper Cumberland, Lower Cumberland, Mississippi, and Tennessee River Basins

### 6.4.1. Upper Cumberland/Rockcastle River Organic Enrichment TMDLs

| Stream Name           | County     | River Miles  | Pollutant                          |
|-----------------------|------------|--------------|------------------------------------|
|                       |            |              | Nutrient/Eutrophication biological |
| Raccoon Creek         | Laurel     | 0.0 to 2.7   | indicators                         |
|                       |            |              | Organic enrichment (sewage)        |
| Renfro Creek          | Rockcastle | 0.0 to 3.0   | biological indicators              |
|                       |            |              | Nutrient/Eutrophication biological |
| Roundstone Creek      | Rockcastle | 16.9 to 23.7 | indicators                         |
|                       |            |              | Nutrient/Eutrophication biological |
| Skegg Creek           | Rockcastle | 0.0 to 3.2   | indicators                         |
|                       |            |              | Nutrient/Eutrophication biological |
| S. Fork Rockcastle R. | Laurel     | 21.5 to 25.5 | indicators                         |

KDOW began collecting data for these streams during Spring of 2006. KY is in the process of developing nutrient criteria for streams. TMDLs for streams impaired by nutrients and/or organic enrichment will not be finalized until the nutrient criteria are promulgated.

**6.4.2.** Lower Cumberland Pathogen TMDLs

| Stream Name                            | County     | River Miles | Pollutant |
|--|------------|-------------|-----------|
| Claylick Creek into Cumberland River   | Livingston | 2.0 to 4.8  | Pathogens |
| Eddy Creek into Cumberland River       | Lyon       | 8.4 to 10.5 | Pathogens |
| Ferguson Creek into Cumberland River   | Livingston | 0.0 to 1.1  | Pathogens |
| Hickory Creek into Cumberland River    | Livingston | 0.0 to 3.8  | Pathogens |
| Livingston Creek into Cumberland River | Lyon       | 4.6 to 7.0  | Pathogens |
| Richland Creek into Cumberland River   | Livingston | 0.6 to 5.3  | Pathogens |
| Sandy Creek into Cumberland River      | Livingston | 0.0 to 2.3  | Pathogens |
| Skinframe Creek into Livingston Creek  | Lyon       | 0.0 to 4.8  | Pathogens |
| Sugar Creek into Cumberland River      | Livingston | 2.1 to 6.7  | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data. Draft TMDLs are expected in 2007.

6.5. Big Sandy, Little Sandy, and Tygarts Basins

| Stream Name                                    | County   | River Miles  | Pollutant |
|--|----------|--------------|-----------|
| East Fork Little Sandy R. into Little Sandy R. | Boyd     | 24.9 to 26.4 | Pathogens |
| Blaine Creek into Big Sandy River              | Lawrence | 35.0 to 40.8 | Pathogens |
| Bear Creek into Big Sandy River                | Lawrence | 0.0 to 1.9   | Pathogens |
| Tygarts Creek into Ohio River                  | Greenup  | 0.0 to 45.7  | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data or delist segments if no impairment is found. Draft TMDLs are expected in 2007.

### **Chapter 7. TMDLs Planned for Development During 2007**

### 7.1. Kentucky River Basin

### 7.1.1. Cane Run Creek TMDLs

| Stream Name         | County  | River Miles | Pollutant               |
|---------------------|---------|-------------|-------------------------|
| Cane Run into North |         |             |                         |
| Elkhorn Creek       | Scott   | 0.0 to 3.0  | Sedimentation/siltation |
| Cane Run into North |         |             |                         |
| Elkhorn Creek       | Scott   | 3.0 to 9.6  | Sedimentation/siltation |
| Cane Run into North |         |             |                         |
| Elkhorn Creek       | Scott   | 3.0 to 9.6  | Nutrient/eutrophication |
|                     |         |             | Organic Enrichment      |
| Cane Run into North |         |             | (sewage) biological     |
| Elkhorn Creek       | Fayette | 9.6 to 17.4 | indicators              |

KDOW began TMDL monitoring on these streams during 2007.

### 7.2. Salt/Licking River Basin

### 7.2.1. Gunpowder Creek TMDLs

| Stream Name                | County | River Miles  | Pollutant               |
|----------------------------|--------|--------------|-------------------------|
| Gunpowder Creek into Ohio  |        |              |                         |
| River                      | Boone  | 15.4 to 17.1 | Sedimentation/siltation |
| Gunpowder Creek into Ohio  |        |              |                         |
| River                      | Boone  | 15.4 to 17.1 | Nutrient/eutrophication |
|                            |        |              | Organic Enrichment      |
| Gunpowder Creek into Ohio  |        |              | (sewage) biological     |
| River                      | Boone  | 15.4 to 17.1 | indicators              |
| Gunpowder Creek into Ohio  |        |              |                         |
| River                      | Boone  | 18.9 to 21.6 | Unknown                 |
| South Fork Gunpowder Creek |        |              |                         |
| into Gunpowder Creek       | Boone  | 0.0 to 2.0   | Sedimentation/siltation |
| South Fork Gunpowder Creek |        |              |                         |
| into Gunpowder Creek       | Boone  | 0.0 to 2.0   | Nutrient/eutrophication |
|                            |        |              | Organic Enrichment      |
| South Fork Gunpowder Creek |        |              | (sewage) biological     |
| into Gunpowder Creek       | Boone  | 0.0 to 2.0   | indicators              |

| Stream Name                | County | River Miles | Pollutant |
|----------------------------|--------|-------------|-----------|
| South Fork Gunpowder Creek |        |             |           |
| into Gunpowder Creek       | Boone  | 4.1 to 6.8  | Pathogens |

KDOW began TMDL monitoring on these streams during 2007.

### 7.3. Green/Tradewater Basin

### 7.3.1. Pathogen TMDLs

| Stream Name                         | County | River Miles | Pollutant |
|-------------------------------------|--------|-------------|-----------|
| Highland Creek into Ohio River      | Union  | 0.0 to 7.1  | Pathogens |
| Cypress Creek into Tradewater River | Union  | 0.0 to 2.25 | Pathogens |
| Tradewater River into Ohio River    | Union  | 0.0 to 16.7 | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data. Draft TMDLs are expected in 2008.

### 7.3.2. Valley Creek Watershed TMDLs

| Stream Name                   | County | River Miles | Pollutant               |
|-------------------------------|--------|-------------|-------------------------|
| Billy Creek into Valley Creek | Hardin | 0.0 to 5.9  | Sedimentation/siltation |
| Billy Creek into Valley Creek | Hardin | 0.0 to 5.9  | Nutrient/eutrophication |
| Valley Creek into Nolin River | Hardin | 8.0 to 10.3 | Sedimentation/siltation |
| Valley Creek into Nolin River | Hardin | 8.0 to 10.3 | Nutrient/eutrophication |

KDOW began TMDL monitoring on these streams during 2007.

### 7.3.3. Deer Creek Watershed TMDLs

| Stream Name                    | County  | River Miles | Pollutant               |
|--------------------------------|---------|-------------|-------------------------|
| Deer Creek into Green River    | Webster | 0.0 to 8.2  | Nutrient/eutrophication |
| East Fork Deer Creek into Deer |         |             | _                       |
| Creek                          | Webster | 0.0 to 6.8  | Sedimentation/siltation |
| Havana Creek into Deer Creek   | Webster | 0.0 to 1.9  | Sedimentation/siltation |
| Knoblick Creek into Deer Creek | Webster | 0.0 to 9.0  | Sedimentation/siltation |

| Stream Name                    | County  | River Miles | Pollutant               |
|--------------------------------|---------|-------------|-------------------------|
| Knoblick Creek into Deer Creek | Webster | 0.0 to 9.0  | Nutrient/eutrophication |
| Knoblick Creek into Deer Creek | Webster | 0.0 to 9.0  | Total dissolved solids  |

KDOW began TMDL monitoring on these streams during 2007.

### 7.3.4. Bacon Creek Watershed TMDLs

| Stream Name                  | County | River Miles  | Pollutant               |
|------------------------------|--------|--------------|-------------------------|
| Bacon Creek into Nolin River | Hart   | 0.0 to 17.2  | Pathogens               |
| Bacon Creek into Nolin River | Hart   | 17.2 to 26.3 | Pathogens               |
| Bacon Creek into Nolin River | Hart   | 17.2 to 26.3 | Sedimentation/siltation |

KDOW plans to begin TMDL monitoring on these streams during 2007.

### 7.3.5. Clear Creek Watershed TMDLs

| Ct                           | C 4     | D: M'1       | D. H. A A               |  |
|------------------------------|---------|--------------|-------------------------|--|
| Stream Name                  | County  | River Miles  | Pollutant               |  |
|                              |         |              | Organic Enrichment      |  |
| Clear Creek into Tradewater  |         |              | (sewage) biological     |  |
| River                        | Hopkins | 0.0 to 2.7   | indicators              |  |
| Clear Creek into Tradewater  |         |              |                         |  |
| River                        | Hopkins | 19.1 to 25.5 | Sedimentation/siltation |  |
|                              |         |              | Organic Enrichment      |  |
| Clear Creek into Tradewater  |         |              | (sewage) biological     |  |
| River                        | Hopkins | 19.1 to 25.5 | indicators              |  |
| Clear Creek into Tradewater  |         |              |                         |  |
| River                        | Hopkins | 25.5 to 26.5 | Pathogens               |  |
| Lambs Creek into Clear Creek | Hopkins | 0.0 to 3.5   | Sedimentation/siltation |  |
| Lambs Creek into Clear Creek | Hopkins | 0.0 to 3.5   | Total dissolved solids  |  |
| Lambs Creek into Clear Creek | Hopkins | 0.0 to 3.5   | Nutrient/eutrophication |  |
| Lick Creek into Clear Creek  | Hopkins | 0.0 to 12.1  | Sedimentation/siltation |  |
| Pond Creek into Clear Creek  | Hopkins | 0.0 to 5.5   | Sedimentation/siltation |  |
| Pond Creek into Clear Creek  | Hopkins | 0.0 to 5.5   | Turbidity               |  |

| Stream Name                     | County  | River Miles | Pollutant               |
|---------------------------------|---------|-------------|-------------------------|
| Richland Creek into Clear Creek | Hopkins | 0.0 to 4.4  | Sedimentation/siltation |
| UT to Clear Creek               | Hopkins | 0.0 to 2.2  | Pathogens               |
| Weirs Creek into Clear Creek    | Hopkins | 0.0 to 5.0  | Sedimentation/siltation |
| Weirs Creek into Clear Creek    | Hopkins | 0.0 to 5.0  | Turbidity               |
| Weirs Creek into Clear Creek    | Hopkins | 0.0 to 5.0  | Nutrient/eutrophication |

KDOW began TMDL monitoring on these streams during 2007.

### 7.4. Tennessee/Mississippi/Cumberland Basin

### 7.4.1. Pathogen TMDLs

| Stream Name                                     | County    | River Miles | Pollutant |
|---|-----------|-------------|-----------|
| Humphrey Creek into Ohio River                  | Ballard   | 3.4 to 11.0 | Pathogens |
| Bear Creek into Tennessee River (Kentucky Lake) | Marshall  | 3.1 to 6.3  | Pathogens |
| Angle Creek into Little Cypress Creek           | Marshall  | 0.0 to 0.7  | Pathogens |
| Island Creek into Tennessee River               | McCracken | 0.0 to 5.5  | Pathogens |
| Little Cypress Creek into Cypress Creek         | Marshall  | 0.0 to 3.4  | Pathogens |

KDOW will develop these pathogen TMDLs based on existing ambient monitoring data. Draft TMDLs are expected in 2008.

### 7.4.2. Pleasant Grove Creek Watershed TMDLs

| Stream Name                         | County | River Miles | Pollutant                                 |
|-------------------------------------|--------|-------------|---|
| Pleasant Grove Creek into Red River | Logan  | 0.0 to 2.2  | Pathogens                                 |
| Pleasant Grove Creek into Red River | Logan  | 0.0 to 2.2  | Nutrient/eutrophication                   |
|                                     |        |             | Organic Enrichment<br>(sewage) biological |
| Pleasant Grove Creek into Red River | Logan  | 0.0 to 2.2  | indicators                                |

KDOW began TMDL monitoring on these streams during 2007.

# 7.4.3. Laurel River Watershed TMDLs

| Stream Name                | County | River Miles  | Pollutant               |
|----------------------------|--------|--------------|-------------------------|
| Laurel River into          |        |              |                         |
| Cumberland River           | Laurel | 36.6 to 46.3 | Sedimentation/siltation |
| Laurel River into          |        |              |                         |
| Cumberland River           | Laurel | 36.6 to 46.3 | Nutrient/eutrophication |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 0.0 to 8.3   | Pathogens               |
|                            |        |              | Organic Enrichment      |
| Little Laurel River into   |        |              | (sewage) biological     |
| Laurel River               | Laurel | 0.0 to 8.3   | indicators              |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 8.3 to 12.4  | Sedimentation/siltation |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 8.3 to 12.4  | Pathogens               |
|                            |        |              | Organic Enrichment      |
| Little Laurel River into   |        |              | (sewage) biological     |
| Laurel River               | Laurel | 8.3 to 12.4  | indicators              |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 8.3 to 12.4  | Total Phosphorus        |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 12.4 to 14.6 | Pathogens               |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 12.4 to 14.6 | Nutrient/eutrophication |
|                            |        |              | Organic Enrichment      |
| Little Laurel River into   |        |              | (sewage) biological     |
| Laurel River               | Laurel | 12.4 to 14.6 | indicators              |
| Little Laurel River into   |        |              |                         |
| Laurel River               | Laurel | 14.6 to 22.8 | Pathogens               |
| UT to Little Laurel River  | Laurel | 0.0 to 1.4   | Sedimentation/siltation |
| Whitley Branch into Little |        |              |                         |
| Laurel River               | Laurel | 0.0 to 1.1   | Pathogens               |
|                            |        |              | Organic Enrichment      |
| Whitley Branch into Little |        |              | (sewage) biological     |
| Laurel River               | Laurel | 0.0 to 1.1   | indicators              |
| Whitley Branch into Little |        |              |                         |
| Laurel River               | Laurel | 1.1 to 2.5   | Pathogens               |

KDOW began TMDL monitoring on these streams during 2007.

# 7.5. Big Sandy, Little Sandy, and Tygarts Basin

## 7.5.1. Elkhorn Creek Watershed TMDLs

| Stream Name               | County | River Miles | Pollutant               |
|---------------------------|--------|-------------|-------------------------|
| Elkhorn Creek into Russel |        |             |                         |
| Fork                      | Pike   | 0.0 to 10.6 | Sedimentation/siltation |
| Elkhorn Creek into Russel |        |             |                         |
| Fork                      | Pike   | 0.0 to 10.6 | Total dissolved solids  |
| Elkhorn Creek into Russel |        |             |                         |
| Fork                      | Pike   | 0.0 to 10.6 | Pathogens               |
| Upper Pidgeon Branch into |        |             |                         |
| Elkhorn Creek             | Pike   | 0.0 to 2.1  | Sedimentation/siltation |
| Upper Pidgeon Branch into |        |             |                         |
| Elkhorn Creek             | Pike   | 0.0 to 2.1  | Total dissolved solids  |

Monitoring will be performed under a 319(h) project grant. KDOW will use the data obtained to develop these TMDLs.

# 7.5.2. Right Fork Beaver Creek Watershed TMDLs

|                                   |        | River      |                             |
|-----------------------------------|--------|------------|-----------------------------|
| Stream Name                       | County | Miles      | Pollutant                   |
| Arnold Fk into R. Fk. Beaver Cr.  | Knott  | 0.0 to 2.6 | Sedimentation/siltation     |
| Arnold Fk into R. Fk. Beaver Cr.  | Knott  | 0.0 to 2.6 | Sulfates                    |
| Arnold Fk into R. Fk. Beaver Cr.  | Knott  | 0.0 to 2.6 | Total Dissolved Solids      |
| Bill D Br. into R. Fk. Beaver Cr. | Knott  | 0.0 to 1.1 | Sedimentation/siltation     |
| Bill D Br. into R. Fk. Beaver Cr. | Knott  | 0.0 to 1.1 | Total Dissolved Solids      |
| Dry Cr. into R. Fk. Beaver Cr.    | Knott  | 0.0 to 4.0 | Sedimentation/siltation     |
| Dry Cr. into R. Fk. Beaver Cr.    | Knott  | 0.0 to 4.0 | Sulfates                    |
| Dry Cr. into R. Fk. Beaver Cr.    | Knott  | 0.0 to 4.0 | Total Dissolved Solids      |
| Goose Cr. into R. Fk. Beaver Cr.  | Floyd  | 0.0 to 2.2 | Impairment unknown          |
| Goose Cr. into R. Fk. Beaver Cr.  | Floyd  | 0.0 to 2.2 | Sedimentation/siltation     |
| Goose Cr. into R. Fk. Beaver Cr.  | Floyd  | 0.0 to 2.2 | Sulfates                    |
| Johns Br. into R. Fk. Beaver Cr.  | Floyd  | 0.0 to 1.6 | Sedimentation/siltation     |
| Johns Br. into R. Fk. Beaver Cr.  | Floyd  | 0.0 to 1.6 | Sulfates                    |
| Jones Fk. into R. Fk. Beaver Cr.  | Knott  | 0.0 to 9.4 | Sedimentation/siltation     |
| Jones Fk. into R. Fk. Beaver Cr.  | Knott  | 0.0 to 9.4 | Sulfates                    |
| Jones Fk. into R. Fk. Beaver Cr.  | Knott  | 0.0 to 9.4 | Total Dissolved Solids      |
| Puncheon Br. into R. Fk. Beaver   |        |            | Organic Enrichment (sewage) |
| Cr.                               | Knott  | 0.0 to 3.6 | biological indicators       |

|                                   |        | River        |   |
|-----------------------------------|--------|--------------|---|
| Stream Name                       | County | Miles        | Pollutant   |
| Puncheon Br. into R. Fk. Beaver   |        |              |   |
| Cr.                               | Knott  | 0.0 to 3.6   | Total Dissolved Solids                            |
| Right Fk. Beaver Cr. into Beaver  |        |              |   |
| Cr.                               | Floyd  | 0.0 to 17.4  | Pathogens   |
| Right Fk. Beaver Cr. into Beaver  |        |              | Organic Enrichment (sewage)                       |
| Cr.                               | Floyd  | 0.0 to 17.4  | biological indicators                             |
| Right Fk. Beaver Cr. into Beaver  |        |              |   |
| Cr.                               | Floyd  | 0.0 to 17.4  | рН  |
| Right Fk. Beaver Cr. into Beaver  |        |              |   |
| Cr.                               | Floyd  | 0.0 to 17.4  | Sedimentation/siltation                           |
| Right Fk. Beaver Cr. into Beaver  |        |              | a 10  |
| Cr.                               | Floyd  | 0.0 to 17.4  | Sulfates  |
| Right Fk. Beaver Cr. into Beaver  |        | 0.0 . 17.4   | m . 15: 1 10 111                                  |
| Cr.                               | Floyd  | 0.0 to 17.4  | Total Dissolved Solids                            |
| Right Fk. Beaver Cr. into Beaver  |        | 20.2 / 22.4  | Organic Enrichment (sewage)                       |
| Cr.                               | Knott  | 30.3 to 33.4 | biological indicators                             |
| Right Fk. Beaver Cr. into Beaver  |        | 20.24-22.4   | G - 1:  |
| Cr.                               | Knott  | 30.3 to 33.4 | Sedimentation/siltation                           |
| Right Fk. Beaver Cr. into Beaver  |        | 20 2 to 22 4 | Total Dissalved Colids                            |
| Cr.                               | Knott  |              | Total Dissolved Solids                            |
| Rock Fk. into R Fk. Beaver Cr.    | Floyd  |              | Sedimentation/siltation                           |
| Rock Fk. into R Fk. Beaver Cr.    | Floyd  | 0.0 to 7.0   | Sulfates  |
| Rock Fk. into R Fk. Beaver Cr.    | Floyd  | 0.0 to 7.0   | Total Dissolved Solids                            |
| Salisbury Br. into R. Fk. Beaver  |        |              | Nutrient/eutrophication                           |
| Cr.                               | Knott  | 0.0 to 1.8   | biological indicators                             |
| Salisbury Br. into R. Fk. Beaver  |        |              |   |
| Cr.                               | Knott  | 0.0 to 1.8   | Sulfates  |
| Salisbury Br. into R. Fk. Beaver  | **     |              |   |
| Cr.                               | Knott  | 0.0 to 1.8   | Total Dissolved Solids                            |
| Salt Lick Cr. into R. Fk. Beaver  | T-1 1  | 0.04.60      | T   |
| Cr.                               | Floyd  | 0.0 to 6.8   | Impairment unknown                                |
| Salt Lick Cr. into R. Fk. Beaver  | T21 1  | 0.04- 6.0    | G - 1:  |
| Cr.                               | Floyd  | 0.0 to 6.8   | Sedimentation/siltation                           |
| Salt Lick Cr. into R. Fk. Beaver  | Eland  | 0.045.6.9    | Culfataa  |
| Cr.                               | Floyd  | 0.0 to 6.8   | Sulfates Organia Enrichment (cayaga)              |
| Steele Cr. into R. Fk. Beaver Cr. | Floyd  | 0.0 to 2.4   | Organic Enrichment (sewage) biological indicators |
|                                   | •      |              |   |
| Steele Cr. into R. Fk. Beaver Cr. | -      | 0.0 to 2.4   | Sedimentation/siltation                           |
| Steele Cr. into R. Fk. Beaver Cr. | -      | 0.0 to 2.4   | Sulfates  |
| Steele Cr. into R. Fk. Beaver Cr. | Floyd  | 0.0 to 2.4   | Total Dissolved Solids                            |

|                                 |        | River      |                             |
|---------------------------------|--------|------------|-----------------------------|
| Stream Name                     | County | Miles      | Pollutant                   |
| Stephens Br. into R. Fk. Beaver |        |            | Organic Enrichment (sewage) |
| Cr.                             | Floyd  | 0.0 to 2.6 | biological indicators       |
| Stephens Br. into R. Fk. Beaver |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 2.6 | Sedimentation/siltation     |
| Stephens Br. into R. Fk. Beaver |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 2.6 | Sulfates                    |
| Stephens Br. into R. Fk. Beaver |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 2.6 | Unionized ammonia           |
| Turkey Cr. into R. Fk. Beaver   |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 5.9 | Impairment unknown          |
| Turkey Cr. into R. Fk. Beaver   |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 5.9 | Sedimentation/siltation     |
| Turkey Cr. into R. Fk. Beaver   |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 5.9 | Sulfates                    |
| Wilson Cr. into R. Fk. Beaver   |        |            | Organic Enrichment (sewage) |
| Cr.                             | Floyd  | 0.0 to 2.9 | biological indicators       |
| Wilson Cr. into R. Fk. Beaver   |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 2.9 | Sedimentation/siltation     |
| Wilson Cr. into R. Fk. Beaver   |        |            |                             |
| Cr.                             | Floyd  | 0.0 to 2.9 | Sulfates                    |

KDOW has contracted Eastern Kentucky University to perform the monitoring for these segments. Monitoring began in 2007.

## Chapter 8. Kentucky River Basin Unit 303(d) List

The 303(d) List for the Kentucky River BMU follows, and the List continues for the other BMUs and the Ohio River Mainstem through Chapter 13. These chapters are presented with headings so the reader will know the BMU, subbasin (if any) and whether streams or lakes/reservoirs are listed on that page.

#### 8.1 Kentucky River Basin Streams

Arnolds Creek into Ten Mile Creek Grant County

From River Mile 0.0 to 10.8 Segment Length: 10.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Streambank

Modifications/Destabilization

KDOW awarded \$159,000 in federal Section 319(h) Grant funds (FFY2005) to the Northern Kentucky Independent District Health Department to develop a Watershed Based Plan for the Ten Mile Creek watershed and to initiate straight pipe abatement.

Bailey Run into Kentucky River Anderson County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Post-Development Erosion and Sedimentation; Source

Unknown; Unspecified Urban Stormwater

Balls Fork into Troublesome Creek Knott County

From River Mile 8.3 to 11.3 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production;

Post-Development Erosion and Sedimentation; Surface Mining

Bantas Fork into Salt River Henry County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

Baughman Fork into Boone Creek Fayette County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Livestock (Grazing or Feeding Operations); Municipal Point

Source Dischargers

See Status of TMDLs Under Development Prior to 2006.

Beals Run into South Elkhorn Creek

From River Mile 0.0 to 1.9

Woodford County
Segment Length: 1.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Site Clearance (Land Development or Redevelopment):

Livestock (Grazing or Feeding Operations)

Benson Creek into Kentucky River Franklin County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County.

Benson Creek into Kentucky River Franklin County

From River Mile 4.6 to 6.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

On-site Treatment Systems (Septic Systems and Similar Decentralized Systems); Agriculture; Habitat Modification -

Other than Hydromodification

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County

Benson Creek into Kentucky River Franklin County

From River Mile 6.7 to 13.4 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Agriculture; Habitat Modification - Other Than

Hydromodification

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County.

Big Caney Creek into Quicksand Creek

Breathitt County

From River Mile 0.3 to 8.0 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Big Twin Creek into Kentucky River

Owen County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

Big Willard Creek into North Fork Kentucky River Perry County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Boone Creek into Kentucky River Fayette County

From River Mile 7.4 to 12.6 Segment Length: 5.2 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

See Status of TMDLs Under Development Prior to 2006.

Brush Creek into Red River Powell County

From River Mile 0.0 to 6.6 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Buckhorn Creek into Troublesome Creek Breathitt County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Sedimentation/Siltation; Total Dissolved Solids;

**Turbidity** 

Suspected Sources: Loss of Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Source Unknown; Coal Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.3. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 2.4.

Buckhorn Creek into Troublesome Creek Breathitt County

From River Mile 2.4 to 6.8 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Impacts from Abandoned Mine Lands (Inactive)

Bull Creek into Collins Fork Knox County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production

<u>Cane Creek into Red River</u> Powell County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

See Status of TMDLs Under Development Prior to 2006.

Cane Run into North Elkhorn Creek Scott County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

See TMDLs Planned for Development During 2007.

<u>Cane Run into North Elkhorn Creek</u> Scott County

From River Mile 3.0 to 9.6 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication

Biological Indicators; Pathogens

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Landfills; Package Plant or Other Permitted Small Flows Discharges; Livestock (Grazing or Feeding Operations)

See Status of TMDLs Under Development Prior to 2006 and TMDLs Planned for Development During 2007.

<u>Cane Run into North Elkhorn Creek</u> Fayette County

From River Mile 9.6 to 17.4 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations); Unspecified Urban

Stormwater

See Status of TMDLs Under Development Prior to 2006 and TMDLs Planned for Development During 2007.

Caney Creek into Eagle Creek Owen County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Managed Pasture

Grazing

Cat Creek into Red River Powell County

From River Mile 0.0 to 8.0 Segment Length: 8.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Loss of Riparian Habitat

Cedar Creek into Kentucky River

Owen County

From River Mile 0.0 to 9.4 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Highway/Road/Bridge

Runoff (Non-Construction Related); Loss of Riparian Habitat;

Managed Pasture Grazing; Silviculture Activities

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 2.2 to 6.7. Based on new assessments, the river miles have been more accurately determined as 0.0 to 9.4.

<u>Chambers Fork into Baptist Fork</u> Wolfe County

From River Mile 0.7 to 1.1 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

Clarks Run into Dix River (Herrington Lake)

Boyle County

From River Mile 0.0 to 4.3 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Urban Runoff/Storm Sewers

See TMDLs Planned for Development During 2006. In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW was awarded \$342,800 in federal Section 319(h) Grant funds (FFY2002) to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed. In 2004, the Bluegrass Personal Responsibility in a Desirable Environment (PRIDE) awarded approximately \$7,000 to the City of Danville to conduct a riparian reforestation effort. During 2004 and 2006, the Kentucky River Authority awarded approximately \$6,000 to the Boyle County High School to support volunteer Water Watch sampling and riparian buffer zone initiatives. In 2005, the Governor's Scholars students at Centre College completed stormwater drain stenciling throughout Danville to reduce storm drain dumping and to increase awareness of this nonpoint pollution source. The City of Danville is also currently contracting with Bluegrass PRIDE to implement stormwater education and outreach activities.

<u>Clarks Run into Dix River (Herrington Lake)</u>
Boyle County

From River Mile 4.3 to 6.6 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators;

Impairment Unknown

Suspected Sources: Municipal Point Source Discharges; Unspecified Urban

Stormwater

See TMDLs Planned for Development During 2006. In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW was awarded \$342,800 in federal Section 319(h) Grant funds (FFY2002) to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed. During 2004 and 2006, the Kentucky River Authority awarded approximately \$6,000 to the Boyle County High School to support volunteer Water Watch sampling and riparian buffer zone initiatives. In 2005, the Governor's Scholars students at Centre College completed stormwater drain stenciling throughout Danville to reduce storm drain dumping and to increase awareness of this nonpoint pollution source. The City of Danville is also currently contracting with Bluegrass PRIDE to assist with implementing stormwater permit requirements.

<u>Clarks Run into Dix River (Herrington Lake)</u>
Boyle County

From River Mile 8.1 to 13.5 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Streambank Modifications/Destabilization

In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW was awarded \$342,800 in federal Section 319(h) Grant funds (FFY2002) to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed. During 2004 and 2006, the Kentucky River Authority awarded approximately \$6,000 to the Boyle County High School to support volunteer Water Watch sampling and riparian buffer zone initiatives. In 2005, the Governor's Scholars students at Centre College completed stormwater drain stenciling throughout Danville to reduce storm drain dumping and to increase awareness of this nonpoint pollution source. The City of Danville is also currently contracting with Bluegrass PRIDE to assist with implementing stormwater permit requirements.

Collins Fork into Goose Creek Clay County

From River Mile 2.4 to 6.3 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Cope Fork into Frozen Creek Breathitt County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Channelization; Loss of Riparian Habitat; Managed Pasture

Grazing; Non-Irrigated Crop Production; Streambank Modifications/Destabilization; Surface Mining; Silviculture

Activities

Copper Creek into Dix RiverRockcastle CountyFrom River Mile 2.2 to 5.0Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW was awarded \$342,800 in federal Section 319(h) Grant funds (FFY2002) to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed.

Crane Creek into South Fork Kentucky River Clay County

From River Mile 0.0 to 5.4 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Post-Development

**Erosion and Sedimentation** 

<u>Crystal Creek into Kentucky River</u>
Lee County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Landfills

Cutshin Creek into Middle Fork Kentucky River Leslie County

From River Mile 9.7 to 10.7 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Surface Mining

<u>Defeated Creek into Carr Creek Reservoir</u>

Knott County

From River Mile 0.4 to 1.6 Segment Length: 1.2 Impaired Use(s): Primary Contact Recreation (Nonsupport), Secondary Contact

Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Dix River into Kentucky River Garrard County

From River Mile 33.3 to 36.1 Segment Length: 2.8

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

<u>Dry Run into North Elkhorn Creek</u> Scott County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Impairment Unknown

Suspected Sources: Managed Pasture Grazing; Source Unknown

KDOW awarded \$158,500 in federal Section 319(h) Grant funds (FFY2004) to the Georgetown/Scott County Planning Commission to conduct an urban water quality demonstration project on land use BMP decision processes in the Dry Run watershed.

Eagle Creek into Kentucky River

Owen County

From River Mile 15.3 to 28.5 Segment Length: 13.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 14.4 to 27.3. Based on NHD river miles, the river miles have been more accurately determined as 15.3 to 28.5. KDOW awarded \$159,000 in federal Section 319(h) Grant funds (FFY2005) to the Northern Kentucky Independent District Health Department to develop a Watershed Based Plan for the Ten Mile Creek watershed and to initiate straight pipe abatement. During 2005, the Kentucky River Authority awarded approximately \$3,000 to the Kentucky Waterways Alliance to assist with start-up expenses for the Eagle Creek Watershed Council.

Eagle Creek into Kentucky River **Grant County** 

From River Mile 31.6 to 36.5 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Managed Pasture Grazing; Crop Production (Crop Land or Dry

Land)

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 29.9 to 34.5. Based on NHD river miles, the river miles have been more accurately determined as 31.6 to 36.5.

Eagle Creek into Kentucky River **Grant County** 

From River Mile 50.8 to 58.5 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 48.6 to 55.9. Based on NHD river miles, the river miles have been more accurately determined as 50.8 to 58.5.

East Fork Otter Creek into Kentucky River **Madison County** 

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Managed Pasture Grazing; Crop Production (Crop Land or Dry Suspected Sources:

Land)

East Hickman Creek into Hickman Creek **Favette County** 

From River Mile 4.2 to 10.2 Segment Length: Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators

Livestock (Grazing or Feeding Operations); Unspecified Urban Suspected Sources:

Stormwater

See Status of TMDLs Under Development Prior to 2006.

East Hickman Creek into Hickman Creek Fayette County

From River Mile 12.6 to 14.0 Segment Length: 1.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Unspecified Urban Stormwater

See Status of TMDLs Under Development Prior to 2006.

Elk Creek into Eagle Creek Owen County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Source Unknown

Elkhorn Creek into Kentucky River Franklin County

From River Mile 0.0 to 18.2 Segment Length: 18.2 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Mercury; Pathogens Suspected Sources: Unknown; Agriculture

See TMDLs Under Development Prior to 2006

Flat Creek into Kentucky River Franklin County

From River Mile 0.0 to 7.1 Segment Length: 7.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County.

Frozen Creek into North Fork Kentucky River

Breathitt County

From River Mile 0.0 to 13.9 Segment Length: 13.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation

Goose Creek into Benson Creek Shelby County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Impairment Unknown

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Agriculture; Habitat Modification - Other Than

Hydromodification

Goose Creek into Benson Creek Shelby County

From River Mile 1.9 to 4.2 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Grazing in Riparian or Shoreline Zones; Managed Pasture

Grazing; Livestock (Grazing or Feeding Operations)

See Status of TMDLs Under Development Prior to 2006.

Goose Creek into South Fork Kentucky River Clay County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems-Septic Tanks and/or

Straight Pipes)

See Status TMDLs Planned for Development During 2006.

Grapevine Creek into North Fork of Kentucky River Perry County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Hanging Fork into Dix River Lincoln County

From River Mile 0.0 to 15.0 Segment Length: 15.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW has awarded over \$750,000 in federal Section 319(h) Grants (FFY1999, FFY2001, and FFY2002), to the Kentucky Division of Conservation

and the Kentucky Heritage RC&D, Inc to implement agricultural BMPs in the Peyton Creek subwatershed, a tributary of Hanging Fork. More recently (FFY2002), KDOW was awarded \$342,800 to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed.

<u>Hardwick Creek into Red River</u> Powell County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Livestock (Grazing or Feeding

Operations)

See TMDLs Planned for Development During 2006.

<u>Hatton Creek into Red River</u> Powell County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Hawes Fork into Ouicksand Creek

Breathitt County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Hell Creek into North Fork Kentucky River

Lee County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Permitted

Silvicultural Activities; Petroleum/Natural Gas Production

Activities (Permitted); Surface Mining

<u>Hickman Creek into Kentucky River</u>

Jessamine County

From River Mile 0.0 to 6.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Livestock (Grazing or

Feeding Operations)

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 25.5. Based on new assessments, the segment has been divided into two segments. This segment had been more accurately determined as 0.0 to 6.0.

Hickman Creek into Kentucky River

Jessamine County

From River Mile 6.0 to 25.5 Segment Length: 19.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Non-Irrigated Crop

Production; Livestock (Grazing or Feeding Operations)

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 25.5. Based on new assessments, the segment has been divided into two segments. This segment had been more accurately determined as 6.0 to 25.5.

Holly Creek into North Fork Kentucky River Wolfe County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining; Loss of Riparian Habitat;

Streambank Modifications/Destabilization; Agriculture

Horse Creek into Goose Creek Clay County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Surface

Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 6.8. Based on new assessments, the river miles have been more accurately determined as 0.0 to 8.3.

<u>Hunting Creek into Quicksand Creek</u>

Breathitt County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Indian Creek into Red River

Menifee County

From River Mile 2.6 to 7.8 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

**Surface Mining** 

Johnson Fork into Lacy Creek Wolfe County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Petroleum/Natural Gas Production Activities (Permitted);

**Residential Districts** 

<u>Judy Creek into Red River</u> Powell County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Kentucky River into Ohio River

Owen County

From River Mile 0.3 to 11.5 Segment Length: 11.2

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): Methylmercury

Suspected Sources: Atmospheric Deposition - Toxics; Source Unknown

<u>Kentucky River into Ohio River</u> Franklin County

From River Mile 53.5 to 118.2 Segment Length: 64.7

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): Methylmercury Suspected Sources: Source Unknown

<u>Kentucky River into Ohio River</u>

Jessamine County

From River Mile 154.0 to 210.0 Segment Length: 56.0

Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Methylmercury; Pathogens Suspected Sources: Source Unknown, Agriculture

Lacy Creek into Red River Wolfe County

From River Mile 0.0 to 7.3 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Heap-Leach Extraction Mining; Loss of

Riparian Habitat; Streambank Modifications/Destabilization

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 1.8. Based on new assessments, the river miles have been more accurately determined as 0.0 to 7.3. The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairments have been more accurately determined as sediment/siltation and impairment unknown.

<u>Laurel Creek into Goose Creek</u> Clay County

From River Mile 3.8 to 4.8 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

Left Fork Island Creek into Island Creek Owsley County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nonnative Fish, Shellfish, or Zooplankton;

Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Introduction of Non-native

Organisms (Accidental or Intentional)

Left Fork Millstone Creek into Millstone Creek

Letcher County

From River Mile 1.6 to 2.9 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; pH

Suspected Sources: Surface Mining

Lick Creek into Eagle Creek Carroll County

From River Mile 0.0 to 5.4 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Unspecified Urban Stormwater

Line Fork into Defeated Creek

Letcher County

From River Mile 9.1 to 11.6 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining

Line Fork into Defeated Creek

Letcher County

From River Mile 11.6 to 27.5 Segment Length: 15.9

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Sewage Discharges in Unsewered

Areas

<u>Little Willard Creek into North Fork Kentucky River</u> Perry County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Channelization; Loss of Riparian Habitat; Post-Development

Erosion and Sedimentation; Site Clearance (Land Development or Redevelopment); Streambank Modifications/Destabilization;

**Surface Mining** 

<u>Long Fork into Buckhorn Creek</u>
Breathitt County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Surface Mining

Lost Creek into Troublesome Creek Breathitt County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Lost Creek into Troublesome Creek Breathitt County

From River Mile 3.7 to 9.0 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Loss of Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Coal Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 3.8 to 10.2. Based on NHD river miles, the river miles have been more accurately determined as 3.7 to 9.0.

Lotts Creek into North Fork Kentucky River Perry County

From River Mile 1.2 to 6.0 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Loss of Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Coal Mining

Lotts Creek into Youngs Fork Knott County

From River Mile 0.4 to 1.0 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Site Clearance (Land Development or

Redevelopment)

<u>Lower Buffalo Creek into South Fork Kentucky River</u> Owsley County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Loss of Riparian Habitat

<u>Lower Howard Creek into Kentucky River</u> Clark County

From River Mile 2.7 to 6.2 Segment Length: 3.55

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic

Enrichment (Sewage) Biological Indicators; Impairment

Unknown

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Source Unknown; Livestock (Grazing or

Feeding Operations)

<u>Lulbegrud Creek into Red River</u>

Clark County

From River Mile 0.0 to 7.3 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Source Unknown

Marble Creek into Kentucky River Jessamine County

From River Mile 0.1 to 3.9 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Streambank Modifications/Destabilization

McConnell Run into North Fork Elkhorn Creek **Scott County** 

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Managed Pasture Grazing

See Status of TMDLs Under Development Prior to 2006.

Meadow Creek into South Fork Kentucky River Owsley County

From River Mile 0.5 to 3.7 Segment Length: 3.65

Aquatic Life (Partial Support) Impaired Use(s): Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Non-Irrigated Crop Production

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.7. Based on NHD river miles, the river miles have been more accurately determined as 0.5 to 3.7.

Leslie County Middle Fork Kentucky River into Kentucky River

Segment Length: From River Mile 61.5 to 64.2

Impaired Use(s): Primary Contact Recreation (Nonsupport), Secondary Contact

Recreation (Nonsupport)

**Pathogens** Pollutant(s):

Suspected Sources: Source Unknown

Middle Fork Kentucky River into Kentucky River Leslie County

From River Mile 67.0 to 73.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Pathogens Loss of Riparian Habitat; Non-Irrigated Crop Production; Suspected Sources:

> Petroleum/Natural Gas Activities; Rangeland Grazing; Surface Mining; Source Unknown; Agriculture; Reclamation of Inactive

Mining

Mill Creek into Rockhouse Creek **Letcher County** 

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Suspended Solids (TSS) Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Petroleum/Natural Gas Production

Activities (Permitted); Surface Mining

Mocks Branch into Dix River (Herrington Lake)

Boyle County

From River Mile 1.6 to 5.7 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization

In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW has awarded several Section 319(h) Grants to the Kentucky Division of Conservation and the Kentucky Heritage RC&D, Inc. to implement watershed restoration strategies: (1) \$185,773 to develop an HSPF model (FFY1997) and (2) \$121,000 to implement agricultural BMPs in the Mocks/Spears Branch subwatersheds (FFY1999). More recently (FFY2002), KDOW was awarded \$342,800 to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed.

Muddy Creek into Kentucky River Madison County

From River Mile 0.0 to 20.2 Segment Length: 20.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

See TMDLs Planned for Development During 2006.

Muncy Creek into Middle Fork Kentucky River Leslie County

From River Mile 2.7 to 4.7 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation

Noland Creek into Kentucky River Estill County

From River Mile 0.1 to 1.2 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

North Benson Creek into Benson Creek
From River Mile 0.8 to 2.0

Franklin County
Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Highways, Roads, Bridges, Infrastructure (New Construction);

Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County.

North Elkhorn Creek into Elkhorn Creek Fayette County

From River Mile 66.0 to 73.8 Segment Length: 7.8 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Highways, Roads, Bridges, Infrastructure (New Construction); Municipal Point Source Discharges; Site Clearance (Land Development or Redevelopment); Source Unknown; Agriculture; Habitat Modification - Other Than

Hydromodification; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 65.0 to 73.7. Based on NHD river miles, the river miles have been more accurately determined as 66.0 to 73.8.

North Fork Kentucky River into Kentucky River

Letcher County

From River Mile 145.5 to 147.9 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Crop Production (Crop Land

or Dry Land); Habitat Modification - Other Than Hydromodification; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 142.6 to 147.7. Based on new assessments, the river miles have been more accurately determined as 145.5 to 147.9.

North Fork Kentucky River into Kentucky River

Letcher County

From River Mile 147.9 to 162.0 Segment Length: 14.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Livestock (Grazing or

Feeding Operations); Crop Production (Crop Land or Dry Land); Silviculture Activities; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 147.7 to 158.0. Based on new assessments, the river miles have been more accurately determined as 147.9 to 162.0.

North Fork North Benson Creek into North Benson Franklin County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$54,200 in federal Section 319(h) Grants (FFY1999 and 2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to develop and implement Agriculture Water Quality Plans. Elkhorn Creek was the primary focus; however, technical assistance was provided throughout Franklin County.

<u>Paint Lick Creek into Kentucky River</u>

Garrard County

From River Mile 0.0 to 7.5 Segment Length: 7.5

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

See TMDLs Planned for Development During 2006.

Plum Branch into Red River Powell County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Agriculture

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.9. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 3.9. The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairments have been more accurately determined as sediment/siltation and impairment unknown.

Polls Creek into Cutshin Creek Leslie County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Potter Fork into Boone Fork Letcher County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

See Status of TMDLs Under Development Prior to 2006.

Puncheon Camp Creek into Middle Fork Kentucky

Breathitt County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Quicksand Creek into North Fork Kentucky River

Breathitt County

From River Mile 0.0 to 17.0 Segment Length: 17.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Pathogens; Turbidity; Impairment Unknown

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Source Unknown; Coal Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.55 to 12.7. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 17.0. The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairments have been more accurately determined as pathogens, turbidity, and impairment unknown.

Quicksand Creek into North Fork Kentucky River

Breathitt County

From River Mile 21.7 to 30.8 Segment Length: 9.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Streambank Modifications/Destabilization;

Surface Mining; Habitat Modification - Other Than Hydromodification; Coal Mining; Silviculture Activities

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 20.8 to 29.4. Based on NHD river miles, the river miles have been more accurately determined as 21.7 to 30.8.

Rattlesnake Creek into Eagle Creek Grant County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Natural Conditions - Water Quality

Standards Use Attainability Analyses Needed

Red Bird River into South Fork Kentucky River Clay County

From River Mile 0.0 to 15.0 Segment Length: 15.0

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems-Septic Tanks and/or

Straight Pipes

See TMDLs Planned for Development During 2006

Red Lick Creek into Station Camp Creek Madison County

From River Mile 0.0 to 8.4 Segment Length: 8.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens

Suspected Sources: Site Clearance (Land Development or Redevelopment); Source

Unknown

Red River into Kentucky River Wolfe County

From River Mile 64.1 to 67.6 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

During 2005 and 2006, the Kentucky River Authority awarded approximately \$7,000 to the Appalachian Heritage Alliance to conduct solid waste clean-up events and to provide hands-on watershed education for Powell County High School students.

Red River into Kentucky River Wolfe County

From River Mile 70.0 to 83.9 Segment Length: 13..9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Crop

Production (Crop Land or Dry Land)

During 2005 and 2006, the Kentucky River Authority awarded approximately \$7,000 to the Appalachian Heritage Alliance to conduct solid waste clean-up events and to provide hands-on watershed education for Powell County High School students.

Red River into Kentucky River Wolfe County

From River Mile 89.5 to 93.4 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

During 2005 and 2006, the Kentucky River Authority awarded approximately \$7,000 to the Appalachian Heritage Alliance to conduct solid waste clean-up events and to provide hands-on watershed education for Powell County High School students.

<u>Richland Creek into Eagle Creek</u> Owen County

From River Mile 0.0 to 0.8 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Specialty Crop Production

Right Fork Buffalo Creek into Buffalo Creek Owsley County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Right Fork Lacy Creek into Lacy Creek Wolfe County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Right Fork Millstone Creek into Millstone Creek

Letcher County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Surface Mining

Rockhouse Creek into North Fork Kentucky River

Letcher County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Pathogens;

**Turbidity** 

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; On-site Treatment Systems (Septic Systems and Similar Decentralized Systems); Silviculture Harvesting; Streambank Modifications/Destabilization; Subsurface

(Hardrock) Mining; Surface Mining

Rose Fork into Red River Wolfe County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Sexton Creek into Goose Creek Clay County

From River Mile 0.1 to 17.2 Segment Length: 17.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Crop Production (Crop Land or Dry Land)

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 9.1 to 16.1. Based on new assessments, the river miles have been more accurately determined as 0.1 to 17.2. The 2004 list had the segment 9.1 to 16.1 listed for pH impairment. Based on new assessment data, a delisting request has been sent for the river miles 9.1 to 16.1 for pH.

Silver Creek into Kentucky River Madison County

From River Mile 0.0 to 11.1 Segment Length: 11.1

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 10.9. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 11.1.

Silver Creek into Kentucky River Madison County

From River Mile 11.2 to 29.8 Segment Length: 18.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Non-Irrigated Crop Production; Post-Development Erosion and

Sedimentation

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 10.9 to 29.2. Based on NHD river miles, the river miles have been more accurately determined as 11.2 to 29.8.

Snow Creek into Lulbegrud Creek Powell County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Post-Development Erosion and Sedimentation

South Elkhorn Creek into Elkhorn Creek Franklin County

From River Mile 5.0 to 16.6 Segment Length: 11.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Chlorine; Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Erosion from Derelict Land (Barren Land); Loss of Riparian

> Habitat; Managed Pasture Grazing; Municipal Point Source Discharges; Non-Irrigated Crop Production; Package Plant or

Other Permitted Small Flows Discharges; Sediment

Resuspension (Clean Sediment)

KDOW awarded \$54,400 in federal Section 319(h) Grants (FFY1999 and FFY2000) to the Kentucky Division of Conservation and the Franklin County Conservation District to assist agricultural landowners with developing and implementing Agriculture Water Quality Plans in the Elkhorn Creek watershed.

South Elkhorn Creek into Elkhorn Creek Woodford County

From River Mile 16.6 to 34.5 Segment Length: 17.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Chlorine; Sedimentation/Siltation; Total Dissolved Solids; Nutrient

Eutrophication Biological Indicators; Organice Enrichment

(Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Municipal

Point Source Discharges; Non-Irrigated Crop Production;

Rangeland Grazing; Livestock (Grazing or Feeding Operations); Agriculture; Manure Runoff; Urban Runoff/Storm Sewers

See TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 16.4 to 34.0. Based on (new assessments, NHD river miles), the river miles have been more accurately determined as 16.6 to 34.5.

South Elkhorn Creek into Elkhorn Creek Woodford County

From River Mile 34.5 to 52.7 Segment Length: 18.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Chlorine; Sedimentation/Siltation; Total Dissolved Solids;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Municipal

Point Source Discharges; Non-Irrigated Crop Production;

Post-Development Erosion and Sedimentation

The river miles for this segment have changed from the 2004 listing. The 2004 list had two separate segments for the river miles 34.0 to 35.2 and 39.9 to 48.0. Based on NHD river miles and new assessment data, the two segments have been combined into one listing. The river miles for the combined segment have been more accurately determined as 34.5 to 52.7. The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairments have been more accurately determined as chlorine, sediment/siltation, total dissolved solids and organic enrichment.

South Fork Quicksand Creek into Quicksand Creek

Breathitt County

From River Mile 0.0 to 16.9 Segment Length: 16.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Loss of Riparian Habitat; Petroleum/Natural Gas Production

Activities (Permitted); Surface Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.0. Based on new assessments, the river miles have been more accurately determined as 0.0 to 16.9.

Spears Creek into Mocks Branch Boyle County

From River Mile 0.1 to 6.3 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Streambank Modifications/Destabilization

In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source

pollution control efforts. KDOW has awarded several Section 319(h) Grants to the Kentucky Division of Conservation and the Kentucky Heritage RC&D, Inc. to implement watershed restoration strategies: (1) \$185,773 to develop an HSPF model (FFY1997) and (2) \$121,000 to implement agricultural BMPs in the Mocks/Spears Branch subwatersheds (FFY1999). More recently (FFY2002), KDOW was awarded \$342,800 to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed.

Spring Fork into Quicksand Creek Breathitt County

From River Mile 3.1 to 6.9 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Squabble Creek into Middle Fork Kentucky River Perry County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Loss of Riparian Habitat; Site Clearance (Land Development or

Redevelopment); Surface Mining

Station Camp Creek into Kentucky River Jackson County

From River Mile 0.0 to 21.3 Segment Length: 21.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Non-Irrigated Crop Production; Other Recreational Pollution

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 7.2. Based on new assessments, the river miles have been more accurately determined as 0.0 to 21.3.

Stevens Creek into Eagle Creek Owen County

From River Mile 14.5 to 17.3 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Managed Pasture Grazing

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 14.4 to 17.1. Based on (new assessments, NHD river miles), the river miles have been more accurately determined as 14.5 to 17.3.

Stillwater Creek into Red River Wolfe County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining; Loss of Riparian Habitat;

Agriculture

Stinnett Creek into Middle Fork Kentucky River Leslie County

From River Mile 1.3 to 4.7 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Residential Districts; Site Clearance

(Land Development or Redevelopment)

Sturgeon Creek into Kentucky River Lee County

From River Mile 8.0 to 12.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production;

**Surface Mining** 

Sugar Creek into Kentucky River Garrard County

From River Mile 4.8 to 6.0 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related)

<u>Sulphur Creek into Drennon Creek</u> Henry County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

Swift Camp Creek into Red River Wolfe County

From River Mile 0.0 to 13.8 Segment Length: 13.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 13.6. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 13.8.

Tate Creek into Kentucky River

Madison County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Livestock (Grazing or

Feeding Operations); Crop Production (Crop Land or Dry

See Status of TMDLs Under Development Prior to 2006.

Ten Mile Creek into Eagle Creek Grant County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

KDOW awarded \$159,000 in federal Section 319(h) Grant funds (FFY2005) to the Northern Kentucky Independent District Health Department to develop a Watershed Based Plan for the Ten Mile Creek watershed and to initiate straight pipe abatement.

<u>Three Forks Creek into Eagle Creek</u>

Grant County

From River Mile 0.0 to 7.6 Segment Length: 7.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Source Unknown

<u>Town Branch into South Elkhorn Creek</u> Fayette County

From River Mile 0.0 to 9.2 Segment Length: 9.2

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Agriculture; Urban

Runoff/Storm Sewers

KDOW awarded \$314,114 in federal Section 319(h) Grant funds (FFY2003) to the Lexington-Fayette Urban County Government to restore the McConnell Springs stormwater quality wetland pond.

Town Branch into South Elkhorn Creek Fayette County

From River Mile 9.2 to 10.6 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Urban Runoff/Storm Sewers

Town Branch into South Elkhorn Creek Fayette County

Segment Length: From River Mile 10.6 to 12.1 1.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

KDOW awarded \$314,114 in federal Section 319(h) Grant funds (FFY2003) to the Lexington-Fayette Urban County Government to restore the McConnell Springs stormwater quality wetland pond.

Trace Fork into Carr Creek Lake **Knott County** 

From River Mile 0.2 to 2.4 Segment Length: Impaired Use(s):

Primary Contact Recreation (Nonsupport), Secondary Contact

Recreation (Nonsupport)

Pollutant(s): Pathogens

Source Unknown Suspected Sources:

Troublesome Creek into North Fork Kentucky River **Breathitt County** 

From River Mile 0.0 to 45.1 Segment Length: 45.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Municipal Point Source Discharges; Petroleum/Natural Gas Suspected Sources:

Activities; Petroleum/Natural Gas Production Activities

(Permitted); Coal Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 25.2 to 31.4. Based on new assessments, the river miles have been more accurately determined as 0.0 to 45.1.

Upper Devil Creek into North Fork Kentucky River Wolfe County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support) Pollutant(s): Sedimentation/Siltation

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Surface

Mining; Reclamation of Inactive Mining; Inappropriate Waste

Disposal; Silviculture Activities

## **Kentucky Basin Unit Kentucky River Basin Streams**

The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairment has been more accurately determined as sediment/siltation.

Upper Howard Creek into Kentucky River **Clark County** 

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Sedimentation/Siltation; Impairment Unknown Pollutant(s):

Suspected Sources: Rangeland Grazing; Source Unknown

The impaired use for this segment has changed from the 2004 listing. The 2004 list had the impaired use as unknown. Based on new assessments, the impairments have been more accurately determined as sediment/siltation and impairment unknown.

Upper Twin Creek into Middle Fork Kentucky River **Breathitt County** 

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Impairment Unknown Pollutant(s): Source Unknown Suspected Sources:

UT of Cane Run into Cane Run **Scott County** 

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): **Pathogens** 

Suspected Sources: Livestock (Grazing or Feeding Operations)

UT to Engle Fork into Engle Fork Perry County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water; Total Dissolved

**Solids** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Surface Mining

UT to N. Br. Lulbegrud Cr. into N. Br. Lulbegrud Cr. Montgomery County From River Mile 0.0 to 2.2 Segment Length:

Impaired Use(s): Aquatic Life (Nonsupport) Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown

## Kentucky Basin Unit Kentucky River Basin Streams

UT to North Elkhorn Creek into North Elkhorn Creek Fayette County

From River Mile 0.0 to 5.6 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Post-Development Erosion and Sedimentation; Streambank

Modifications/Destabilization

UT to Smith Fork into Smith Fork Madison County

From River Mile 0.0 to 0.55 Segment Length: 0.55

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining; Agriculture

<u>UT to Swift Camp Creek into Swift Camp Creek</u> Wolfe County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Septage Disposal

See Status of TMDLs Under Development Prior to 2006.

West Fork Mill Creek into Mill Creek Carroll County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Unspecified Urban Stormwater

West Hickman Creek into Hickman Creek

Jessamine County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Unspecified Urban

Stormwater

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$373,560 in federal Section 319(h) Grant funds (FFY2003) to the Lexington-Fayette Urban County Government to implement stormwater controls (i.e., retention basin retrofit) in the Gainesway community in the West Hickman Creek watershed.

## Kentucky Basin Unit Kentucky River Basin Streams

West Hickman Creek into Hickman Creek
From River Mile 3.0 to 8.6

Jessamine County
Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Unspecified Urban Stormwater

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$373,560 in federal Section 319(h) Grant funds (FFY2003) to the Lexington-Fayette Urban County Government to implement stormwater controls (i.e., retention basin retrofit) in the Gainesway community in the West Hickman Creek watershed.

White Lick Creek into Paint Lick Creek Garrard County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Total Suspended Solids (TSS)

Suspected Sources: Non-Irrigated Crop Production; Specialty Crop Production

White Oak Creek into Dix River Garrard County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Municipal

Point Source Discharges

Wolf Run into Town Branch Fayette County

From River Mile 0.0 to 4.1 Segment Length: 4.1 Impaired Use(s): Primary Contact Recreation (Nonsupport); Aquatic Life (Partial

Support)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators

Suspected Sources: Channelization; Unspecified Urban Stormwater

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$314,114 in federal Section 319(h) Grant funds (FFY2003) to the Lexington-Fayette Urban County Government to restore the McConnell Springs stormwater quality wetland pond. During 2006, the Kentucky River Authority awarded approximately \$3,000 to the Friends of Wolf Run to improve riparian buffers, provide lawn testing for fertilizer needs and to conduct community education efforts.

Wooten Creek into Cutshin Creek

Leslie County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

# Kentucky Basin Unit Kentucky River Basin Lakes

#### 8.2 Kentucky River Basin Lakes

Boltz Lake Grant County

Acres: 92

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Suspected Sources: Agriculture; Unspecified Urban Stormwater

Bullock Pen Lake Grant County

Acres: 134

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

<u>Carr Creek</u> Knott County

Acres: 710

Impaired Use(s): Aquatic Life (Partial Support), Secondary Contact Recreation

(Partial Support)

Pollutant(s): Oxygen, Dissolved; Sedimentation/Siltation; Total Suspended

Solids (TSS); Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Surface Mining; Source Unknown

<u>Cedar Creek</u> Lincoln County

Acres: 784

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

Elmer Davis Lake Owen County

Acres: 149

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Suspected Sources: Agriculture

Herrington Lake Garrard County

Acres: 2940

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Methylmercury; Oxygen, Dissolved; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Internal Nutrient Recycling; Municipal Point Source

Discharges; On-site Treatment Systems (Septic Systems and Similar Decentralized Systems); Source Unknown; Agriculture

## Kentucky Basin Unit Kentucky River Basin Lakes

See TMDLs Planned for Development During 2006. In 1999, the Dix River/Herrington Reservoir watershed was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts. KDOW has awarded over \$1.0 million in Section 319(h) Grants to the Kentucky Division of Conservation and the Kentucky Heritage RC&D, Inc to develop an HSPF model (FFY1997), implement agricultural BMPs in the Mocks/Spears Branch subwatersheds (FFY1999), and implement agricultural BMPs in the Peyton Creek subwatershed (FFY1999, FFY2001, and FFY2002). More recently (FFY2002), KDOW was awarded \$342,800 to develop and initiate implementation of a comprehensive Watershed Based Plan for the Dix River/Herrington Reservoir watershed.

<u>Lake Reba</u> Madison County

Acres: 78

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Suspected Sources: Golf Courses; Unspecified Urban Stormwater

<u>Panbowl Lake</u> Breathitt County

Acres: 98

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Oxygen, Dissolved; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Internal Nutrient Recycling; Septage Disposal

Stanford City Lake (Rice Lake)

Lincoln County

Acres: 43

Impaired Use(s): Drinking Water (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Wilgreen Lake Madison County

Acres: 169

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological Suspected Sources: Non-Irrigated Crop Production; On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems);

Livestock (Grazing or Feeding Operations)

# Chapter 9. Salt-Licking Basin Unit 303(d) List

#### 9.1 Licking River Basin Streams

Allison Creek into Fleming Creek Fleming County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Phosphorus (Total); Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts.

Banklick Creek into Licking River Kenton County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Municipal Point Source Discharges; Unspecified Urban

Stormwater; Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.2. Based on new assessments the segment has been split. Sanitation District 1 (SD1) of Northern Kentucky was awarded a line-item appropriation of \$475,000 to develop and apply a Watershed Assessment Protocol to Banklick Creek. SD1 has signed a Consent Decree with state and federal regulators to apply an innovative adaptive watershed management approach to addressing sewer overflows and water quality in Northern Kentucky. The Banklick Watershed Council (BWC) was awarded \$117,260 in federal 104(b)(3) grant funds to develop a watershed Action Plan; BWC intends to apply for FFY2007 federal Section 319(h) Grant funds to continue their watershed planning process and to begin implementation of remedial measures.

Banklick Creek into Licking River

Kenton County

From River Mile 3.5 to 8.2 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.2. Based on new assessments the segment has been split. Sanitation District 1 (SD1) of Northern Kentucky was awarded a line-item appropriation of \$475,000 to develop and apply a Watershed Assessment Protocol to Banklick Creek. SD1 has signed a Consent Decree with state and federal regulators to apply an innovative adaptive watershed management approach to addressing sewer overflows and water quality in Northern Kentucky. The Banklick Watershed Council (BWC) was awarded \$117,260 in federal 104(b)(3) grant funds to develop a watershed Action Plan; BWC intends to apply for FFY2007 federal Section 319(h) Grant funds to continue their watershed planning process and to begin implementation of remedial measures.

Banklick Creek into Licking River

Kenton County

From River Mile 8.2 to 19.2 Segment Length: 11.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 8.2 to 19.0. Based on NHD river miles, the river miles have been more accurately determined as 8.2 to 19.2. Sanitation District 1 (SD1) of Northern Kentucky was awarded a line-item appropriation of \$475,000 to develop and apply a Watershed Assessment Protocol to Banklick Creek. SD1 has signed a Consent Decree with state and federal regulators to apply an innovative adaptive watershed management approach to addressing sewer overflows and water quality in Northern Kentucky. The Banklick Watershed Council (BWC) was awarded \$117,260 in federal 104(b)(3) grant funds to develop a watershed Action Plan; BWC intends to apply for FFY2007 federal Section 319(h) Grant funds to continue their watershed planning process and to begin implementation of remedial measures.

Beaver Creek into Licking River Menifee County

From River Mile 10.0 to 14.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

Blacks Creek into Hinkston Creek Bourbon County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations)

<u>Blackwater Creek into Licking River</u>

Morgan County

From River Mile 3.8 to 11.7 Segment Length: 7.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Boone Creek into Hinkston Creek Bourbon County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations)

Broke Leg Creek into Blackwater Creek Morgan County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

Broke Leg Creek into Blackwater Creek Morgan County

From River Mile 1.0 to 4.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Upstream Source; Runoff from Forest/Grassland/Parkland

Brushy Fork into South Fork Grassy Creek
From River Mile 0.0 to 5.8

Pendleton County
Segment Length: 5.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Streambank Modifications/Destabilization; Crop Production

(Crop Land or Dry Land); Agriculture; Runoff from

Forest/Grassland/Parkland

Burning Fork into Licking River Magoffin County

From River Mile 0.0 to 3.3 Segment Length: 3.25

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Municipal (Urbanized High Density Area); Municipal Point Source Discharges; Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.9. Based on new assessments, the river miles have been more accurately determined as 0.0 to 3.3.

Caney Creek into Licking River Morgan County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Caskey Fork into Grassy Fork Morgan County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Site Clearance (Land Development or Redevelopment); Source

Unknown

Christy Creek into Triplett Creek Rowan County

From River Mile 0.0 to 4.3 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production

<u>Clarks Run into North Fork Licking River</u>

Mason County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Coffee Creek into Williams Creek Morgan County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channel Erosion/Incision from Upstream Hydromodifications;

Channelization; Streambank Modifications/Destabilization;

Agriculture

Cooper Run into Stoner Creek Bourbon County

From River Mile 0.0 to 10.1 Segment Length: 10.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators
Suspected Sources: Livestock (Grazing or Feeding Operations)

Craintown Branch into Fleming Creek Fleming County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Phosphorus (Total)

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.5. Based on NHD, the river miles have been more accurately determined as 0.0 to 3.6. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multiagency nonpoint source pollution control efforts.

<u>Crane Creek into Fox Creek</u> Fleming County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Sand/Gravel/Rock Mining or

Quarries; Streambank Modifications/Destabilization; Crop

Production (Crop Land or Dry Land); Agriculture

<u>Crooked Creek into Licking River</u>
Nicholas County

From River Mile 0.0 to 9.1 Segment Length: 9.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Doty Branch into Fleming Creek Fleming County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators Suspected Sources: Animal Feeding Operations (NPS); Agriculture

See Status of TMDLs Under Development Prior to 2006. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts.

Doty Branch into Fleming Creek Fleming County

From River Mile 2.3 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment (Sewage) Biological Indiators Suspected Sources: Animal Feeding Operations (NPS); Agriculture

<u>Dry Creek into Triplett Creek</u> Rowan County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Urban Runoff/Storm Sewers

Elk Fork into Licking River Morgan County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

Agriculture; Habitat Modification - Other Than Hydromodification; Silviculture Activities

See Status of TMDLs Under Development Prior to 2006.

Elk Fork into Licking River Morgan County

From River Mile 4.9 to 10.5 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

See Status of TMDLs Under Development Prior to 2006.

Elk Fork into Licking River Morgan County

From River Mile 12.6 to 14.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

See Status of TMDLs Under Development Prior to 2006.

Fannins Fork into Elk Fork Morgan County

From River Mile 1.5 to 3.4 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Flat Creek into Licking River Bath County

From River Mile 0.0 to .9 Segment Length: 0.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Flat Run into Stoner Creek Bourbon County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations)

Fleming Creek into Licking River Fleming County

From River Mile 0.0 to 12.8 Segment Length: 12.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators;

Phosphorus (Total)

Suspected Sources: Animal Feeding Operations (NPS)

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 39.2. Based on new assessments the segment has been split. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts.

Fleming Creek into Licking River Fleming County

From River Mile 12.8 to 16.0 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators Suspected Sources: Animal Feeding Operations (NPS); Agriculture

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 39.2. Based on new assessments the segment has been split. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts.

Fleming Creek into Licking River Fleming County

From River Mile 20.8 to 39.4 Segment Length: 18.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators;

Phosphorus (Total)

Suspected Sources: Animal Feeding Operations (NPS); Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 39.2. Based on new assessments the segment has been split and extended from 39.2 to 39.4. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant

funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multiagency nonpoint source pollution control efforts.

Fox Creek into Licking River Fleming County

From River Mile 0.0 to 10.1 Segment Length: 10.1 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Grazing in Riparian or Shoreline Zones; Source Unknown;

**Natural Sources** 

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.8. Based on new assessments the river miles have been more accurately determined as 0.0 to 10.1.

Fox Creek into Licking River Fleming County

From River Mile 20.1 to 22.7 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Dredging (e.g., for Navigation Channels); Silviculture

Harvesting; Natural Sources; Silviculture Activities

Grassy Creek into Licking River Morgan County

From River Mile 4.6 to 10.0 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Source Unknown; Crop Production (Crop Land or Dry Land)

<u>Hinkston Creek into South Fork Licking River</u>
Bourbon County

From River Mile 20.8 to 31.0 Segment Length: 10.2

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

<u>Hinkston Creek into South Fork Licking River</u>
Bourbon County

From River Mile 41.8 to 49.1 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Agriculture

<u>Hinkston Creek into South Fork Licking River</u>
From River Mile 51.5 to 65.9

Montgomery County
Segment Length: 14.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones

See Status of TMDLs Under Development Prior to 2006.

<u>Houston Creek into Stoner Creek</u>
Bourbon County

From River Mile 0.0 to 9.0 Segment Length: 9.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Houston Creek into Stoner Creek</u>
Bourbon County

From River Mile 9.0 to 12.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Golf Courses

See TMDLs Planned for Development During 2006.

Johnson Creek into Licking River Magoffin County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Johnson Creek into Licking River Robertson County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.3. Based on new assessments, the river miles have been more accurately determined as 0.0 to 3.5.

Lees Creek into North Fork Licking River

Mason County

From River Mile 0.0 to 4.3 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Crop Production (Crop

Land or Dry Land)

<u>Left Fork White Oak Creek into Licking River</u>

Morgan County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Lick Creek into Licking River Magoffin County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Livestock (Grazing or Feeding Operations); Crop Production (Crop Land or Dry Land); Wet Weather Discharges (Non-Point Source); Impervious Surface/Parking Lot Runoff;

Unrestricted Cattle Access; Rural (Residential Areas)

Licking River into Ohio River Campbell County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Combined Sewer Overflows; Urban Runoff/Storm Sewers

Licking River into Ohio River Campbell County

From River Mile 4.8 to 14.9 Segment Length: 10.1

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 4.6 to 14.5. Based on NHD river miles, the river miles have been more accurately determined as 4.8 to 14.9.

Licking River into Ohio River Kenton County

From River Mile 31.0 to 37.6 Segment Length: 6.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Rowan County Licking River into Ohio River

From River Mile 174.4 to 180.8 Segment Length: 6.4

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Licking River into Ohio River Morgan County

From River Mile 224.3 to 241.3 Segment Length: 17.0 Impaired Use(s):

Primary Contact Recreation (Nonsupport), Secondary Contact

Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Licking River into Ohio River Magoffin County

From River Mile 265.0 to 271.6 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Turbidity; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

> Habitat; Silviculture Harvesting; Silviculture Reforestation; Streambank Modifications/Destabilization; Wet Weather Discharges (Non-Point Source); Silviculture Activities; Urban

Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 263.1 to 269.5. Based on NHD river miles, the river miles have been more accurately determined as 265.0 to 271.6.

Magoffin County Licking River into Ohio River

From River Mile 271.6 to 294.1 Segment Length: 22.5

Aquatic Life (Partial Support) Impaired Use(s): Pollutant(s): Sedimentation/Siltation Suspected Sources: Resource Extraction

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 269.5 to 293.3. Based on NHD river miles, the river miles have been more accurately determined as 271.6 to 294.1.

Licking River into Ohio River Magoffin County

From River Mile 294.1 to 302.4 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 293.3 to 301.1. Based on NHD river miles, the river miles have been more accurately determined as 294.1 to 302.4.

Little Beaver Creek into Beaver Creek Harrison County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Highway/Road/Bridge

Runoff (Non-Construction Related); Crop Production (Crop

Land or Dry Land)

<u>Little Stoner Creek into Stoner Creek</u>

Clark County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

Locust Creek into Licking River Fleming County

From River Mile 0.0 to 11.8 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Crop Production (Crop

Land or Dry Land)

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 5.7 to 11.7. Based on new assessments, the river miles have been more accurately determined as 0.0 to 11.8.

Logan Run into Fleming Creek Fleming County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. Since 1998, KDOW has awarded over \$1.5 million in federal Section 319(h) Grant funds (FFY1997, 1999, 2000 & 2004) to the Kentucky Division of Conservation and the Fleming County Conservation District to implement watershed restoration activities focusing on agriculture in the Fleming Creek watershed. In 1999, Fleming Creek was selected as one of five Clean Water Action Plan projects for focused and targeted multi-agency nonpoint source pollution control efforts.

Mash Fork into Horsepen Fork Magoffin County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Crop Production (Crop Land or Dry Land)

Middle Fork Licking River into Licking River

Magoffin County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

Mill Creek into South Fork Licking Harrison County

From River Mile 0.0 to 21.6 Segment Length: 21.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Site Clearance (Land Development or Redevelopment);

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

North Fork Licking River into Licking River (Cave Run Morgan County

Lake)

From River Mile 8.4 to 12.0 Segment Length: 3.6

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

North Fork Licking River into Licking River (Cave Run Morgan County

Lake)

From River Mile 12.0 to 13.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Upstream Source; Introduction of Non-native Organisms

(Accidental or Intentional)

North Fork Licking River into Licking River

Bracken County

From River Mile 18.5 to 52.5 Segment Length: 34.0

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Agriculture

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 18.1 to 51.7. Based on NHD river miles, the river miles have been more accurately determined as 18.5 to 52.5.

Oldfield Fork into Grassy Creek Morgan County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Phillips Creek into Licking River Campbell County

From River Mile 0.0 to 5.3 Segment Length: 5.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

<u>Prickly Ash Creek into Slate Creek</u>

Bath County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Agriculture

KDOW awarded \$66,000 in federal Section 319(h) Grant funds (FFY1997) to the Gateway District Health Department to implement on-site wastewater treatment alternatives in the Slate Creek Watershed.

<u>Puncheon Camp Creek into Licking River</u>

Magoffin County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Rock Fork into North Fork Triplett Creek Rowan County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Dredging (e.g., for Navigation Channels); Crop Production

(Crop Land or Dry Land)

Salt Lick Creek into Licking River Bath County

From River Mile 3.0 to 8.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Rangeland Grazing

Scrubgrass Creek into Cassidy Creek Nicholas County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Slate Creek into Licking River

Bath County

From River Mile 0.0 to 13.6 Segment Length: 13.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 7.0. Based on new assessments, the river miles have been more accurately determined as 0.0 to 13.6. KDOW awarded \$66,000 in federal Section 319(h) Grant funds (FFY1997) to the Gateway District Health Department to educate and implement on-site wastewater treatment alternatives in the Slate Creek Watershed. As part of the FFY1998 Section 319(h) Grant, KDOW awarded an additional \$235,000 for design and installation of a decentralized wastewater treatment facility for the community of Preston; located in the headwaters of the Slate Creek watershed.

<u>Spruce Creek into Slate Creek</u>

From River Mile 0.0 to 1.7

Montgomery County
Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones

Stoner Creek into South Fork Licking River Bourbon County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Stoner Creek into South Fork Licking River Bourbon County

From River Mile 5.5 to 15.0 Segment Length: 9.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Stony Creek into Licking River Nicholas County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Straight Creek into Elk Fork Morgan County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

See Status of TMDLs Under Development Prior to 2006.

<u>Strodes Creek into Stoner Creek</u>

Bourbon County

From River Mile 2.7 to 19.3 Segment Length: 16.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Municipal Point Source Discharges; Agriculture; Habitat Modification - Other Than Hydromodification; Unspecified

4.6

**Urban Stormwater** 

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$680,034 in federal Section 319(h) Grant funds (FFY2004) to the City of Winchester to implement BMPs and restore the water quality of Strodes Creek.

Threemile Creek into Licking River
From River Mile 0.1 to 4.7

Campbell County
Segment Length:

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures);

Source Unknown

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 4.7. The river miles have been more accurately determined as 0.1 to 4.7 to account for

backwater from the Licking River. Sanitation District 1 of Northern Kentucky has signed a Consent Decree with state and federal regulators to apply an innovative adaptive watershed management approach to addressing sewer overflows and water quality in Northern Kentucky. As part of this Consent Decree, a watershed plan will be developed for this watershed.

Townsend Creek into South Fork Licking River Bourbon County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006. KDOW awarded \$900,000 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Chapter of the Nature Conservancy to target agricultural BMPs, conservation easements, and other water quality practices in 303(d) impaired watersheds in the Licking River Basin; the project has a specific goal of meeting water quality standards in Townsend Creek.

<u>Trace Fork into Licking River</u>
From River Mile 0.0 to 3.1

Magoffin County
Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Triplett Creek into Licking River Rowan County

From River Mile 5.9 to 12.3 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Impacts from Hydrostructure Flow Regulation/Modification;

Municipal Point Source Discharges; Source Unknown; Agriculture; Unspecified Urban Stormwater; Urban

Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 5.8 to 12.0. Based on NHD, the river miles have been more accurately determined as 5.9 to 12.3. A diverse stakeholder group has formed to address water quality and quantity issues in this watershed. They have applied for \$40,000 FFY2006 federal 604(b) grant funds to develop a watershed based plan and they intend to apply for

FFY2007 federal Section 319(h) grant funds to continue development of their watershed based plan and begin implementation of identified remedial strategies.

UT to Mill Creek into Mill Creek and North Fork

Fleming County

**Licking River** 

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Kjehldahl Nitrogen (TKN);

Phosphorus (Total)

Suspected Sources: Dairies (Outside Milk Parlor Areas); Highway/Road/Bridge

Runoff (Non-Construction Related); Loss of Riparian Habitat; Livestock (Grazing or Feeding Operations); Unrestricted Cattle Access; Introduction of Non-native Organisms (Accidental or

Intentional)

UT to UT to Lees Creek into Lees Creek Mason County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Kjehldahl Nitrogen (TKN);

Nitrate/Nitrite (Nitrite + Nitrate as N)

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Livestock (Grazing or Feeding Operations); Unrestricted Cattle Access; Introduction of Non-native

Organisms (Accidental or Intentional)

Williams Creek into Elk Fork Morgan County

From River Mile 0.0 to 5.3 Segment Length: 5.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

# 9.2 Licking River Basin Lakes

<u>Cave Run Lake</u> Rowan County

Acres: 8270

Impaired Use(s): Aquatic Life (Partial Support), Primay Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support), Fish

Consumption (Partial Support)

Pollutant(s): Methylmercury; pH

Suspected Sources: Atmospheric Deposition - Toxics; Source Unknown; Upstream

Source

Doe Run Lake Kenton County

Acres: 51

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Indicators; Dissolved Gas Supersaturation

Suspected Sources: Source Unknown; Upstream Source

<u>Kincaid Lake</u> Pendleton County

Acres: 183

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Indicators; Dissolved Gas Supersaturation

Suspected Sources: Agriculture

#### 9.3 Ohio River Basin Streams

Allen Fork into Woolper Creek Boone County

From River Mile 2.0 to 4.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Habitat Modification - Other Than Hydromodification;

Unspecified Urban Stormwater

See Status of TMDLs Under Development Prior to 2006.

Big Sugar Creek into Ohio River Gallatin County

From River Mile 0.7 to 2.0 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related); Site

Clearance (Land Development or Redevelopment); Crop

Production (Crop Land or Dry Land)

Bracken Creek into Ohio River Bracken County

From River Mile 2.8 to 11.0 Segment Length: 8.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Animal Feeding Operations (NPS); Grazing in Riparian or

Shoreline Zones; Crop Production (Crop Land or Dry Land)

Briery Branch into Ohio River Lewis County

From River Mile 0.2 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Grazing in Riparian or Shoreline Zones; Crop Production (Crop

Land or Dry Land); Rural (Residential Areas)

Brush Creek into Twelvemile Creek Campbell County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources

Cabin Creek into Ohio River Mason County

From River Mile 3.6 to 11.3 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

Clary Branch into Salt Lick Creek Lewis County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related);

Runoff from Forest/Grassland/Parkland

<u>Dry Creek into Ohio River</u>

Boone County

From River Mile 0.2 to 7.0 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges; Agriculture; Unspecified

**Urban Stormwater** 

<u>Dry Creek into Ohio River</u>

Gallatin County

From River Mile 1.1 to 3.0 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

Fourmile Creek into Ohio River Campbell County

From River Mile 0.2 to 8.5 Segment Length: 8.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Source Discharges; Sanitary Sewer Overflows

(Collection System Failures)

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.3. Based on NHD, the river miles have been more accurately determined as 0.2 to 8.5. Sanitation District 1 of Northern Kentucky has signed a Consent Decree with state and federal regulators to apply an innovative adaptive watershed management approach to addressing sewer overflows and water quality in Northern Kentucky. As part of this Consent Decree, a watershed plan will be developed for this watershed.

Goose Creek into Locust Creek Bracken County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Surface Mining; Natural Sources

Gunpowder Creek into Ohio River Boone County

From River Mile 0.0 to 15.4 Segment Length: 15.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Site Clearance (Land Development or Redevelopment)

Gunpowder Creek into Ohio River Boone County

From River Mile 15.4 to 17.1 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Airports; Highway/Road/Bridge Runoff (Non-Construction

Related); Loss of Riparian Habitat; Site Clearance (Land

Development or Redevelopment); Streambank

Modifications/Destabilization; Agriculture; Unspecified Urban

Stormwater

See TMDLs Planned for Development During 2007. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 15.0 to 16.6. Based on new assessments, the river miles have been more accurately determined as 15.4 to 17.1.

Gunpowder Creek into Ohio River Boone County

From River Mile 18.9 to 21.6 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Laurel Fork into Kinniconick Creek

Lewis County

From River Mile 5.8 to 15.9 Segment Length: 10.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Turbidity; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Dredging (e.g., for Navigation Channels); Livestock (Grazing

or Feeding Operations); Crop Production (Crop Land or Dry Land); Silvigulture Activities; Savaga Discharges in Unsavored

Land); Silviculture Activities; Sewage Discharges in Unsewered

Areas

Locust Creek into Ohio River Bracken County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Locust Creek into Ohio River</u>

Bracken County

From River Mile 4.1 to 12.2 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Montgomery Creek into Kinniconick Creek Lewis County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Dredging (e.g., for Navigation Channels); Grazing in Riparian

or Shoreline Zones; Site Clearance (Land Development or Redevelopment); Crop Production (Crop Land or Dry Land);

Sewage Discharges in Unsewered Areas

Salt Lick Creek into Ohio River Lewis County

From River Mile 0.2 to 7.2 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Impervious Surface/Parking Lot Runoff; Introduction of Non-native Organisms (Accidental or

Intentional); Runoff from Forest/Grassland/Parkland

Snag Creek into Ohio River Bracken County

From River Mile 0.5 to 5.5 Segment Length: 5.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

South Fork Gunpowder Creek into Ohio River Boone County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Package Plant or Other Permitted Small Flows Discharges;

Post-Development Erosion and Sedimentation; Site Clearance

(Land Development or Redevelopment); Agriculture

See TMDLs Planned for Development During 2007. A volunteer citizens group was formed in 2006 to monitor, plan, and implement remedial measures in this watershed. Sample training via the Licking River Watershed Watch is scheduled and pre-BMP monitoring will begin in 2006. They plan to apply for FFY2008 federal Section 319(h) Grant funding.

South Fork Gunpowder Creek into Ohio River Boone County

From River Mile 4.1 to 6.8 Segment Length: 2.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2007. A volunteer citizens group was formed in 2006 to monitor, plan, and implement remedial measures in this watershed. Sample training via the Licking River Watershed Watch is scheduled and pre-BMP monitoring will begin in 2006. They plan to apply for FFY2008 federal Section 319(h) Grant funding.

<u>Tenmile Creek into Ohio River</u>
From River Mile 0.1 to 1.2

Campbell County
Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Site Clearance (Land Development or Redevelopment);

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

Trace Creek into Kinniconick Creek Lewis County

From River Mile 0.2 to 4.6 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Dredging (e.g., for Navigation Channels); Grazing in Riparian

or Shoreline Zones; Illegal Dumps or Other Inappropriate Waste Disposal; Crop Production (Crop Land or Dry Land); Silviculture Activities; Sewage Discharges in Unsewered Areas

Woolper Creek into Ohio River Boone County

From River Mile 2.8 to 7.2 Segment Length: 4.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Woolper Creek into Ohio River Boone County

From River Mile 11.9 to 14.0 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Total Suspended Solids (TSS);

Nutrient/Eutrophication Biological Indicators; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal; Impacts

from Hydrostructure Flow Regulation/Modification; Urban

Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 11.5 to 13.6. Based on NHD, the river miles have been more accurately determined as 11.9 to 14.0. Northern Kentucky University Center for Applied Ecology will begin a \$1.2 million stream restoration project on Woolper Creek in 2006 to address past channelization and filling of wetlands and floodplain.

#### 9.5 Salt River Basin Streams

Beargrass Creek into Ohio River Jefferson County

From River Mile 0.5 to 1.8 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Cadmium; Organic Enrichment (Sewage) Biological Indicators Suspected Sources: Combined Sewer Overflows; Landfills; Municipal Point Source

Discharges; Sanitary Sewer Overflows (Collection System

Failures); Unspecified Urban Stormwater

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 1.5. Based on NHD, the river miles have been more accurately determined as 0.5 to 1.8. The Beargrass Creek Watershed Council is active in the watershed and has recently coordinated several Clean Sweep events, as well as the Beargrass Creek Watershed Roundtable Conference. MSD has entered into a consent decree to address unauthorized discharges from SSO, CSO and WWTPs and to address discharges from the CSO locations identified in their KPDES permit.

Beech Creek into Taylorsville Lake (Salt River)

Shelby County

From River Mile 4.6 to 19.6 Segment Length: 15.0 Impaired Use(s): Primary Contact Recreation (Nonsupport), Secondary Contact

Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Beech Fork into Rolling Fork

Nelson County

From River Mile 39.5 to 50.4 Segment Length: 10.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 39.5 to 49.7. Based on new assessments, the river miles have been more accurately determined as 39.5 to 50.4.

Big South Fork into Rolling Fork

Marion County

From River Mile 0.0 to 12.4 Segment Length: 12.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Grazing in Riparian or Shoreline Zones

Blue Spring Ditch into Northern Ditch
From River Mile 0.0 to 2.1

Segment Length: 2.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.7. Based on NHD, the river miles have been more accurately determined as 0.0 to 2.1.

Brashears Creek into Salt River Spencer County

From River Mile 0.0 to 13.0 Segment Length: 13.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Brooks Run into Floyds Fork Bullitt County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges

See Status of TMDLs Under Development Prior to 2006.

Brooks Run into Floyds Fork Bullitt County

From River Mile 2.5 to 4.1 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

Indicators

Suspected Sources: Municipal Point Source Discharges

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

Brooks Run into Floyds Fork Bullitt County

From River Mile 4.1 to 6.1 Segment Length: 2.0 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 6.1. Based on new assessments, the segment has been split with the river miles more accurately determined as 0.0 to 2.5, 2.5 to 4.1 and 4.1 to 6.1. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

Bullitt Lick Creek into Salt River

Bullitt County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Site Clearance (Land Development or

Redevelopment)

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

<u>Cartwright Creek into Beech Fork</u>
From River Mile 0.0 to 6.6

Washington County
Segment Length: 6.

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Loss of Riparian Habitat; Agriculture

<u>Cartwright Creek into Beech Fork</u>
From River Mile 6.6 to 12.6

Washington County
Segment Length:

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

<u>Chaplin River into Beech Fork</u>
Nelson County

From River Mile 0.0 to 23.1 Segment Length: 23.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Chaplin River into Beech Fork Mercer County

From River Mile 63.0 to 69.7 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

<u>Cheese Lick into Sulphur Creek</u> Anderson County

From River Mile 0.7 to 4.4 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Streambank Modifications/Destabilization

<u>Chenoweth Run into Floyds Fork</u>

Jefferson County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Landfills; Municipal (Urbanized High Density Area); Municipal

Point Source Discharges; Package Plant or Other Permitted Small Flows Discharges; Livestock (Grazing or Feeding

Operations); Unspecified Urban Stormwater

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

<u>Chenoweth Run into Floyds Fork</u>

Jefferson County

From River Mile 5.2 to 9.2 Segment Length: 3.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Landfills; Municipal (Urbanized High Density Area); Municipal

Point Source Discharges; Package Plant or Other Permitted Small Flows Discharges; Livestock (Grazing or Feeding

Operations); Unspecified Urban Stormwater

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 5.3 to 9.1. Based on NHD, the river miles have been more accurately determined as 5.2 to 9.2. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Clear Creek into Bullskin Creek Shelby County

From River Mile 0.0 to 11.0 Segment Length: 11.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

Biological Indicators; Nutrient/Eutrophication Biological Indicators

Suspected Sources: Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land); Unspecified Urban Stormwater

Clear Creek into Rolling Fork Hardin County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Cox Creek into Salt River

Bullitt County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Cox Creek into Salt River

Nelson County

From River Mile 11.2 to 15.5 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Permitted Runoff from Confined Animal Feeding Operations

(CAFOs)

Crooked Creek into Rolling Fork Bullitt County

From River Mile 5.6 to 12.8 Segment Length: 7.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

<u>Currys Fork into Floyds Fork</u> Oldham County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/siltation; Pathogens

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Municipal (Urbanized High Density Area); Package Plant or

Other Permitted Small Flows Discharges

The Oldham County Fiscal Court will be awarded \$970,500 in federal Section 319(h) Grant funds (FFY2006) to develop and implement a Watershed Based Plan for the Curry's Fork watershed.

Doe Run into Ohio River Meade County

From River Mile 4.1 to 7.9 Segment Length: 3.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

East Fork into Beech Fork Washington County
From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 1.8. Based on new assessments, the river miles have been more accurately determined as 0.0 to 1.9.

Fern Creek into Northern DitchJefferson CountyFrom River Mile 0.0 to 1.3Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Landfills; Municipal Point Source Discharges; Unspecified

**Urban Stormwater** 

See Status of TMDLs Under Development Prior to 2006. In the 2004 listing, Fern Creek was synonymous with Northern Ditch (i.e., Fern Creek/Northern Ditch). However, on the United States Geological Survey 7.5' topographic map of the Louisville East quadrangle, Fern Creek discharges into Northern Ditch at the State Route 2052 bridge. Therefore, the listings have been separated, and Northern Ditch ends at RM 7.5.

Fern Creek into Northern DitchJefferson CountyFrom River Mile 1.3 to 4.4Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological Indicators Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal; Landfills;

Municipal Point Source Discharges; Unspecified Urban

Stormwater; Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. In the 2004 listing, Fern Creek was synonymous with Northern Ditch (i.e., Fern Creek/Northern Ditch). However, on the United States Geological Survey 7.5' topographic map of the Louisville East quadrangle, Fern Creek discharges into Northern Ditch at the State Route 2052 bridge. Therefore, the listings have been separated, and Northern Ditch ends at RM 7.5.

From River Mile 4.4 to 5.9

Impaired Use(s):

Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm

See Status of TMDLs Under Development Prior to 2006. In the 2004 listing, Fern Creek was synonymous with Northern Ditch (i.e., Fern Creek/Northern Ditch). However, on the United States Geological Survey 7.5' topographic map of the Louisville East quadrangle, Fern Creek discharges into Northern Ditch at the State Route 2052 bridge. Therefore, the listings have been separated, and Northern Ditch ends at RM 7.5.

Floyds Fork into Salt River

Jefferson County

From River Mile 0.0 to 11.6 Segment Length: 11.6

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

<u>Floyds Fork into Salt River</u>

Jefferson County

From River Mile 11.6 to 24.2 Segment Length: 12.6

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Source Discharges; Package Plant or Other

Permitted Small Flows Discharges; Agriculture; Urban

Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 11.6 to 21.6 and 21.6 to 24.2. Based on new assessments, the river miles have been more accurately determined as 11.6 to 24.2. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Floyds Fork into Salt River
From River Mile 24.2 to 34.1

Jefferson County
Segment Length: 9.9

Impaired Use(s): Aquatic Life (Non Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/siltation, Pathogens

Suspected Sources: Municipal Point Source Discharges; Package Plant or Other

Permitted Small Flows Discharges; Agriculture; Urban

Runoff/Storm Sewers; Site Clearance (Land Development or Redevelopment)

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Floyds Fork into Salt River Shelby County

From River Mile 34.1 to 61.9 Segment Length: 27.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Municipal (Urbanized High Density Area); Municipal Point

Source Discharges; Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO); Non-Point Source; Wet Weather Discharges (Non-Point Source);

Introduction of Non-native Organisms (Accidental or Intentional)

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Glens Creek into Chaplin River
From River Mile 0.0 to 4.8

Washington County
Segment Length: 22.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Streambank Modifications/Destabilization

Goose Creek into Ohio RiverJefferson CountyFrom River Mile 0.3 to 3.6Segment Length: 3.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Industrial Point Source Discharge; Municipal Point Source

Discharges; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.2. Based on NHD and backwater from the Ohio River, the river miles have been more accurately determined as 0.3 to 3.6.

Goose Creek into Ohio River
From River Mile 3.6 to 13.0
Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 3.2 to 11.7. Based on NHD, the river miles have been more accurately determined as 3.6 to 13.0.

Guist Creek into Brashears creek Shelby County

From River Mile 15.4 to 27.6 Segment Length: 12.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Livestock (Grazing or Feeding Operations); Crop Production (Crop Land or Dry Land); Unspecified Urban

Stormwater

Hardins Creek into Beech Fork Marion County

From River Mile 13.3 to 22.9 Segment Length: 9.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nitrate/Nitrite (Nitrite + Nitrate as N); Phosphorus (Total) Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Unrestricted Cattle Access; Introduction of Non-native

Organisms (Accidental or Intentional)

<u>Hardins Creek into Sinking Creek</u>
From River Mile 0.0 to 5.0

Breckinridge County
Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

See Status of TMDLs Under Development Prior to 2006. The Sinking Creek Watershed Council has conducted several water quality related field days and is applying for funding to implement additional watershed improvement initiatives.

Hardins Creek into Sinking CreekBreckinridge CountyFrom River Mile 5.2 to 11.4Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges

See Status of TMDLs Under Development Prior to 2006. The Sinking Creek Watershed Council has conducted several water quality related field days and is applying for funding to implement additional watershed improvement initiatives.

Hardy Creek into Little Kentucky River Trimble County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Grazing in Riparian or Shoreline Zones; Highway/Road/Bridge

Runoff (Non-Construction Related); Loss of Riparian Habitat; Streambank Modifications/Destabilization; Crop Production (Crop Land or Dry Land); Urban Runoff/Storm Sewers

Hardy Creek into Little Kentucky River

Trimble County

From River Mile 1.6 to 5.6 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Dredging (e.g., for Navigation Channels); Source Unknown

<u>Harrods Creek into Ohio River</u> Oldham County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Package Plant or Other Permitted Small Flows Discharges

<u>Harrods Creek into Ohio River</u> Oldham County

From River Mile 3.2 to 33.3 Segment Length: 29.8

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Municipal (Urbanized High Density Area); Package Plant or

Other Permitted Small Flows Discharges

<u>Hayden Creek into Chaplin River</u> Mercer County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Other

Suspected Sources: Source Unknown

Hite Creek into South Fork Harrods Creek

Jefferson County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Municipal Point Source Discharges

<u>Jeptha Creek into Guist Creek</u> Shelby County

From River Mile 0.0 to 0.7 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

Jones Creek into North Rolling Fork Marion County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

<u>Lick Run Creek into Ohio River</u>
From River Mile 0.0 to 3.5

Breckinridge County
Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production;

Crop Production (Crop Land or Dry Land)

<u>Little Goose Creek into Goose Creek</u>

Jefferson County

From River Mile 0.0 to 9.2 Segment Length: 9.2

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 8.7. Based on new assessments, the river miles have been more accurately determined as 0.0 to 9.2.

Little Kentucky River into Ohio River Henry County

From River Mile 21.0 to 27.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

The Little Kentucky Watershed Conservancy District has funded a watershed coordinator to assist with water quality coordination (monitoring, education/outreach, watershed plan development, funding, etc.).

Long Lick Creek into Salt River

Bullitt County

From River Mile 0.0 to 10.5 Segment Length: 10.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Streambank Modifications/Destabilization; Livestock (Grazing or Feeding Operations); Unrestricted Cattle Access; Introduction of Non-native Organisms (Accidental or Intentional)

Long Run into Floyds Fork Jefferson County

From River Mile 0.0 to 10.0 Segment Length: 10.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Landfills; Municipal Point Source Discharges; Livestock

(Grazing or Feeding Operations); Unspecified Urban Stormwater

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 9.5. Based on new assessments, the river miles have been more accurately determined as 0.0 to 10.0. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Mellins Branch into Little Kentucky River Carroll County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Site Clearance (Land

Development or Redevelopment); Crop Production (Crop Land

or Dry Land)

Middle Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Channelization; Sanitary Sewer Overflows (Collection System

Failures); Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.3. Based on new assessments, the river miles have been more accurately determined as 0.0 to 2.0.

Middle Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 2.0 to 2.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens

Suspected Sources: Combined Sewer Overflows; Landfills; Municipal Point Source

Discharges; Unspecified Urban Stormwater

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 2.3 to 15.2. Based on new assessments, the segment has been split and the river miles have been more accurately determined as 2.0 to 2.9.

Middle Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 2.9 to 5.8 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal; Sanitary

Sewer Overflows (Collection System Failures); Urban

Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 2.3 to 15.2. Based on new assessments, the segment has been split and the river miles have been more accurately determined as 2.9 to 5.8.

Middle Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 5.8 to 15.3 Segment Length: 9.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal; Sanitary

Sewer Overflows (Collection System Failures); Urban

Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 2.3 to 15.2. Based on new assessments, the segment has been split and the river miles have been more accurately determined as 5.8 to 15.3.

Mill Creek into Ohio River

Jefferson County

From River Mile 0.0 to 11.2 Segment Length: 11.2

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Industrial Point Source Discharge; Municipal Point Source

Discharges; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 9.7. Based on NHD, the river miles have been more accurately determined as 0.0 to 11.2.

Mill Creek Cutoff into Ohio River Jefferson County

From River Mile 0.0 to 6.7 Segment Length: 6.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 6.5. Based on NHD, the river miles have been more accurately determined as 0.0 to 6.7.

Muddy Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 0.0 to 6.9 Segment Length: 6.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Landfills; Municipal Point Source Discharges; Unspecified

**Urban Stormwater** 

See Status of TMDLs Under Development Prior to 2006.

Northern Ditch into Southern Ditch

Jefferson County

From River Mile 0.0 to 7.3 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Pathogens; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 7.5. Based on new assessments, the river miles have been more accurately determined as 0.0 to 7.3. In the 2004 listing, Fern Creek was synonymous with Northern Ditch (i.e., Fern Creek/Northern Ditch). However, on the United States Geological Survey 7.5' topographic map of the Louisville East quadrangle, Fern Creek discharges into Northern Ditch at the State Route 2052 bridge. Therefore, the listings have been separated, and Northern Ditch ends at RM 7.5.

Otter Creek into Ohio River Meade County

From River Mile 0.0 to 10.7 Segment Length: 10.7

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Landfills; Municipal Point Source Discharges; Livestock

(Grazing or Feeding Operations); Unspecified Urban Stormwater

Otter Creek into Rolling Fork

Larue County

From River Mile 0.0 to 2.9 Segment Length: 2.7

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Pennsylvania Run into Floyds Fork Jefferson County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Dredging (e.g., for Navigation Channels); Illegal Dumps or

Other Inappropriate Waste Disposal; Loss of Riparian Habitat;

Municipal Point Source Discharges; Streambank

Modifications/Destabilization; Upstream Impoundments (e.g., Pl-5Irrigated Crop Production NRCS Structures); Urban Runoff/Storm Sewers; Runoff from Forest/Grassland/Parkland

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.1. Based on new assessments, the river miles have been more accurately determined as 0.0 to 3.3. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

Pleasant Run into Beech Fork Washington County
From River Mile 4.2 to 6.9 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Grazing in Riparian or Shoreline Zones; Impacts from

Hydrostructure Flow Regulation/Modification; Loss of Riparian Habitat; Streambank Modifications/Destabilization; Unrestricted

Cattle Access

Plum Creek into Salt River Spencer County

From River Mile 0.0 to 17.8 Segment Length: 17.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Site Clearance (Land Development or Redevelopment);

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land); Agriculture

Pond Creek into Ohio River Oldham County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Chlorine; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges

<u>Pond Creek/Southern Ditch into Pond Creek</u>

Jefferson County

From River Mile 5.1 to 8.1 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Pathogens; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Package Plant or Other Permitted Small Flows Discharges; Unspecified Urban Stormwater

Pond Creek/Southern Ditch into Pond Creek

Jefferson County

From River Mile 14.7 to 16.1 Segment Length: 1.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Unspecified Urban Stormwater

Pope Lick Creek into Floyds Fork Jefferson County

From River Mile 2.0 to 5.2 Segment Length: 3.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Landfills; Municipal Point Source Discharges; Unspecified Suspected Sources:

**Urban Stormwater** 

KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed.

Road Run into Cartwright Creek

From River Mile 0.0 to 7.1

Washington County Segment Length: 7.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Phosphorus (Total)

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

Loss of Riparian Habitat; Municipal (Urbanized High Density

Area); Municipal Point Source Discharges; Streambank Modifications/Destabilization; Wet Weather Discharges

(Non-Point Source); Impervious Surface/Parking Lot Runoff;

Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.4. Based on new assessments, the river miles have been more accurately determined as 0.0 to 7.1.

Rolling Fork into Salt River Larue County

From River Mile 0.0 to 40.7 Segment Length: 40.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Salt River into Ohio River **Bullitt County** 

From River Mile 11.9 to 26.2 Segment Length:

Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Methylmercury; Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 11.4 to 25.2. Based on NHD, the river miles have been more accurately determined as 11.9 to 26.2. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

Salt River into Ohio River

Anderson County

From River Mile 78.0 to 89.0 Segment Length: 11.0

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): Methylmercury

Suspected Sources: Atmospheric Deposition - Toxics; Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 78.0 to 88.5. Based on new assessments, the river miles have been more accurately determined as 78.0 to 89.0.

Short Creek into Beech Fork
From River Mile 0.0 to 5.0
Washington County
Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Crop Production with Subsurface Drainage;

Drainage/Filling/Loss of Wetlands; Loss of Riparian Habitat; Streambank Modifications/Destabilization; Source Unknown;

Crop Production (Crop Land or Dry Land)

<u>Sinking Creek into Ohio River</u>
From River Mile 8.7 to 15.4

Breckinridge County
Segment Length: 6.7

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Agriculture; Habitat

Modification - Other Than Hydromodification

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 8.9 to 15.6. Based on new assessments, the river miles have been more accurately determined as 8.7 to 15.4.

Sinking Creek into Ohio RiverBreckinridge CountyFrom River Mile 15.4 to 39.7Segment Length: 24.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Source Discharges; Agriculture

South Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm

See Status of TMDLs Under Development Prior to 2006.

South Fork Beargrass Creek into Beargrass Creek

Jefferson County

From River Mile 2.7 to 13.6 Segment Length: 10.9 Impaired Use(s): Primary Contact Recreation (Nonsupport), Aquatic Life (Partial

Support)

Pollutant(s): Pathogens, Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm

See Status of TMDLs Under Development Prior to 2006.

Southern Ditch into Pond Creek Jefferson County

From River Mile 0.0 to 5.9 Segment Length: 5.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Illegal Dumps or Other Inappropriate Waste Disposal;

Municipal Point Source Discharges; Urban Runoff/Storm

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 5.5. Based on NHD, the river miles have been more accurately determined as 0.0 to 5.9.

Sulphur Creek into Chaplin River Anderson County

From River Mile 0.0 to 10.0 Segment Length: 10.0

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

<u>Thompson Creek into Chaplin River</u>

Mercer County

From River Mile 0.0 to 9.2 Segment Length: 9.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization

Tioga Creek into Abrahams Run Hardin County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

NPS Pollution from Military Base Facilities (Other Than Port

Facilities); Residential Districts; Upstream Source

UT of Pond Creek into Pond Creek Oldham County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Chlorine; Organic Enrichment (Sewage) Biological Indicators Suspected Sources: Package Plant or Other Permitted Small Flows Discharges

UT to Brooks Run into Brooks Run

Bullitt County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Package Plant or Other Permitted Small Flows Discharges;

Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$304,400 in federal Section 319(h) Grant funds (FFY2003) to the Kentucky Waterways Alliance to develop and initiate implementation of a Watershed Based Plan in the Floyds Fork watershed and \$244,000 (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

UT to Buffalo Run into Buffalo Run

Bullitt County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Highway/Road/Bridge Runoff

(Non-Construction Related); Loss of Riparian Habitat;

Residential Districts; Impervious Surface/Parking Lot Runoff; Unspecified Urban Stormwater; Urban Runoff/Storm Sewers

KDOW awarded \$244,000 in Section 319(h) Grant funds (FFY2003) to the Bullitt County Fiscal Court to implement urban stormwater management runoff controls.

<u>UT to Hammond Creek into Hammond Creek</u>

Anderson County

From River Mile 0.0 to 1.8 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Kjehldahl Nitrogen (TKN);

Nitrate/Nitrite (Nitrite + Nitrate as N)

Suspected Sources: Grazing in Riparian or Shoreline Zones; Impacts from

Hydrostructure Flow Regulation/Modification; Loss of Riparian Habitat; Streambank Modifications/Destabilization; Upstream Impoundments (e.g., Pl-5Irrigated Crop Production NRCS Structures); Livestock (Grazing or Feeding Operations);

**Unrestricted Cattle Access** 

<u>UT to Salt River into Salt River</u>

Mercer County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Streambank Modifications/Destabilization; Livestock (Grazing or Feeding Operations); Unrestricted Cattle Access

UT to Southern Ditch into Southern Ditch Jefferson County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Commercial Districts (Industrial Parks);

Commercial Districts (Shopping/Office Complexes);

Highway/Road/Bridge Runoff (Non-Construction Related); Impacts from Hydrostructure Flow Regulation/Modification; Loss of Riparian Habitat; Municipal (Urbanized High Density

Area): Package Plant or Other Permitted Small Flows

Discharges; Impervious Surface/Parking Lot Runoff; Urban Runoff/Storm Sewers; Introduction of Non-native Organisms

(Accidental or Intentional)

UT to UT to Guist Creek Shelby County

From River Mile Unknown Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Loss of Riparian

Habitat; Livestock (Grazing or Feeding Operations);

**Unrestricted Cattle Access** 

Wetwoods Creek into Northern Ditch

Jefferson County

From River Mile 0.0 to 3.7 Segment Length: 3.7 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Cadmium; Pathogens

Suspected Sources: Industrial Point Source Discharge; Municipal Point Source

Discharges; Urban Runoff/Storm Sewers

Wilson Creek into Rolling Fork Bullitt County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Oxygen, Dissolved; Sedimentation/Siltation; Total Kjehldahl

Nitrogen (TKN)

Suspected Sources: Commercial Districts (Industrial Parks); Municipal (Urbanized

High Density Area); Impervious Surface/Parking Lot Runoff;

Urban Runoff/Storm Sewers

KDOW awarded \$336,305 in Section 319(h) Grant funds (FFY2000) to the Bernheim Arboretum and Research Forest to conduct riparian and stream restoration and to provide technical training on natural channel design techniques and methodologies.

Withrow Creek into Beech Fork Nelson County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Suspected Sources: Other Spill Related Impacts

<u>Yellowbank Creek into Ohio River</u>
From River Mile 1.5 to 12.0

Breckinridge County
Segment Length: 10.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Combined Sewer Overflows; Channel Erosion/Incision from

Upstream Hydromodifications; Streambank

Modifications/Destabilization; Livestock (Grazing or Feeding

Operations)

Younger Creek into Rolling Fork Hardin County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Municipal Point

Source Discharges; Streambank Modifications/Destabilization;

Livestock (Grazing or Feeding Operations); Silviculture

#### 9.6 Salt River Basin Lakes

<u>Chickasaw Park Pond</u> Jefferson County

Acres: 1.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury Suspected Sources: Source Unknown

Guist Creek Lake Shelby County

Acres: 317

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Partial

Support), Drinking Water (Partial Support)

Pollutant(s): Manganese; Methylmercury; Oxygen, Dissolved;

Nutrient/Eutrophication Biological Indicators; Organic Enrichment (Sewage) Biological Indicators; Dissolved Gas

Supersaturation

Suspected Sources: Atmospheric Deposition - Toxics; On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems); Source Unknown; Natural Sources; Agriculture; Rural

(Residential Areas)

<u>Lake Jericho</u> Henry County

Acres: 137

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Indicators: Dissolved Gas Supersaturation

Suspected Sources: Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land); Agriculture

McNeely Lake Jefferson County

Acres: 51

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury

Suspected Sources: Atmospheric Deposition - Toxics

Shelby Lake Shelby County

Acres: 17

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Internal Nutrient Recycling; Agriculture

Taylorsville Lake Spencer County

Acres: 3050

Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial

Support)

Pollutant(s): Methylmercury; Oxygen, Dissolved; Dissolved Gas

Supersaturation

Suspected Sources: Municipal Point Source Discharges; Source Unknown;

Livestock (Grazing or Feeding Operations); Upstream Source;

Willisburg Lake Washington County

Acres: 126

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oxygen, Dissolved; Nutrient/Eutrophication Biological

Indicators; Dissolved Gas Supersaturation

Suspected Sources: Source Unknown; Upstream Source

# Chapter 10. Tennessee-Mississippi-Cumberland Basin Unit 303(d) List

#### 10.1 Lower Cumberland River Basin Streams

<u>Casey Creek into Little River</u> Trigg County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Sources Outside State Jurisdiction or Borders

Claylick Creek into Cumberland River Crittenden County

From River Mile 2.0 to 4.8 Segment Length: 2.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

See TMDLs Planned for Development During 2006.

Donaldson Creek into Cumberland River Trigg County

From River Mile 4.5 to 9.3 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Dredge Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 9.6 to 14.2. Based on NHD river miles, the river miles have been more accurately determined as 4.5 to 9.3.

Dry Creek into Eddy Creek, Cumberland River Caldwell County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

<u>Dry Creek into Lower Cumberland</u> Trigg County

From River Mile 4.9 to 7.4 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Dry Fork Creek into Noah Springs Branch Christian County

From River Mile 5.0 to 5.8 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Source Unknown

Eddy Creek into Cumberland River (Lake Barkley)

Lyon County

From River Mile 8.4 to 10.5 Segment Length: 2.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 11.9 to 14.1. Based on NHD river miles, the river miles have been more accurately determined as 8.4 to 10.5. Also, see TMDLs Planned for Development During 2006.

Eddy Creek into Cumberland River (Lake Barkley) Caldwell County

From River Mile 13.3 to 16.1 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 16.9 to 19.7. Based on NHD river miles, the river miles have been more accurately determined as 13.3 to 16.1.

Elk Fork into Red River Todd County

From River Mile 22.0 to 29.0 Segment Length: 7.0 Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

Indicators; Impairment Unknown

Suspected Sources: Municipal Point Source Discharges

Ferguson Creek into Cumberland River
From River Mile 0.0 to 1.1

Livingston County
Segment Length: 1.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Ferguson Creek into Cumberland River
From River Mile 1.1 to 2.2

Livingston County
Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

<u>Hickory Creek into Cumberland River</u>
From River Mile 0.0 to 3.8

Livingston County
Segment Length: 3.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Kenady Creek into Muddy Fork, Little River Trigg County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

<u>Little River into Cumberland River (Lake Barkley)</u> Trigg County

From River Mile 20.4 to 23.6 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Dam Construction (Other than Upstream Flood Control

Projects); Impacts from Hydrostructure Flow Regulation/Modification; Source Unknown

Little River into Cumberland River (Lake Barkley)

Trigg County

From River Mile 23.6 to 33.1 Segment Length: 9.5

Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial

Support)

Pollutant(s): Iron; Methylmercury; Sedimentation/Siltation;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Source Unknown

Iron is associated with siltation. See Status of TMDLs Under Development Prior to 2006.

<u>Little River into Cumberland River (Lake Barkley)</u> Trigg County

From River Mile 33.1 to 34.4 Segment Length: 1.3 Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation (Partial

Support)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

See Status of TMDLs Under Development Prior to 2006.

Little River into Cumberland River (Lake Barkley)

Trigg County

From River Mile 34.4 to 48.4 Segment Length: 14.0 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Source Unknown; Crop

Production (Crop Land or Dry Land); Agriculture

See Status of TMDLs Under Development Prior to 2006.

Little River into Cumberland River (Lake Barkley) Christian County

From River Mile 48.4 to 61.0 Segment Length: 12.6

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Source Unknown; Crop

Production (Crop Land or Dry Land)

See Status of TMDLs Under Development Prior to 2006.

Livingston Creek into Cumberland River Lyon County

From River Mile 4.6 to 7.0 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Livingston Creek into Cumberland River</u>

Lyon County

From River Mile 11.6 to 15.4 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown

<u>Long Pond Branch into Muddy Fork, Little River</u> Trigg County

From River Mile 2.7 to 3.1 Segment Length:

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Source Unknown

<u>Lower Branch into North Fork Little River</u> Christian County

From River Mile 3.7 to 9.2 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Muddy Fork into Little River Trigg County

From River Mile 14.5 to 26.6 Segment Length: 12.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

North Fork Little River into Little River Christian County

From River Mile 0.0 to 0.3

Segment Length: 0.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation (Partial

Support)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

0.4

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Source Unknown;

Agriculture; Urban Runoff/Storm Sewers

See Status of TMDLs Under Development Prior to 2006.

North Fork Little River into Little River Christian County

From River Mile 0.3 to 6.9 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Agriculture

North Fork Little River into Little River

From River Mile 6.9 to 11.6

Christian County

Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

Indicators; Impairment Unknown

Suspected Sources: Municipal Point Source Discharges; Agriculture

See Status of TMDLs Under Development Prior to 2006.

North Fork Little River into Little River Christian County

From River Mile 11.6 to 12.3 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Channelization; Source Unknown; Habitat Modification - Other

Than Hydromodification

See Status of TMDLs Under Development Prior to 2006.

North Fork Little River into Little River Christian County

From River Mile 12.3 to 16.2 Segment Length: 3.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 12.3 to 18.6. Based on NHD river miles, the river miles have been more accurately determined as 12.3 to 16.2. Also, see Status of TMDLs Under Development Prior to 2006.

<u>Pleasant Grove Creek into Red River</u>
Logan County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Grazing in Riparian or Shoreline Zones; Managed Pasture

Grazing; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems)

See TMDLs Planned for Development During 2007. KDOW awarded \$125,000 in federal Section 319(h) Grant funds (FFY2005) to Austin Peay University and the Red River Watershed Association to develop and initiate implementation of a Watershed

Based Plan in the Pleasant Grove Creek watershed. The Red River Watershed Association is an active inter-state watershed group working to improve water quality in the Red River. Further, the Cumberland River Compact, a broader inter-state watershed group, received a \$600,000 Watershed Initiative Grant to implement best management practices in three subwatersheds of the Cumberland River, including Pleasant Grove Creek watershed.

Red River into Cumberland River Logan County

From River Mile 50.1 to 54.2 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Red River into Cumberland River Simpson County

From River Mile 73.5 to 80.5 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Richland Creek into Cumberland River
From River Mile 0.6 to 5.3
Livingston County
Segment Length: 4.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Roaring Paunch Creek into South Fork Cumberland River McCreary County

From River Mile 7.8 to 15.6 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport); Primary Contact Recreation

(Nonsupport), Secondary ContactRecreation (Nonsupport)

Pollutant(s): pH

Suspected Sources: Acid Mine Drainage

Sandy Creek into Cumberland River Livingston County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Sinking Fork into Little River</u>

Trigg County

From River Mile 2.2 to 5.6 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

Sinking Fork into Little River Christian County

From River Mile 13.6 to 16.6 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators; Impairment

Unknown

Suspected Sources: Source Unknown

Skinframe Creek into Livingston Creek Lyon County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Skinner Creek into Casey Creek Trigg County

From River Mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

South Fork Little River into Little River Christian County

From River Mile 0.0 to 10.5 Segment Length: 10.5

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Other

Suspected Sources: Municipal Point Source Discharges; Source Unknown;

Agriculture

See Status of TMDLs Under Development Prior to 2006.

South Fork Little River into Little River Christian County

From River Mile 10.5 to 19.9 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Other

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006.

South Fork Little River into Little River Christian County

From River Mile 20.9 to 25.4 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Spring Creek into Livingston Creek Lyon County

From River Mile 3.0 to 3.7 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Loss of Riparian Habitat

<u>Sugar Creek into Cumberland River</u>
From River Mile 2.1 to 6.7

Livingston County
Segment Length: 4.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Sugar Creek into Muddy Fork, Little River Christian County

From River Mile 1.0 to 1.4 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture

Upper Branch into North Fork Little River Christian County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

# 10.2 Lower Cumberland River Basin Lakes

Hematite Lake Trigg County
Acres: 90

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Natural Sources

## 10.3 Mississippi River Basin Streams

Bayou de Chien into Obion Creek Hickman County

From River Mile 14.0 to 25.9 Segment Length: 11.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$59,868 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Cane Creek watershed, a tributary to the impaired segment of Bayou de Chien.

Brush Creek into Obion Creek Graves County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels);

Agriculture

Brush Creek into Obion Creek Hickman County

From River Mile 0.0 to 6.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Caldwell Creek into Terrapin Creek Graves County

From River Mile 0.0 to 3.05 Segment Length: 3.05

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

<u>Cane Creek into Bayou de Chien</u>
From River Mile 0.0 to 5.4

Hickman County
Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production

This listing is designated First Priority because it is an Outstanding State Resource Water (OSRW) containing a federally threatened or endangered species. KDOW awarded \$59,868 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Cane Creek watershed.

<u>Cane Creek into Shawnee Creek</u>
Ballard County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Municipal Point Source Discharges

Central Creek into Truman Creek Carlisle County

From River Mile 0.8 to 2.5 Segment Length: 1.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

<u>Cooley Creek into Mayfield Creek</u> Graves County

From River Mile 0.6 to 2.3 Segment Length: 1.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.7 to 2.3. Based on NHD river miles, the river miles have been more accurately determined as 0.6 to 2.3. Also, see Status of TMDLs Under Development Prior to 2006.

Gilbert Creek into Mayfield Creek Graves County

From River Mile 1.8 to 3.5 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Loss of Riparian Habitat

Goose Creek into Wilson Creek Graves County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat

<u>Hazel Creek into Axe Lake (Wetland Ponds)</u>
Ballard County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization, Source Unknown

<u>Hurricane Creek into Obion Creek</u>

Carlisle County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Knob Creek into Blackmore Creek Graves County

From River Mile 1.1 to 2.2 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

<u>Little Bayou de Chien into Bayou de Chien</u> Hickman County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Agriculture

Little Bayou de Chien into Bayou de Chien Fulton County

From River Mile 10.1 to 12.3 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

Little Creek into Obion Creek Hickman County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat

Little Cypress Creek into Obion Creek Graves County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Source Unknown

Little Mud Creek into Bayou de Chien Fulton County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Non-Irrigated Crop Production

Mayfield Creek into Mississippi River Carlisle County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Mayfield Creek into Mississippi River Carlisle County

From River Mile 8.2 to 13.5 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Copper; Iron; Sedimentation/Siltation; Pathogens; Zinc

Suspected Sources: Channelization; Source Unknown; Habitat Modification - Other

Than Hydromodification

Mayfield Creek into Mississippi River Carlisle County

From River Mile 13.5 to 14.8 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture

Mayfield Creek into Mississippi River

McCracken County

From River Mile 19.2 to 32.9 Segment Length: 13.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 17.4 to 32.9. Based on NHD river miles, the river miles have been more accurately determined as 19.2 to 32.9.

Mayfield Creek into Mississippi River Graves County

From River Mile 32.9 to 34.9 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat

Mayfield Creek into Mississippi River Graves County

From River Mile 34.9 to 37.6 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Copper; Sedimentation/Siltation

Suspected Sources: Channelization; Source Unknown; Agriculture

Mayfield Creek into Mississippi River Graves County

From River Mile 37.6 to 40.8 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Habitat Modification –

Other Than Hydromodification

Mayfield Creek into Mississippi River Graves County

From River Mile 40.8 to 43.7 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat

Mayfield Creek into Mississippi River Calloway County

From River Mile 57.7 to 59.8 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

Mud Creek into Bayou de Chien Fulton County

From River Mile 0.0 to 6.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Obion Creek into Mississippi River Fulton County

From River Mile 1.3 to 15.8 Segment Length: 14.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Iron; Sedimentation/Siltation

Suspected Sources: Channelization; Impacts from Hydrostructure Flow

Regulation/Modification; Loss of Riparian Habitat;

Non-Irrigated Crop Production

Obion Creek into Mississippi River Hickman County

From River Mile 38.6 to 42.0 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Source Unknown

KDOW awarded \$234,676 in federal Section 319(h) funds (FFY1999) to the Obion Creek Watershed Conservancy District to restore a naturalized flow and stream channel to Obion Creek utilizing natural channel design and stream restoration techniques. Stream improvement and channel restoration work has been further enhanced with \$72,000 from the Stream Mitigation Program.

Obion Creek into Mississippi River
From River Mile 42.0 to 47.6

Hickman County
Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Crop Production (Crop Land or Dry Land)

Obion Creek into Mississippi River Graves County

From River Mile 47.6 to 56.0 Segment Length: 8.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Impairment Unknown

Suspected Sources: Source Unknown; Agriculture

Opossum Creek into Obion Creek Graves County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization

Running Slough into Obion River (Reelfoot Lake) Fulton County

From River Mile 0.0 to 15.3 Segment Length: 15.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Crop Production (Crop Land or Dry Land)

Shawnee Creek Slough into Mississippi River Ballard County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Iron

Suspected Sources: Source Unknown

Shawnee Creek Slough into Mississippi River

Ballard County

From River Mile 8.9 to 17.9 Segment Length: 9.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Agriculture

South Fork into Bayou de Chien Graves County

From River Mile 2.0 to 7.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land)

This listing is designated First Priority because it is an Outstanding State Resource Water (OSRW) containing a federally threatened or endangered species.

### Tennessee-Mississippi-Cumberland Basin Unit Mississippi River Basin Streams

<u>UT to Mayfield Creek into Mayfield Creek</u>

From River Mile 0.0 to 1.0

McCracken County

Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture

<u>UT to Mayfield Creek into Mayfield Creek</u> Graves County

From River Mile 1.1 to 3.5 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Agriculture

UT to Obion Creek into Obion Creek Hickman County

From River Mile 1.6 to 2.2 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Source Unknown

## Tennessee-Mississippi-Cumberland Basin Unit Mississippi River Basin Lakes

# 10.4 Mississippi River Basin Lakes

Swan Pond Ballard County
Acres: 193

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Natural Sources; Agriculture

#### 10.5 Ohio River Basin Streams

Bayou Creek into Ohio River

From River Mile 0.0 to 6.5

Impaired Use(s):

Aquatic Life (Nonsupport), Minimum Criteria (Partial Support)

Pollutant(s):

Beta Particles and Photon Emitters; Mercury; Lead; Copper

Suspected Sources:

Industrial Point Source Discharge; Inappropriate Waste Disposal

See Status of TMDLs Under Development Prior to 2006.

Clanton Creek into Humphrey Creek Ballard County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Humphrey Creek into Ohio River Ballard County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

Humphrey Creek into Ohio River Ballard County

From River Mile 3.4 to 11.0 Segment Length: 7.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

<u>Little Bayou Creek into Bayou Creek</u>
From River Mile 0.0 to 6.5

McCracken County
Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Nonsupport),

Minimum Criteria (Partial Support)

Pollutant(s): Beta Particles and Photon Emitters; Lead; Copper

Suspected Sources: Industrial Point Source Discharge; Inappropriate Waste Disposal

See Status of TMDLs Under Development Prior to 2006.

Massac Creek into Ohio RiverMcCracken CountyFrom River Mile 3.6 to 4.2Segment Length: 0.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation
Suspected Sources: Dredge Mining; Highway/Road/Bridge Runoff

(Non-Construction Related); Loss of Riparian Habitat;

Post-Development Erosion and Sedimentation

# Tennessee-Mississippi-Cumberland Basin Unit Ohio River Basin Lakes

## 10.6 Ohio River Basin Lakes

Metropolis Lake McCracken County

Acres: 36

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

#### 10.7 Tennessee River Basin Streams

Angle Creek into Little Cypress Creek Marshall County

From River Mile 0.0 to 0.7 Segment Length: 0.7 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

Bear Creek into Tennessee River Marshall County

From River Mile 3.1 to 6.3 Segment Length: 3.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Package Plant or Other Permitted

**Small Flows Discharges** 

Bee Creek into Clarks River
From River Mile 0.0 to 1.8

Calloway County
Segment Length: 1.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

<u>Blizzard Pond into West Fork Clarks River</u>
From River Mile 0.0 to 3.7

McCracken County
Segment Length: 3.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

<u>Camp Creek into West Fork Clarks River</u>

From River Mile 0.0 to 5.4

McCracken County

Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Impairment Unknown; Other

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

<u>Champion Creek into Island Creek</u>
From River Mile 0.0 to 1.5

McCracken County
Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Site Clearance (Land Development or Redevelopment)

Chestnut Creek into Clarks River

Marshall County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Impairment Unknown; Other

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

<u>Clarks River into Tennessee River</u>

From River Mile 5.0 to 12.7

McCracken County

Segment Length: 7.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Clarks River into Tennessee River
From River Mile 50.9 to 59.9
Segment Length: 9.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges; Agriculture; Unspecified

Urban Stormwater

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

Clarks River into Tennessee River Calloway County

From River Mile 59.9 to 61.9 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

Clayton Creek into Clarks River
Calloway County

From River Mile 0.8 to 3.3 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

<u>Clayton Creek into Clarks River</u>

Calloway County

From River Mile 3.3 to 7.1 Segment Length: 3.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

Cypress Creek into Tennessee River Marshall County

From River Mile 6.3 to 7.7 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Source Unknown

Cypress Creek into Tennessee River Marshall County

From River Mile 7.7 to 9.7 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Damon Creek into West Fork Clarks River Calloway County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Animal Feeding Operations (NPS); Source Unknown

See Status of TMDLs Under Development Prior to 2006.

Guess Creek into Tennessee River
From River Mile 0.0 to 2.6

Livingston County
Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Island Creek into Tennessee RiverMcCracken CountyFrom River Mile 0.0 to 5.5Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

<u>Island Creek into Tennessee River</u>

From River Mile 5.5 to 10.3

McCracken County

Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Jonathan Creek into Tennessee River (Kentucky Lake) Calloway County

From River Mile 6.2 to 18.0 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

KDOW awarded \$132,300 in federal Section 319(h) Grant funds (FFY2000) to the Jackson Purchase RC&D, Inc. to design, install and demonstrate a decentralized wastewater treatment system for over 170 homes in the community of Pirates Cove in the Jonathan Creek watershed.

Little Cypress Creek into Cypress Creek Marshall County

From River Mile 0.0 to 3.4 Segment Length: 3.4 Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

Little Cypress Creek into Cypress Creek Marshall County

From River Mile 3.4 to 6.0 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Middle Fork Clarks River into Clarks River

From River Mile 0.0 to 2.7

Calloway County

Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

Middle Fork Clarks River into Clarks River Calloway County

From River Mile 2.7 to 4.9 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$108,300 in federal Section 319(h) Grant funds (FFY2002) to the Jackson Purchase RC&D, Inc. to develop a Watershed Based Plan for the Upper East Fork Clarks River watershed.

Middle Fork Creek into Clarks River

Marshall County

From River Mile 0.2 to 6.6 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006.

Reeves Branch into Sugar Creek Marshall County

From River Mile 0.0 to 0.3 Segment Length: 0.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Spring Creek into West Fork Clarks River Graves County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Channelization; Drainage/Filling/Loss of Wetlands

See Status of TMDLs Under Development Prior to 2006.

<u>Tennessee River into Ohio River</u>
From River Mile 21.1 to 22.4

Marshall County
Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Source Unknown

UT to Old Beaver Dam Slough into Old Beaver Dam Marshall County

Slough

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Urban Runoff/Storm Sewers

West Fork Clarks River into Clarks River
From River Mile 2.6 to 10.1

McCracken County
Segment Length: 7.5

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. This segment is located on the canalized portion of West Fork Clarks River. This canalized waterbody diverted flow away from the natural channel of West Fork Clarks River (which was called West Fork of Clarks River – Old Channel in previous reports and is now called West Fork Clarks River (Relict Channel) into West Fork Clarks River).

West Fork Clarks River into Clarks River Graves County

From River Mile 12.8 to 16.8 Segment Length: 4.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown; Agriculture

See Status of TMDLs Under Development Prior to 2006. This segment is located on the canalized portion of West Fork Clarks River. This canalized waterbody diverted flow away from the natural channel of West Fork Clarks River (which was called West Fork of Clarks River – Old Channel in previous reports and is now called West Fork Clarks River (Relict Channel) into West Fork Clarks River).

West Fork Clarks River into Clarks River

Marshall County

From River Mile 19.7 to 22.7 Segment Length: 3.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

This segment is located on the canalized portion of West Fork Clarks River. This

canalized waterbody diverted flow away from the natural channel of West Fork Clarks River (which was called West Fork of Clarks River – Old Channel in previous reports and is now called West Fork Clarks River (Relict Channel) into West Fork Clarks River). There was a duplicate of this segment on the 2004 303(d), which was erroneously listed as being on the West Fork Clarks River-Old Channel: It has been removed for this report.

West Fork Clarks River into Clarks River Calloway County

From River Mile 22.7 to 27.3 Segment Length: 4.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See Status of TMDLs Under Development Prior to 2006. This canalized waterbody diverted flow away from the natural channel of West Fork Clarks River (which was called West Fork of Clarks River – Old Channel in previous reports and is now called West Fork Clarks River (Relict Channel) into West Fork Clarks River).

West Fork Clarks River into Clarks River Calloway County

From River Mile 33.1 to 37.2 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

This segment is located on the canalized portion of West Fork Clarks River. This canalized waterbody diverted flow away from the natural channel of West Fork Clarks River (which was called West Fork of Clarks River – Old Channel in previous reports and is now called West Fork Clarks River (Relict Channel) into West Fork Clarks River).

#### West Fork Clarks River (Relict Channel) into West Fork Clarks River

From River Mile 0.0 to 13.8 Graves County

Impaired Use(s): Aquatic Life (Partial Support) Segment Length 13.8

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

This waterbody, which is the former (natural) channel of West Fork Clarks River, was referred to as West Fork of Clarks River-Old Channel on the 2004 303(d). The name has been changed for clarity and to reflect the fact that this waterbody discharges into West Fork Clarks River, which has now been canalized, instead of discharging into Clarks River as it did before the canal was constructed.

#### 10.8 Upper Cumberland River Basin Streams

<u>Bear Creek into South Fork Cumberland River</u>
From River Mile 0.0 to 3.2

McCreary County
Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): pH

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Becks Creek into Jellico Creek Whitley County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation; pH; Impairment Unknown

Suspected Sources: Surface Mining

This listing is the result of extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream segment since November 1975. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 3.5. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 4.0.

Big Indian Creek into Cumberland River Knox County

From River Mile 0.0 to 5.1 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Site Clearance (Land

Development or Redevelopment)

<u>Big Renox Creek into Cumberland River</u>
From River Mile 0.0 to 5.8

Cumberland County
Segment Length: 5.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Briary Creek into Buck Creek Pulaski County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Dredge Mining; Non-Irrigated Crop Production; Other

**Recreational Pollution Sources** 

KDOW awarded \$330,094 in federal Section 319(h) Grant funds (FFY2005) to the Pulaski County Conservation District to implement BMPs to protect and restore water quality conditions in the Buck Creek watershed.

Brush Creek into Cumberland River

Knox County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

Surface Mining

Brush Creek into Roundstone Creek
From River Mile 1.1 to 7.6
Rockcastle County
Segment Length: 6.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 1.1 to 7.5. Based on NHD river miles, the river miles have been more accurately determined as 1.1 to 7.6. Also, KDOW awarded \$282,892 in federal Section 319(h) Grant funds (FFY2001) to the Kentucky Chapter of The Nature Conservancy to install and demonstrate agricultural BMPs in the Roundstone Creek watershed. Between 1999 and 2005, the Rockcastle County Health Department has installed 71 septic systems in the Brush and Crooked Creek watersheds (tributaries of Roundstone Creek).

Buck Creek into Cumberland River Pulaski County

From River Mile 44.9 to 45.4 Segment Length: 0.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury

Suspected Sources: Atmospheric Deposition - Toxics; Source Unknown

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach.

<u>Clover Fork into Cumberland River</u>
Harlan County

From River Mile 29.1 to 30.3 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining: Source Unknown

Cloverlick Creek into Poor Fork Cumberland River Harlan County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Total Suspended Solids (TSS)
Suspected Sources: Heap-Leach Extraction Mining

Cranks Creek into Martins Fork Cumberland River Harlan County

From River Mile 1.9 to 2.5 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Source Unknown

<u>Crocus Creek into Cumberland River</u>
From River Mile 4.8 to 13.8

Cumberland County
Segment Length: 9.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Agriculture

Crocus Creek into Cumberland River Adair County

From River Mile 13.8 to 16.9 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Agriculture

<u>Crooked Creek into Roundstone Creek</u>
From River Mile 1.0 to 6.4

Rockcastle County
Segment Length: 5.4

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture; Sewage Discharges in Unsewered Areas

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$282,892 in federal Section 319(h) Grant funds (FFY2001) to the Kentucky Chapter of The Nature Conservancy to install and demonstrate agricultural BMPs in the Roundstone Creek watershed. Between 1999 and 2005, the Rockcastle County Health Department has installed 71 septic systems in the Brush and Crooked Creek watersheds (tributaries of Roundstone Creek).

Cumberland River into Ohio River Bell County

From River Mile 649.0 to 650.6 Segment Length: 1.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Source Discharges; Sanitary Sewer Overflows

(Collection System Failures); On-Site Treatment Systems (Septic

Systems and Similar Decentralized Systems)

<u>Cumberland River into Ohio River</u>
Harlan County

From River Mile 660.1 to 666.7 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Iron; Impairment Unknown

Suspected Sources: Source Unknown

East Fork Lynn Camp Creek into Lynn Camp Creek Knox County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Site Clearance (Land Development or Redevelopment)

Elk Spring Creek into Beaver Creek Wayne County

From River Mile 0.0 to 7.8 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Ewing Creek into Cumberland River Harlan County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Post-Development Erosion and Sedimentation; Surface Mining

Ferris Fork Creek into Marrowbone Creek
From River Mile 0.0 to 1.2

Cumberland County
Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Livestock (Grazing or Feeding

Operations)

Gilmore Creek into Crab Orchard Creek Pulaski County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Dredge Mining

Goodin Creek into Cumberland River Knox County

From River Mile 2.1 to 2.3 Segment Length: 0.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Upstream Impoundments (e.g.,

Pl-5Irrigated Crop Production NRCS Structures)

Hatchell Branch into Eagle Creek McCreary County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Silviculture Activities

<u>Indian Creek into Buck Creek</u> Pulaski County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Dredge Mining

KDOW awarded \$330,094 in federal Section 319(h) Grant funds (FFY2005) to the Pulaski County Conservation District to implement BMPs to protect and restore water quality conditions in the Buck Creek watershed.

Jennys Branch into Laurel Creek McCreary County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Silviculture Activities

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach.

Laurel Fork into Clear Fork Whitley County

From River Mile 10.3 to 13.9 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Silviculture Harvesting

There is a federally threatened and endangered species in this OSRW reach.

Laurel River into Cumberland River

Laurel County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Source Unknown

<u>Laurel River into Cumberland River</u>

Laurel County

From River Mile 24.9 to 27.9 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Source Unknown

<u>Laurel River into Cumberland River</u>

Laurel County

From River Mile 36.6 to 46.3 Segment Length: 9.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Animal Feeding Operations (NPS); Managed Pasture Grazing;

Non-Irrigated Crop Production; Surface Mining

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Left Fork Straight Creek into Straight Creek Bell County

From River Mile 0.0 to 13.0 Segment Length: 13.0

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Suspended Solids

(TSS); Turbidity; pH

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining; Surface Mining; Source Unknown; Silviculture Activities

Little Clear Creek into Clear Creek Bell County

From River Mile 0.0 to 10.4 Segment Length: 10.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH

Suspected Sources: Heap-Leach Extraction Mining; Silviculture Activities

This listing is the result of the extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream since November 1975.

Little Laurel River into Laurel River Laurel County

From River Mile 0.0 to 8.3

Segment Length: 8.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Little Laurel River into Laurel River Laurel County From River Mile 8.3 to 12.4 Segment Length: 4.1

Aquatic Life (Nonsupport), Primary Contact Recreation Impaired Use(s):

(Nonsupport)

Sedimentation/Siltation; Pathogens; Organic Enrichment Pollutant(s):

(Sewage) Biological Indicators; Phosphorus (Total)

Combined Sewer Overflows; Municipal Point Source Suspected Sources:

Discharges; Site Clearance (Land Development or

Redevelopment)

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Little Laurel River into Laurel River **Laurel County** 

From River Mile 12.4 to 14.6 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Nutrient/Eutrophication Biological Indicators;

Organic Enrichment (Sewage) Biological Indicators

Municipal Point Source Discharges; Agriculture Suspected Sources:

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Little Laurel River into Laurel River Laurel County

From River Mile 14.6 to 22.8 Segment Length: 8.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Livestock (Grazing or Feeding Operations)

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Little Poplar Creek into Cumberland River **Knox County** 

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing: Non-Irrigated Crop Production; Site

Clearance (Land Development or Redevelopment)

<u>Little South Fork into South Fork Cumberland River</u> Wayne County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining; Coal Mining (Subsurface)

This listing is the result of the extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream since November 1975.

Lynn Camp Creek into Laurel River

Laurel County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Oil and Grease; Pathogens; Total Suspended Solids (TSS) Suspected Sources: Other Spill Related Impacts; Source Unknown; Habitat

Modification - Other Than Hydromodification; Urban

Runoff/Storm Sewers

KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Lynn Camp Creek into Laurel River Whitley County

From River Mile 4.6 to 10.7 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Managed Pasture Grazing; Non-Irrigated Crop Production; Post-Development Erosion and Sedimentation; Site Clearance

(Land Development or Redevelopment)

KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

Marrowbone Creek into Cumberland River

From River Mile 0.0 to 2.8

Cumberland County

Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Source Unknown

Marsh Creek into Cumberland River McCreary County

From River Mile 13.3 to 16.3 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Silviculture Activities

This stream segment is an OSRW containing a federally threatened and endangered species.

Marsh Creek into Cumberland River McCreary County

From River Mile 19.0 to 24.1 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Agriculture; Coal Mining

This stream segment is an OSRW containing a federally threatened and endangered species. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 18.7 to 24.0. Based on NHD river miles, the river miles have been more accurately determined as 19.0 to 24.1.

Martins Fork into Clover Fork Harlan County

From River Mile 10.1 to 15.5 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 10.1 to 17.0. Based on NHD river miles, the river miles have been more accurately determined as 10.1 to 15.5.

Martins Fork into Clover Fork Harlan County

From River Mile 18.0 to 27.4 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): pH

Suspected Sources: Coal Mining

A recent biological assessment shows that this segment now fully supports aquatic life use. However, no pH data have been collected. Therefore, this listing has been carried forward from the 1998 303(d) Report.

Meadow Creek into Cumberland River Knox County

From River Mile 0.0 to 6.8 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production;

Surface Mining

Middle Fork Richland Creek into Richland Creek Knox County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Site Clearance (Land Development or Redevelopment);

Surface Mining

Mitchell Creek into Sinking Creek Laurel County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Site Clearance (Land Development or Redevelopment)

Mud Creek into Clear Fork Whitley County

From River Mile 0.0 to 5.1 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Non-Irrigated Crop Production: Site Clearance (Land

Development or Redevelopment)

Pitman Creek into Cumberland River Pulaski County

From River Mile 4.0 to 5.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Municipal Point Source Discharges

Poor Fork into Cumberland River Harlan County

From River Mile 14.9 to 16.3 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Source Unknown

<u>Poor Fork into Cumberland River</u>
Harlan County

From River Mile 25.1 to 27.5 Segment Length: 2.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Raccoon Creek into South Fork Rockcastle River Laurel County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Heap-Leach Extraction Mining; Livestock (Grazing or Feeding

Operations); Crop Production (Crop Land or Dry Land);

Silviculture Activities

See TMDLs Planned for Development During 2006.

Renfro Creek into Roundstone Creek
From River Mile 0.0 to 3.0

Rockcastle County
Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Package Plant or Other Permitted Small Flows Discharges;

Upstream Impoundments (e.g., Pl-5Irrigated Crop Production

NRCS Structures); Unspecified Urban Stormwater

See TMDLs Planned for Development During 2006.

Richland Creek into Cumberland River Knox County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Site Clearance (Land Development or Redevelopment);

Surface Mining; Source Unknown

Rock Creek into South Fork Cumberland River McCreary County

From River Mile 16.6 to 21.9 Segment Length: 5.3

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

Roundstone Creek into Rockcastle River
From River Mile 16.9 to 23.7

Rockcastle County
Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators Suspected Sources: Livestock (Grazing or Feeding Operations);

Habitat Modification - Other Than Hydromodification

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach. See TMDLs Planned for Development During 2006. KDOW awarded \$282,892 in federal Section 319(h) Grant funds (FFY2001) to the Kentucky Chapter of The Nature Conservancy to install and demonstrate agricultural BMPs in the Roundstone Creek watershed. Between 1999 and 2005, the Rockcastle County Health Department has installed 71 septic systems in the Brush and Crooked Creek watersheds (tributaries of Roundstone Creek).

<u>Ryans Creek into Jellico Creek</u>

From River Mile 0.0 to 5.3

McCreary County

Segment Length: 5.3

Impaired Use(s):Aquatic Life (Nonsupport)Pollutant(s):Total Suspended Solids (TSS)Suspected Sources:Heap-Leach Extraction Mining

Sam Branch into Fishing Creek Pulaski County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Agriculture

Sims Fork into Left Fork Straight Creek Bell County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Impairment Unknown Suspected Sources: Heap-Leach Extraction Mining; Source Unknown

This stream segment is an OSRW containing a federally threatened and endangered species.

Skegg Creek into Rockcastle River
From River Mile 0.0 to 3.2

Rockcastle County
Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Non-Irrigated Crop Production; Post-Development Erosion and

Sedimentation; Surface Mining; Natural Sources

See TMDLs Planned for Development During 2006.

South Fork Rockcastle River into Rockcastle River Laurel County

From River Mile 20.8 to 21.5 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Crop Production (Crop Land or Dry

Land)

South Fork Rockcastle River into Rockcastle River Laurel County

From River Mile 21.5 to 25.5 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Livestock (Grazing or Feeding

Operations); Crop Production (Crop Land or Dry Land)

See TMDLs Planned for Development During 2006.

Stinking Creek into Cumberland River Knox County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Oil and Grease; Sedimentation/Siltation; pH

Suspected Sources: Acid Mine Drainage; Channelization; Impacts from Abandoned

Mine Lands (Inactive); Non-Irrigated Crop Production; Petroleum/Natural Gas Production Activities (Permitted);

Surface Mining

KDOW awarded \$63,370 in federal Section 319(h) Grant funds (FFY1999) to the Knox County Fiscal Court to conduct nonpoint source education and demonstrate BMPs in the Stinking Creek watershed.

Stoney Fork into Straight Creek Bell County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Loss of

Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization; Subsurface (Hardrock) Mining;

**Surface Mining** 

Stony Fork into Bennetts Fork Yellow Creek Bell County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Loss of Riparian Habitat; Silviculture Harvesting; Streambank

Modifications/Destabilization

Straight Creek into Cumberland River Bell County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining; Source Unknown

<u>UT to Jennys Branch into Jennys Branch</u>

From River Mile 0.0 to 1.1

McCreary County

Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Post-Development Erosion and

Segment Length:

Sedimentation

UT to Little Laurel River into Little Laurel River

Laurel County

From River Mile 0.0 to 1.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Loss of Riparian Habitat

See TMDLs Planned for Development During 2007. KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

White Oak Creek into Rock Creek
From River Mile 0.0 to 4.2

McCreary County
Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Iron

Suspected Sources: Habitat Modification - Other Than Hydromodification; Coal

Mining

White Oak Creek into Sinking Creek

Laurel County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Suspended Solids (TSS); Turbidity

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production;

Post-Development Erosion and Sedimentation

Whitley Branch into Little Laurel River

Laurel County

From River Mile 0.0 to 1.1 Segment Length: 1.0 Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation (Partial

Support)

Pollutant(s): Pathogens; Organic Enrichment (Sewage) Biological

**Indicators** 

Suspected Sources: Municipal Point Source Discharges

See TMDLs Planned for Development During 2007. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 1.0. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 1.1. Also, KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed. The London Utility Commission is using local funding for rehabilitation of collection system to prevent sanitary sewer overflows.

Whitley Branch into Little Laurel River

Laurel County

From River Mile 1.1 to 2.5 Segment Length: 1.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures)

See TMDLs Planned for Development During 2007. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 1.0 to 2.5. Based on NHD river miles, the river miles have been more accurately determined as 1.1 to 2.5. Also, KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed. The London Utility Commission is using local funding for rehabilitation of collection system to prevent sanitary sewer overflows.

Wolf Creek into Clear Fork, Cumberland River Whitley County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Surface Mining

Yellow Creek into Cumberland River Bell County

From River Mile 0.0 to 0.8 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification; Urban Runoff/Storm Sewers

Yellow Creek into Cumberland River

Bell County

From River Mile 0.8 to 8.9 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Unspecified Urban Stormwater; Urban Runoff/Storm Sewers

#### 10.9 Upper Cumberland River Basin Lakes

<u>Corbin City Reservoir</u> Laurel County

Acres: 139

Impaired Use(s): Aquatic Life (Partial Support), Drinking Water (Nonsupport)
Pollutant(s): Nutrient/Eutrophication Biological Indicators; Organic

Nutrient/Eutrophication Biological Indicators; Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Internal Nutrient Recycling; Municipal Point Source

Discharges; Agriculture

KDOW awarded \$108,989 in federal Section 319(h) Grant funds (FFY2004) to Third Rock Consultants to develop a Watershed Based Plan for the Corbin City Reservoir/Laurel River watershed.

<u>Cranks Creek</u> Harlan County

Acres: 219

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): pH

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive)

<u>Lake Cumberland</u> Russell County

Acres: 50250

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

Wood Creek Laurel County

Acres: 672

Impaired Use(s): Drinking Water (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

Eastern Kentucky Personal Responsibility in a Desirable Environment (PRIDE) funding is being used to sewer a portion of the residences near the lake.

#### Chapter 11. Green-Tradewater Basin Unit 303(d) List

#### 11.1. Green River Basin Streams

Adams Fork into Rough River Ohio County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Bacon Creek into Nolin River Hart County

From River Mile 0.0 to 17.2 Segment Length: 17.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See TMDLs Planned for Development During 2007. KDOW awarded \$86,946 in federal Section 319(h) Grant funds (FFY2005) to the Kentucky Waterways Alliance was to develop and initiate implementation of a Watershed Based Plan in the Bacon Creek watershed.

Bacon Creek into Nolin River Hart County

From River Mile 17.2 to 26.3 Segment Length: 9.1

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production;

On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See TMDLs Planned for Development During 2007. KDOW awarded \$86,946 in federal Section 319(h) Grant funds (FFY2005) to the Kentucky Waterways Alliance was to develop and initiate implementation of a Watershed Based Plan in the Bacon Creek watershed.

Bacon Creek into Nolin River Hart County

From River Mile 26.3 to 31.2 Segment Length: 4.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Agriculture

See Status of TMDLs Under Development Prior to 2006. KDOW awarded \$86,946 in federal Section 319(h) Grant funds (FFY2005) to the Kentucky Waterways Alliance was to develop and initiate implementation of a Watershed Based Plan in the Bacon Creek watershed.

Barren River into Green River Allen County

From River Mile 110.0 to 124.3 Segment Length: 14.3

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Bat East Creek into Pond Creek
From River Mile 0.0 to 3.3

Muhlenberg County
Segment Length: 3.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Petroleum/Natural Gas Production Activities (Permitted); Surface Mining; Habitat

Modification - Other Than Hydromodification

Bat East Creek into Pond Creek Muhlenberg County
From River Mile 3.3 to 7.1 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids; Impairment Unknown

Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Surface Mining; Agriculture

<u>Bear Creek into Green River</u>
From River Mile 14.5 to 22.3

Edmonson County
Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 14.5 to 22.2. Based on NHD river miles, the river miles have been more accurately determined as 14.5 to 22.3.

Bear Creek into Green River Grayson County

From River Mile 22.3 to 31.7 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 22.2 to 32.7. Based on NHD river miles, the river miles have been more accurately determined as 22.3 to 31.7.

Big Creek into Russell Creek Adair County

From River Mile 3.0 to 8.2 Segment Length: 5.2 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Big Pitman Creek into Green River Green County

From River Mile 0.0 to 13.6 Segment Length: 13.6

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Big Pitman Creek into Green River Green County

From River Mile 26.9 to 32.0 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Dredge Mining; Dredging (e.g., for Navigation Channels); Loss

of Riparian Habitat; Streambank Modifications/Destabilization; Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

Big Reedy Creek into Green River

Butler County

From River Mile 7.5 to 13.6 Segment Length: 6.1 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

Aquatic Life (Fartial Support), Filmary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Crop Production (Crop Land or Dry Land);

Habitat Modification - Other Than Hydromodification

See TMDLs Planned for Development During 2006.

Billy Creek into Valley Creek Hardin County

From River Mile 0.0 to 5.9 Segment Length: 5.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

Biological Indicators; Impairment Unknown

Suspected Sources: Industrial Point Source Discharge; Streambank

Modifications/Destabilization; Livestock (Grazing or Feeding Operations); Crop Production (Crop Land or Dry Land);

Unspecified Urban Stormwater

See TMDLs Planned for Development During 2006 and TMDLs Planned for Development During 2007.

Brush Creek into Green River Casey County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

Brush Fork into Long Falls Creek McLean County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; pH

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Surface Mining

See TMDLs Planned for Development During 2006.

Buck Creek into Buck Fork of Pond River Christian County

From River Mile 1.3 to 7.4 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Buck Creek into Green River McLean County

From River Mile 0.0 to 8.0 Segment Length: 8.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production; Permitted Runoff from Confined Animal Feeding

Operations (CAFOs)

Buck Fork into Pond RiverChristian CountyFrom River Mile 14.0 to 20.0Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

Burnett Fork into North Fork of Panther Creek Daviess County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nitrogen (Total); Phosphorus (Total) Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Streambank

Modifications/Destabilization

See TMDLs Planned for Development During 2006.

Butler Fork into Russell Creek Adair County

From River Mile 2.3 to 4.0 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2006.

<u>Calhoun Creek into Green River</u>

Casey County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Managed Pasture Grazing

Cane Run into South Fork Panther Creek

Daviess County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Non-Irrigated Crop

Production; Source Unknown

See TMDLs Planned for Development During 2006.

<u>Caney Creek into Pond Creek</u>
From River Mile 0.0 to 3.5

Muhlenberg County
Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion

and Sedimentation

<u>Caney Creek into Pond Creek</u>
From River Mile 3.5 to 7.5

Muhlenberg County
Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Agriculture; Habitat Modification - Other Than

Hydromodification

<u>Caney Creek into Pond River</u>
From River Mile 1.4 to 5.3

Muhlenberg County
Segment Length: 3.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Source Unknown

Casey Creek into Green River Casey County

From River Mile 3.7 to 4.7 Segment Length: 1.0

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Cash Creek into Green RiverHenderson CountyFrom River Mile 0.0 to 5.8Segment Length: 5.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production

<u>Claylick Creek into Green River</u>

Warren County

From River Mile 2.0 to 3.1 Segment Length: 1.1 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Channelization; Source Unknown; Habitat Modification - Other

Than Hydromodification

See TMDLs Planned for Development During 2006.

Claylick Creek into South Fork Little Barren River Metcalfe County

From River Mile 4.1 to 5.3 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Loss of Riparian Habitat; Managed Pasture Grazing

KDOW has awarded \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Cox's Run into Nolin River Hardin County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Post-Development Erosion and Sedimentation; Streambank Modifications/Destabilization; Livestock (Grazing or Feeding

Operations); Crop Production (Crop Land or Dry Land)

Craborchard Creek into Drakes Creek Hopkins County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Impairment Unknown

Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Surface Mining; Agriculture; Habitat Modification - Other Than

Hydromodification

<u>Crooked Creek into Panther Creek</u>

Daviess County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Cypress Creek into Pond River</u>
From River Mile 23.1 to 25.4

Muhlenberg County
Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): Pathogens; pH

Suspected Sources: Acid Mine Drainage; Surface Mining; Source Unknown; Coal

Mining (Subsurface)

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 22.9 to 25.0. Based on NHD river miles, the river miles have been more accurately determined as 23.1 to 25.4.

<u>Cypress Creek into Pond River</u>
From River Mile 25.4 to 33.3

Muhlenberg County
Segment Length: 7.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation (Partial

Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): Total Dissolved Solids; pH

Suspected Sources: Acid Mine Drainage

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 25.0 to 33.3. Based on NHD river miles, the river miles have been more accurately determined as 25.4 to 33.3.

<u>Daniels Creek into Rock Lick Creek</u>
From River Mile 0.0 to 5.7

Breckinridge County
Segment Length: 5.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

<u>Deer Creek into Green River</u>

Webster County

From River Mile 0.0 to 8.2 Segment Length: 8.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators
Suspected Sources: Crop Production (Crop Land or Dry Land)

See TMDLs Planned for Development During 2007.

<u>Deer Creek into Green River</u>

Webster County

From River Mile 8.2 to 17.5 Segment Length: 9.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Crop Production (Crop Land or

Dry Land)

Deserter Creek into South Fork Panther Creek Daviess County

From River Mile 0.0 to 3.1 Segment Length: 3.1 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Channelization; Source Unknown; Agriculture; Habitat

Modification - Other Than Hydromodification

See TMDLs Planned for Development During 2006.

Dorsey Run into Sinks of Nolin River Hardin County

From River Mile 1.9 to 3.7 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Post-Development Erosion and Sedimentation

Drakes Creek into Barren River Warren County

From River Mile 0.0 to 23.4 Segment Length: 23.4

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Polychlorinated Biphenyls Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 23.5. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 23.4.

<u>Dry Creek into Casey Creek</u> Casey County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Non-Irrigated Crop Production

KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation

District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

East Branch into West Fork of Pond River Christian County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

East Fork Deer Creek into Deer Creek Webster County

From River Mile 0.0 to 6.8 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production

See TMDLs Planned for Development During 2007.

Elk Creek into Pond River Hopkins County

From River Mile 0.0 to 5.4 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Elk Creek into Pond River Hopkins County

From River Mile 7.5 to 10.6 Segment Length: 3.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures)

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 7.8 to 10.9. Based on NHD river miles, the river miles have been more accurately determined as 7.5 to 10.6.

Elk Pond Creek into Pond River

From River Mile 0.0 to 4.5

Muhlenberg County
Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

Flat Creek into Pond River **Hopkins County** 

From River Mile 0.0 to 10.6 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids; pH

Acid Mine Drainage; Highway/Road/Bridge Runoff Suspected Sources:

(Non-Construction Related); Highways, Roads, Bridges,

Infrastructure (New Construction); Illicit Connections/Hook-Ups to Storm Sewers;

Industrial/Commercial Site Stormwater Discharge (Permitted); Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Site Clearance (Land Development or Redevelopment); Surface Mining

See Status of TMDLs Under Development Prior to 2006.

Ford Ditch into Rhodes Creek **Daviess County** 

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sulfates; Total Dissolved Solids; Phosphorus (Total) Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels);

> Irrigated Crop Production; Non-Irrigated Crop Production; Petroleum/Natural Gas Production Activities (Permitted);

**Surface Mining** 

See TMDLs Planned for Development During 2006.

Gilles Ditch into Rhodes Creek **Daviess County** 

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport) Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization

Glens Fork into Russell Creek **Adair County** 

From River Mile 0.0 to 8.0 Segment Length: 8.0

Aquatic Life (Partial Support), Primary Contact Recreation Impaired Use(s):

(Nonsupport)

Sedimentation/Siltation; Pathogens Pollutant(s):

Suspected Sources: Rangeland Grazing; Source Unknown; Habitat Modification -

Other Than Hydromodification

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of

Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

<u>Grassy Creek into Rough River</u> Ohio County

From River Mile 0.8 to 2.9 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels); Loss

of Riparian Habitat; Surface Mining

Green River into Ohio River Hart County

From River Mile 207.8 to 246.4 Segment Length: 38.6

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury Suspected Sources: Source Unknown

Groves Creek into Green River Webster County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production

Havana Creek into Deer Creek Webster County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

See TMDLs Planned for Development During 2007.

Indian Camp Creek into Green River

Butler County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

<u>Indian Camp Creek into Green River</u>

Butler County

From River Mile 3.9 to 10.2 Segment Length: 6.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

<u>Isaacs Creek into Pond River</u>
From River Mile 0.0 to 7.4

Muhlenberg County
Segment Length: 7.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH

Suspected Sources: Acid Mine Drainage; Impacts from Abandoned Mine Lands

(Inactive)

Jarrels Creek into Pond RiverMuhlenberg CountyFrom River Mile 0.0 to 1.6Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Dredging (e.g., for Navigation Channels); Source Unknown;

Habitat Modification - Other Than Hydromodification

<u>Jarret Fork into Caney Creek</u> Grayson County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Animal Feeding Operations (NPS); Impacts from

Hydrostructure Flow Regulation/Modification; Upstream Impoundments (e.g., Pl-5Irrigated Crop Production NRCS Structures); Livestock (Grazing or Feeding Operations); Crop

Production (Crop Land or Dry Land)

Jenny Hollow Branch into Horse Branch Ohio County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels); Loss

of Riparian Habitat; Streambank Modifications/Destabilization;

Livestock (Grazing or Feeding Operations)

<u>Joes Branch into North Fork Panther Creek</u>

Daviess County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Managed Pasture Grazing; Non-Irrigated Crop

Production; Source Unknown

Joes Run into North Fork Panther Creek Daviess County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Managed Pasture Grazing; Non-Irrigated Crop

Production; Source Unknown

Knoblick Creek into Deer Creek Webster County

From River Mile 0.0 to 9.0 Segment Length: 9.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing;

Non-Irrigated Crop Production; Rangeland Grazing

See TMDLs Planned for Development During 2007.

Knoblick Creek into Panther Creek Daviess County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006

<u>Lewis Creek into Green River</u>

Ohio County

From River Mile 0.0 to 11.8 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining; Habitat Modification - Other Than

Hydromodification

<u>Lick Creek into Green River</u>
From River Mile 0.0 to 3.7

Henderson County
Segment Length: 3.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production

Lick Creek into Green River **Henderson County** From River Mile 5.0 to 13.8 Segment Length: 8.8

Impaired Use(s): Aquatic Life (Nonsupport) Sedimentation/Siltation Pollutant(s):

Suspected Sources: Channelization

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 4.9 to 13.7. Based on new assessment, the river miles have been more accurately determined as 5.0 to 13.8.

Lindy Creek into Lynn Camp Creek Hart County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Dredging (e.g., for Navigation Channels); Managed Pasture

Grazing

KDOW awarded \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Little Barren River into Green River **Green County** 

From River Mile 0.0 to 8.8 Segment Length: 8.8

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): **Pathogens** 

Source Unknown Suspected Sources:

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Little Beaverdam Creek into Green River Warren County

From River Mile 10.7 to 11.4 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Silviculture Harvesting

<u>Little Cypress Creek into Pond River</u>
From River Mile 0.0 to 9.2

Muhlenberg County
Segment Length: 9.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Channelization; Golf Courses; Highway/Road/Bridge Runoff

(Non-Construction Related); Irrigated Crop Production; Non-Irrigated Crop Production; Petroleum/Natural Gas

Production Activities (Permitted); Surface Mining; Unspecified

**Urban Stormwater** 

<u>Little Muddy Creek into Green River</u>

Butler County

From River Mile 4.9 to 6.4 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

<u>Little Muddy Creek into Green River</u>

Butler County

From River Mile 6.4 to 12.9 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production

Long Falls Creek into Green River Reservoir McLean County

From River Mile 0.0 to 7.5 Segment Length: 7.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

**Pathogens** 

Suspected Sources: Channelization; Irrigated Crop Production; Non-Irrigated Crop

Production; Petroleum/Natural Gas Production Activities

(Permitted); Surface Mining; Source Unknown

See TMDLs Planned for Development During 2006.

Long Falls Creek into Green River Reservoir McLean County

From River Mile 7.5 to 11.8 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Pathogens;

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Suspected Sources: Acid Mine Drainage; Channelization; Loss of Riparian Habitat;

Non-Irrigated Crop Production

See TMDLs Planned for Development During 2006.

Long Lick Creek into Rough River Reservoir
From River Mile 4.5 to 6.9

Breckinridge County
Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Livestock (Grazing or Feeding

Operations); Crop Production (Crop Land or Dry Land)

McGrady Creek into Caney Creek Ohio County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Mill Creek into Smith Creek Ohio County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Mud River into Green River

Butler County

From River Mile 0.0 to 9.0 Segment Length: 9.0

Impaired Use(s): Fish Consumption (Nonsupport)
Pollutant(s): Polychlorinated Biphenyls

Suspected Sources: Industrial Point Source Discharge

Mud River into Green River

Butler County

From River Mile 9.0 to 30.5 Segment Length: 21.5 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Nonsupport)

Pollutant(s): Methylmercury; Polychlorinated Biphenyls; Other Suspected Sources: Industrial Point Source Discharge; Source Unknown

Mud River into Green River

Logan County

From River Mile 30.5 to 38.9 Segment Length: 8.4

Impaired Use(s): Fish Consumption (Nonsupport)
Pollutant(s): Polychlorinated Biphenyls
Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 30.5 to 64.8. Based on new assessments, the river miles have been more accurately determined as 30.5 to 38.9.

Mud River into Green River Logan County

From River Mile 38.9 to 67.8 Segment Length: 25.9

Impaired Use(s): Fish Consumption (Nonsupport)
Pollutant(s): Polychlorinated Biphenyls
Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 30.5 to 64.8. Based on new assessments, the river miles have been more accurately determined as 38.9 to 67.8.

Muddy Creek into Caney Fork Ohio County

From River Mile 0.0 to 6.1 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Muddy Creek into Green River Butler County

From River Mile 8.3 to 12.1 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Source Unknown

Muddy Creek into Green River Logan County

From River Mile 12.1 to 14.9 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production; Crop

Production (Crop Land or Dry Land)

Muddy Creek into Rough River

Ohio County

From River Mile 1.9 to 3.9 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Channelization; Agriculture

Muddy Creek into Rough River Ohio County

From River Mile 5.9 to 9.1 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Channelization; Non-Irrigated Crop Production; Permitted

Runoff from Confined Animal Feeding Operations (CAFOs)

Narge Creek into Pond River Hopkins County

From River Mile 2.2 to 3.9 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Crop Production (Crop Land or

Dry Land)

Nolin River into Green River Hardin County

From River Mile 44.0 to 93.2 Segment Length: 49.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

North Branch into South Fork Panther Creek Hancock County

From River Mile 0.0 to 12.4 Segment Length: 12.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Crop Production (Crop Land or Dry Land); Habitat

Modification - Other Than Hydromodification

North Fork Barnett Creek into Barnett Creek Ohio County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

North Fork Panther Creek into Panther Creek Daviess County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Irrigated Crop Production; Managed Pasture

Grazing; Non-Irrigated Crop Production

North Fork Panther Creek into Panther Creek Daviess County

From River Mile 4.2 to 6.0 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown Suspected Sources: Channelization; Source Unknown

See TMDLs Planned for Development During 2006

North Fork Panther Creek into Panther Creek Daviess County

From River Mile 6.1 to 9.7 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 6.0 to 9.5. Based on NHD river miles, the river miles have been more accurately determined as 6.1 to 9.7.

North Fork Panther Creek into Panther Creek

Daviess County

From River Mile 9.7 to 12.7 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Non-Irrigated Crop

Production

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 9.5 to 12.7. Based on NHD river miles, the river miles have been more accurately determined as 9.7 to 12.7.

Old Panther Creek into Panther Creek Daviess County

From River Mile 0.4 to 5.7 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown
Suspected Sources: Source Unknown

Old Panther Creek into Panther Creek Daviess County

From River Mile 5.7 to 8.8 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 5.7 to 8.3. Based on NHD river miles, the river miles have been more accurately determined as 5.7 to 8.8.

Otter Creek into Pond River Hopkins County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Non-Irrigated Crop Production; Sanitary Sewer

Overflows (Collection System Failures); Unspecified Urban

Stormwater

<u>Panther Creek into Green River</u>

Daviess County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production; Unspecified Urban Stormwater

<u>Panther Creek into Green River</u>

Daviess County

From River Mile 2.7 to 5.6 Segment Length: 2.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

See TMDLs Planned for Development During 2006.

Panther Creek into Green River Daviess County

From River Mile 17.1 to 19.5 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Managed Pasture

Grazing; Non-Irrigated Crop Production; Streambank Modifications/Destabilization; Source Unknown

See TMDLs Planned for Development During 2006.

Pettys Fork into Russell Creek Adair County

From River Mile 0.0 to 6.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Rangeland Grazing; Source Unknown; Habitat Modification -

Other Than Hydromodification

See TMDLs Planned for Development During 2006. KDOW awarded \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Pigeon Creek into Muddy Creek Ohio County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Acid Mine Drainage; Non-Irrigated Crop Production

Pleasant Run into Drakes CreekHopkins CountyFrom River Mile 0.0 to 2.1Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

KDOW has awarded two Section 319(h) Grants to the Kentucky Division of Abandoned Mine Lands for watershed restoration work in this watershed: (1) \$756,286 (FFY2001) to restore abandoned mine sites and remediate acid mine drainage in Pleasant Run and Fox Creek (a Tradewater River Basin tributary) and (2) \$720,440 (FFY2005) to develop a Watershed Based Plan and continue acid mine drainage remediation in the Pleasant Run watershed.

Plum Creek into Pond CreekMuhlenberg CountyFrom River Mile 0.0 to 2.5Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Chloride; Total Dissolved Solids
Suspected Sources: Inappropriate Waste Disposal

Plum Creek into Pond CreekMuhlenberg CountyFrom River Mile 2.5 to 4.3Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: Source Unknown; Habitat Modification - Other Than

Hydromodification

Pond Creek into Green RiverMuhlenberg CountyFrom River Mile 4.9 to 7.5Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Chloride; Sedimentation/Siltation; Sulfates; Total Dissolved

Solids

Suspected Sources: Channelization; Petroleum/Natural Gas Production Activities

(Permitted); Post-Development Erosion and Sedimentation; Streambank Modifications/Destabilization; Surface Mining;

Inappropriate Waste Disposal

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 4.7 to 9.4. Based on NHD river miles, the river miles have been more accurately determined as 4.9 to 7.5.

<u>Pond Creek into Green River</u>
From River Mile 7.5 to 11.7

Muhlenberg County
Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Chloride; Sedimentation/Siltation; Sulfates; Total Dissolved

Solids; pH

Suspected Sources: Acid Mine Drainage; Channelization; Petroleum/Natural Gas

Activities; Petroleum/Natural Gas Production Activities

(Permitted); Streambank Modifications/Destabilization; Surface Mining; Habitat Modification - Other Than Hydromodification;

Inappropriate Waste Disposal

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 9.4 to 13.6. Based on NHD river miles, the river miles have been more accurately determined as 7.5 to 11.7.

Pond Creek into Green RiverMuhlenberg CountyFrom River Mile 11.7 to 14.3Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; pH Suspected Sources: Acid Mine Drainage; Habitat Modification - Other Than

Hydromodification; Coal Mining

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 13.6 to 16.3. Based on NHD river miles, the river miles have been more accurately determined as 11.7 to 14.3.

Pond Creek into Green River
From River Mile 14.3 to 18.1

Impaired Use(s):

Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): pH

Suspected Sources: Acid Mine Drainage; Channelization; Irrigated Crop Production;

Loss of Riparian Habitat; Managed Pasture Grazing;

Non-Irrigated Crop Production; Post-Development Erosion and

Sedimentation

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 16.3 to 20.0. Based on NHD river miles, the river miles have been more accurately determined as 14.3 to 18.1.

Pond Creek into Green RiverMuhlenberg CountyFrom River Mile 18.1 to 21.4Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): pH; Impairment Unknown

Suspected Sources: Acid Mine Drainage; Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Surface Mining; Habitat

Modification - Other Than Hydromodification

See Status of TMDLs Under Development Prior to 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 20.0 to 23.8. Based on NHD river miles, the river miles have been more accurately determined as 18.1 to 21.4.

Pond Drain into Cypress Creek McLean County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production

Pond River into Green River Hopkins County

From River Mile 1.0 to 20.8 Segment Length: 19.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Heap-Leach Extraction Mining; Surface Mining; Habitat

Modification - Other Than Hydromodification

<u>Pond River into Green River</u>
From River Mile 20.8 to 31.1

Muhlenberg County
Segment Length: 10.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining; Habitat Modification - Other Than

Hydromodification; Coal Mining (Subsurface)

<u>Pond River into Green River</u>
From River Mile 69.1 to 79.7

Muhlenberg County
Segment Length: 10.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Poplar Grove Branch into Big Brush Creek Taylor County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Render Creek into Lewis Creek
Ohio County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids

Suspected Sources: Acid Mine Drainage; Channelization; Loss of Riparian Habitat;

Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Surface Mining

Rhodes Creek into Green River Daviess County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Unspecified Urban Stormwater

Rhodes Creek into Panther Creek Daviess County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 7.3. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 2.2.

Rhodes Creek into Panther Creek Daviess County

From River Mile 2.2 to 7.5 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Streambank

Modifications/Destabilization; Crop Production (Crop Land or

Dry Land)

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 7.3. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 7.5.

Richland Slough into Green River
From River Mile 0.0 to 6.2

Henderson County
Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Agriculture

Russell Creek into Green River Adair County

From River Mile 40.0 to 41.5 Segment Length: 1.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006. KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

Salt Lick Creek into Gasper River Warren County

From River Mile 0.0 to 1.3 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Agriculture

Sand Lick Creek into Pond Creek
From River Mile 0.0 to 3.0

Muhlenberg County
Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Source

Unknown

South Fork Beaver Creek into Beaver Creek Barren County

From River Mile 1.2 to 5.9 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; Source Unknown

South Fork Panther Creek into Panther Creek Daviess County

From River Mile 0.0 to 2.4 Segment Length: 2.4 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Copper; Sedimentation/Siltation; Pathogens;

Nutrient/Eutrophication Biological Indicators; Phosphorus

Suspected Sources: Irrigated Crop Production; Loss of Riparian Habitat;

Non-Irrigated Crop Production; Silviculture Harvesting; Streambank Modifications/Destabilization; Source Unknown

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 2.3. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 2.4.

South Fork Panther Creek into Panther Creek Daviess County

From River Mile 2.4 to 9.6 Segment Length: 7.15

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Wet Weather Discharges (Point Source and

Combination of Stormwater, SSO or CSO); Source Unknown

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 2.3 to 9.5. Based on NHD river miles, the river miles have been more accurately determined as 2.4 to 9.6.

South Fork Panther Creek into Panther Creek Daviess County

From River Mile 9.6 to 13.5 Segment Length: 3.95

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Phosphorus (Total)
Suspected Sources: Channelization; Irrigated Crop Production; Managed Pasture

Grazing; Non-Irrigated Crop Production; Agriculture; Habitat

Modification - Other Than Hydromodification

See TMDLs Planned for Development During 2006. The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 9.5 to 13.5. Based on NHD river miles, the river miles have been more accurately determined as 9.6 to 13.5.

South Fork Panther Creek into Panther Creek Daviess County

From River Mile 13.5 to 17.7 Segment Length: 4.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

<u>Sputzman Creek into Green River</u>
From River Mile 1.0 to 4.1
Henderson County
Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

Sunfish Creek into Bear Creek Grayson County

From River Mile 6.6 to 9.7 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Agriculture

Sweepstakes Branch into South Fork Panther Creek Daviess County

From River Mile 1.0 to 3.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production; Streambank

Modifications/Destabilization

See TMDLs Planned for Development During 2006.

<u>Sycamore Creek into Bear Creek</u>
From River Mile 0.0 to 1.5

Edmonson County
Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Habitat Modification - Other Than Hydromodification

Taylor Fork into Bear Creek Grayson County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Unspecified Urban Stormwater

<u>Three Lick Fork into Muddy Creek</u> Ohio County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production; Surface Mining

Town Branch into Mud River Logan County

From River Mile 0.0 to 6.7 Segment Length: 6.7

Impaired Use(s): Fish Consumption (Nonsupport)
Pollutant(s): Polychlorinated Biphenyls
Suspected Sources: Industrial Point Source Discharge

UT to Butler Branch into Butler Branch Adair County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

KDOW has awarded \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

UT to Cool Springs Creek into Cool Springs Creek Adair County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Agriculture

KDOW awarded over \$450,000 in federal Section 319(h) Grant funds (FFY1997, 1999 & 2002) to the Kentucky Division of Conservation and the Adair County Conservation District to implement watershed restoration activities focusing on agriculture in the Green River Conservation Reserve Enhancement Program (CREP) area. The Green River CREP is a \$110 million stream buffer initiative program for land easement purchase and BMP installation.

<u>UT to Cypress Creek into Cypress Creek</u>

From River Mile 0.0 to 1.6

Muhlenberg County
Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Irrigated Crop Production; Loss of Riparian Habitat; Managed

Pasture Grazing; Non-Irrigated Crop Production; Unspecified

**Urban Stormwater** 

<u>UT to Elk Creek into Elk Creek</u>
Hopkins County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures)

<u>UT to Flat Creek into Flat Creek</u>

Hopkins County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Surface Mining

<u>UT to Flat Creek into Flat Creek</u>

Hopkins County

From River Mile 3.1 to 4.1 Segment Length: 1.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures)

<u>UT to Pond Creek into Pond Creek</u>

From River Mile 0.0 to 2.3

Muhlenberg County

Segment Length: 2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Impairment Unknown Suspected Sources: Surface Mining

UT to West Fork Lewis Creek into West Fork Lewis Ohio County

Creek

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Habitat Modification - Other Than Hydromodification

<u>UT to Wiggington Creek into Wiggington Creek</u> Logan County

From River Mile 0.9 to 1.9 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Source Unknown; Crop Production (Crop Land or Dry Land); Habitat Modification -

Other Than Hydromodification

<u>Valley Creek into Nolin River</u>
Hardin County

From River Mile 0.0 to 3.5 Segment Length: 3.5 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Valley Creek into Nolin River Hardin County

From River Mile 8.0 to 10.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Impairment Unknown

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Industrial Point Source Discharge; Loss of Riparian Habitat; Streambank Modifications/Destabilization; Livestock (Grazing or Feeding Operations); Crop Production (Crop Land or Dry Land)

See TMDLs Planned for Development During 2007.

Valley Creek into Nolin River Hardin County

From River Mile 10.3 to 11.8 Segment Length: 1.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

West Fork Drakes Creek into Drakes Creek Warren County

From River Mile 0.0 to 9.9 Segment Length: 9.9

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Polychlorinated Biphenyls Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 23.4. Based on NHD river miles, the river miles have been more accurately determined as 0.0 to 9.9.

West Fork Drakes Creek into Drakes Creek Simpson County

From River Mile 9.9 to 23.4 Segment Length: 13.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Polychlorinated Biphenyls

Suspected Sources: Industrial Point Source Discharge

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 0.0 to 23.4. Based on NHD river miles, the river miles have been more accurately determined as 9.9 to 23.4.

West Fork Pond River into Pond River Christian County

From River Mile 1.6 to 8.9 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Habitat Modification - Other Than Hydromodification

West Fork Pond River into Pond River Christian County

From River Mile 19.6 to 26.0 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Livestock (Grazing or Feeding Operations); Habitat

Modification - Other Than Hydromodification

Wolf Branch into Rhodes Creek Daviess County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Phosphorus (Total)

Suspected Sources: Channelization; Irrigated Crop Production; Loss of Riparian

Habitat; Non-Irrigated Crop Production

See TMDLs Planned for Development During 2006.

Wolf Lick Creek into Mud River Logan County

From River Mile 3.3 to 13.7 Segment Length: 10.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

#### 11.2. Green River Basin Lakes

Barren River Reservoir Allen County

Acres: 10000

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury

Suspected Sources: Atmospheric Deposition - Toxics; Source Unknown

Campbellsville City Reservoir Taylor County

Acres: 63

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Upstream Source; Natural Sources

<u>Caneyville City Reservoir</u> Grayson County

Acres: 75

Impaired Use(s): Secondary Contact Recreation (Partial Support), Drinking

Water (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators

Suspected Sources: Natural Sources

Green River Taylor County

Acres: 8210

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury; Polychlorinated Biphenyls

Suspected Sources: Industrial Point Source Discharge

Lake Luzerne Muhlenberg County

Acres: 55

Impaired Use(s): Drinking Water (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Source Unknown

Rough River Hardin County

Acres: 5100

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury Suspected Sources: Source Unknown

Salem Lake Larue County

Acres: 99

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Grazing in Riparian or Shoreline Zones; Agriculture; Habitat

Modification - Other Than Hydromodification

Spa Lake Logan County

Acres: 240

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation
Suspected Sources: Natural Sources; Agriculture

#### 11.3. Ohio River Basin Streams

Bayou Creek into Ohio River Livingston County

From River Mile 0.0 to 17.3 Segment Length: 17.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Loss of Riparian Habitat; Source Unknown

Bear Run into Clover Creek
From River Mile 1.5 to 1.9

Breckinridge County
Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Silviculture

Harvesting

Blackford Creek into Ohio River Hancock County

From River Mile 3.6 to 8.0 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Channelization; Source Unknown

<u>Canoe Creek into Ohio River</u>
From River Mile 0.0 to 3.9

Henderson County
Segment Length: 3.9

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Chromium (Total); Copper; Pathogens; Zinc

Suspected Sources: Source Unknown

<u>Casey Creek into Highland Creek</u>
Union County

From River Mile 0.6 to 9.5 Segment Length: 8.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Total Dissolved Solids

Suspected Sources: Channelization; Drainage/Filling/Loss of Wetlands; Dredging

(e.g., for Navigation Channels); Impacts from Hydrostructure Flow Regulation/Modification; Irrigated Crop Production; Loss

of Riparian Habitat; Petroleum/Natural Gas Production

Activities (Permitted); Streambank Modifications/Destabilization

<u>Clover Creek into Ohio River</u>
From River Mile 7.8 to 9.2

Breckinridge County
Segment Length: 1.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

Livestock (Grazing or Feeding Operations); Crop Production

(Crop Land or Dry Land)

<u>Crooked Creek into Ohio River</u>

Crittenden County

From River Mile 0.0 to 11.7 Segment Length: 11.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Source Unknown

<u>Crooked Creek into Ohio River</u>
From River Mile 22.7 to 23.7

Crittenden County
Segment Length: 1.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflow (SSO)

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 22.2 to 23.3. Based on NHD river miles, the river miles have been more accurately determined as 22.7 to 23.7.

<u>Deer Creek into Ohio River</u>
From River Mile 0.0 to 7.9

Livingston County
Segment Length: 7.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Agriculture

Goose Pond Ditch/Wardens Slough into Ohio River Union County

From River Mile 0.0 to 14.0 Segment Length: 14.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Streambank

Modifications/Destabilization; Crop Production (Crop Land or

Dry Land)

<u>Highland Creek into Ohio River</u>

Union County

From River Mile 0.0 to 7.1 Segment Length: 7.1

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Pathogens; Impairment Unknown

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Loss of Riparian Habitat; Streambank Modifications/Destabilization; Agriculture

Rush Creek into Crooked Creek
From River Mile 0.0 to 1.3

Crittenden County
Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators
Suspected Sources: Municipal Point Source Discharges; Unspecified Urban

Stormwater

<u>Sugg Creek into Cypress Creek</u> Union County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

# Green-Tradewater Basin Unit Ohio River Basin Lakes

### 11.4. Ohio River Basin Lakes

Scenic Lake Henderson County

Acres: 18

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Contaminated Sediments; Internal Nutrient Recycling

#### 11.5. Tradewater River Basin Streams

Bishop Ditch into Caney Fork Webster County

From River Mile 3.0 to 5.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Animal Feeding Operations (NPS); Heap-Leach Extraction

Mining; Non-Irrigated Crop Production

Buffalo Creek into Tradewater River Hopkins County

From River Mile 0.0 to 6.7 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production; Source Unknown

Bull Creek into Slover Creek Webster County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Non-Irrigated Crop Production; Habitat

Modification - Other Than Hydromodification

Caney Creek into Donaldson Creek Caldwell County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production;

Source Unknown

Caney Creek into Tradewater River

Hopkins County

From River Mile 0.0 to 8.8 Segment Length: 8.8

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH

Suspected Sources: Acid Mine Drainage; Channelization; Loss of Riparian Habitat;

**Surface Mining** 

See TMDLs Planned for Development During 2006. KDOW awarded \$756,286 in federal Section 319(h) Grant funds (FFY2001) to the Kentucky Division of Abandoned Mine Lands to restore abandoned mine sites and remediate acid mine drainage in

Pleasant Run (a Green River Basin tributary) and Fox Creek, a tributary to Caney Creek.

<u>Caney Fork into Craborchard Creek</u>
Webster County

From River Mile 3.5 to 7.9 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

Non-Irrigated Crop Production

Castleberry Creek into Tradewater River Christian County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Turbidity;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

<u>Clear Creek into Tradewater River</u>

Hopkins County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2007.

Clear Creek into Tradewater River

Hopkins County

From River Mile 19.1 to 25.5 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Channelization; Surface Mining; Source Unknown;

Introduction of Non-native Organisms (Accidental or Intentional)

See TMDLs Planned for Development During 2007.

Clear Creek into Tradewater River Hopkins County

From River Mile 25.5 to 26.5 Segment Length: 1.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Sanitary Sewer Overflows (Collection System Failures)

See TMDLs Planned for Development During 2007.

Copper Creek into Richland Creek
Hopkins County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Iron; Total Dissolved Solids; Zinc; pH

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Copperas Creek into Cany Creek Hopkins County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Cadmium; Iron; Nickel; Total Dissolved Solids; Zinc; pH

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Craborchard Creek into Tradewater River Webster County

From River Mile 1.4 to 8.8 Segment Length: 7.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Craborchard Creek into Tradewater River Webster County

From River Mile 13.2 to 15.3 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

<u>Cypress Creek into Tradewater River</u>

Union County

From River Mile 0.0 to 2.3 Segment Length: 3.0

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Source Unknown

Hurricane Creek into Tradewater River Hopkins County

From River Mile 0.7 to 2.2 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Iron; Total Dissolved Solids; Zinc; pH

Suspected Sources: Source Unknown

See TMDLs Planned for Development During 2006.

Lambs Creek into Clear Creek Hopkins County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Channelization; Loss of Riparian Habitat; Surface Mining;

Source Unknown

See TMDLs Planned for Development During 2007.

Lick Creek into Clear Creek Hopkins County

From River Mile 0.0 to 12.1 Segment Length: 12.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining

See TMDLs Planned for Development During 2007.

Lynn Fork into Craborchard Creek Webster County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production

Pigeonroost Creek into Tradewater River Crittenden County

From River Mile 0.9 to 3.9 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Agriculture

# Green-Tradewater Basin Unit Tradewater Basin Streams

<u>Pond Creek into Clear Creek</u> Hopkins County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Channelization; Loss of Riparian Habitat; Non-Irrigated Crop

Production; Surface Mining

See TMDLs Planned for Development During 2007.

Richland Creek into Clear Creek Hopkins County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Loss of Riparian Habitat; Managed Pasture

Grazing

See TMDLs Planned for Development During 2007.

Tradewater River into Ohio River Union County

From River Mile 0.0 to 16.7 Segment Length: 16.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Tradewater River into Ohio River Hopkins County

From River Mile 63.1 to 93.9 Segment Length: 30.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Surface Mining

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 63.0 to 92.2. Based on NHD river miles, the river miles have been more accurately determined as 63.1 to 93.9.

<u>Tyson Branch into Tradewater River</u>

Caldwell County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Habitat Modification - Other Than Hydromodification

# **Green-Tradewater Basin Unit Tradewater Basin** Streams

UT to Clear Creek into Clear Creek Segment 0.0 to 2.2 **Hopkins County** 

2.2 From River Mile 0.0 to 2.2 Segment Length:

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): **Pathogens** 

Suspected Sources: Package Plant or Other Permitted Small Flows Discharges;

Sanitary Sewer Overflows (Collection System Failures)

See TMDLs Planned for Development During 2007.

UT to UT to Slover Creek into Slover Creek Webster County

From River Mile 0.2 to 1.2 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Sedimentation/Siltation; Total Dissolved Solids Pollutant(s): Channelization; Surface Mining; Agriculture Suspected Sources:

Ward Creek into Flynn Fork Caldwell County

From River Mile 4.9 to 10.1 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport) Pollutant(s): Impairment Unknown

Suspected Sources: Habitat Modification - Other Than Hydromodification

Weirs Creek into Clear Creek **Hopkins County** 

Segment Length: From River Mile 0.0 to 5.0 5.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity; Nutrient/Eutrophication

**Biological Indicators** 

Channelization; Loss of Riparian Habitat; Non-Irrigated Crop Suspected Sources:

Production

See TMDLs Planned for Development During 2007.

Wolf Creek into Tradewater River Crittenden County 1.2

From River Mile 0.0 to 1.2 Segment Length:

Impaired Use(s): Aquatic Life (Nonsupport) Pollutant(s): Impairment Unknown

Suspected Sources: Loss of Riparian Habitat; Non-Irrigated Crop Production;

Source Unknown

# Green-Tradewater Basin Unit Tradewater Basin Lakes

# 11.6. Tradewater River Basin Lakes

<u>Lake Peewee</u> Hopkins County

Acres: 360

Impaired Use(s): Drinking Water (Partial Support)

Pollutant(s): Nutrient/Eutrophication Biological Indicators

Suspected Sources: Agriculture

# Chapter 12. Big Sandy-Little Sandy-Tygarts Basin Unit 303(d) List

#### 12.1 Big Sandy River Basin Streams

Arkansas Creek into Beaver Creek Floyd County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Organic Enrichment (Sewage) Biological Indicators;

Phosphorus (Total)

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Post-Development Erosion and Sedimentation; Surface Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

Arnold Fork into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Barnetts Creek into Paint Creek Johnson County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Big Sandy River of Ohio River

Lawrence County

From River Mile 0.0 to 27.1 Segment Length: 27.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Resource Extraction

Bear Creek into Big Sandy RiverLawrence CountyFrom River Mile 0.0 to 1.9Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Animal Feeding Operations (NPS); On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems); Habitat Modification - Other Than Hydromodification

Beaver Creek into Levisa Fork Floyd County

From River Mile 0.0 to 7.1 Segment Length: 7.1 Impaired Use(s): Aquatic Life ( Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Surface Mining

Big Creek into Tug Fork Pike County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

Big Creek into Tug Fork Pike County

From River Mile 7.3 to 10.7 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems); Surface Mining

Big Creek into Tug Fork Pike County

From River Mile 10.7 to 15.1 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Surface Mining

Big Mine Creek into Little Paint CreekMagoffin CountyFrom River Mile 1.4 to 3.9Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Partial Support), Secondary Contact Recreation (Partial Support)

Pollutant(s): Sedimentation/Siltation; pH; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Agriculture;

Inappropriate Waste Disposal; Silviculture Activities

Big Mine Creek into Little Paint Creek Magoffin County

From River Mile 5.8 to 8.4 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

Bill D Branch into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Blaine Creek into Big Sandy River

Lawrence County

From River Mile 8.1 to 17.4 Segment Length: 9.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

**Indicators** 

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; On-site

Treatment Systems (Septic Systems and Similar

Decentralized Systems); Post-Development Erosion and Sedimentation; Streambank Modifications/Destabilization

Blaine Creek into Big Sandy River

Lawrence County

From River Mile 35.0 to 40.8 Segment Length: 5.8

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

Blaine Creek into Big Sandy River

From River Mile 41.6 to 43.0

Lawrence County

Segment Length: 1.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Heap-Leach Extraction Mining

Blaine Creek into Big Sandy RiverLawrence CountyFrom River Mile 44.0 to 48.4Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Agriculture;

Inappropriate Waste Disposal; Silviculture Activities

Brushy Fork into Johns Creek Pike County

From River Mile 0.0 to 10.0 Segment Length: 10.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing; Surface

Mining; Source Unknown

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Johns Creek is one of five subwatersheds targeted by the RC&D for erosion control.

Buck Branch into Beaver Creek Floyd County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Heap-Leach Extraction Mining; On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems); Post-Development Erosion and Sedimentation; Habitat

Modification - Other Than Hydromodification; Unspecified Urban

Stormwater

Buffalo Creek into Johns Creek Floyd County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Caleb Fork into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Sedimentation/Siltation; Sulfates; Total

Dissolved Solids; Organic Enrichment (Sewage) Biological

Indicators; Phosphorus (Total)

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

**Urban Stormwater** 

Clear Creek into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

Coldwater Fork into Middle Fork Rockcastle Creek Martin County

From River Mile 2.1 to 8.8 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related); Impacts from Abandoned Mine Lands (Inactive); Loss of Riparian Habitat; Other Spill Related Impacts; Surface Mining; Sediment Resuspension (Contaminated Sediment); Unspecified

**Urban Stormwater** 

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Coldwater Fork is one of five subwatersheds targeted by the RC&D for erosion control.

Dry Creek into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Managed Pasture Grazing; Petroleum/Natural Gas Production

Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat

Modification - Other Than Hydromodification

See TMDLs Planned for Development During 2007.

Elkhorn Creek into Russell Fork Pike County

From River Mile 0.0 to 10.6 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Pathogens Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Surface Mining

See TMDLs Planned for Development During 2007.

Frasure Branch into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

Urban Stormwater

Georges Creek into Levisa Fork, Big Sandy River

Lawrence County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Goose Creek into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Impairment Unknown Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2007.

Greasy Creek into Levisa Fork Johnson County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Municipal Point Source Discharges; Subsurface (Hardrock)

Mining; Surface Mining

Hood Creek into Blaine Creek Lawrence County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Impairment Unknown

Suspected Sources: Heap-Leach Extraction Mining; Landfills; Silviculture Activities;

Unspecified Urban Stormwater

Ice Dam Creek into Big Sandy River

Boyd County

From River Mile 0.0 to 0.4 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Nitrogen (Total); Impairment

Unknown

Suspected Sources: Industrial Point Source Discharge; On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems); Post-Development Erosion and Sedimentation; Habitat

Modification - Other Than Hydromodification: Unspecified Urban

Stormwater

Ice Dam Creek into Big Sandy River

Boyd County

From River Mile 0.4 to 2.4 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Nitrogen (Total); Impairment Unknown

Suspected Sources: Industrial Point Source Discharge; On-site Treatment Systems

(Septic Systems and Similar Decentralized Systems); Post-Development Erosion and Sedimentation; Habitat

Modification - Other Than Hydromodification; Unspecified Urban

Stormwater

<u>Indian Creek into Long Fork</u> Pike County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Channelization; Highway/Road/Bridge Runoff

> (Non-Construction Related); Loss of Riparian Habitat; Post-Development Erosion and Sedimentation; Streambank

Modifications/Destabilization; Surface Mining

Island Creek into Levisa Fork, Big Sandy River

Pike County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Surface Mining

<u>Jacks Branch into Left Fork Beaver Creek</u> Floyd County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Impairment Unknown Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than

Hydromodification

Jennys Creek into Paint Creek

Johnson County

From River Mile 5.3 to 10.8 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Site Clearance (Land Development or Redevelopment);

Subsurface (Hardrock) Mining; Surface Mining

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Johns Branch into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport) Pollutant(s): Sedimentation/Siltation; Sulfates

Suspected Sources: Post-Development Erosion and Sedimentation; Subsurface

(Hardrock) Mining; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2007.

Johns Creek into Levisa Fork, Big Sandy River Floyd County

From River Mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Impacts from Hydrostructure Flow Regulation/Modification;

> Subsurface (Hardrock) Mining; Surface Mining; Upstream Impoundments (e.g., Pl-5 Irrigated Crop Production NRCS

Structures)

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Johns Creek is one of five subwatersheds targeted by the RC&D for erosion control.

Johns Creek into Levisa Fork, Big Sandy River Pike County

From River Mile 24.0 to 30.7 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Surface Mining

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Johns Creek is one of five subwatersheds targeted by the RC&D for erosion control.

Johns Creek into Levisa Fork, Big Sandy River Pike County

From River Mile 34.4 to 42.5 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Nonsupport)

Sedimentation/Siltation: Total Dissolved Solids Pollutant(s):

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Surface Mining

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Johns Creek is one of five subwatersheds targeted by the RC&D for erosion control.

Jones Fork into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 9.4 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2007.

Knox Creek into Tug Fork Pike County

From River Mile 0.0 to 7.6 Segment Length: 7.6 Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Sedimentation/Siltation; Temperature, Water; Pathogens Suspected Sources: Dredging (e.g., for Navigation Channels); On-site Treatment

Systems (Septic Systems and Similar Decentralized

Systems); Source Unknown; Habitat Modification - Other Than

Hydromodification

Left Fork Beaver Creek into Beaver Creek Knott County

From River Mile 0.0 to 11.4 Segment Length: 11.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Loss of Riparian Habitat; Petroleum/Natural Gas Production

Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Surface Mining; Crop Production (Crop Land or Dry Land);

Unspecified Urban Stormwater

<u>Left Fork Beaver Creek into Beaver Creek</u>

Knott County

From River Mile 13.6 to 18.7 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Surface Mining

Left Fork Blaine Creek into Blaine Creek **Lawrence County** From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Agriculture;

Inappropriate Waste Disposal; Silviculture Activities

Left Fork Middle Creek into Middle Creek Levisa Fork Floyd County

From River Mile 0.0 to 8.4 Segment Length: 8.4

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sulfates; Total Dissolved Solids; pH; Impairment Unknown

Suspected Sources: **Surface Mining** 

Levisa Fork into Big Sandy River Lawrence County

From River Mile 5.8 to 15.3 Segment Length: 9.5 Impaired Use(s): Aquatic Life (Nonsupport); Fish consumption (Partial Support) Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Methyl Mercury;

**PCBs** 

Suspected Sources: Surface Mining; Unknown

Levisa Fork into Big Sandy River Johnson County

From River Mile 65.2 to 99.9 Segment Length: 34.7

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): **Pathogens** 

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Urban Runoff/Storm Sewers

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 65.0 to 97.3. Based on NHD river miles, the river miles have been more accurately determined as 65.2 to 99.9.

Pike County Levisa Fork into Big Sandy River

From River Mile 116.0 to 124.4 Segment Length: 8.4 Aquatic Life (Nonsupport), Primary Contact Recreation (Partial Impaired Use(s):

Support)

Pollutant(s): Sedimentation/Siltation; Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Surface Mining; Sewage

Discharges in Unsewered Areas

The river miles for this segment have changed from the 2004 listing. The 2004 list had the river miles as 116.2 to 124.6. Based on NHD river miles, the river miles have been more accurately determined as 116.0 to 124.4.

Little Paint Creek into Paint Creek

Johnson County

From River Mile 3.2 to 6.4 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation

Little Paint Creek into Paint Creek

Johnson County

From River Mile 6.4 to 11.6 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Agriculture;

Inappropriate Waste Disposal; Silviculture Activities

<u>Long Branch into Johns Creek</u> Floyd County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water; Total Dissolved

**Solids** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Surface Mining

Lower Laurel Fork into Blaine Creek

Lawrence County

From River Mile 0.0 to 7.9 Segment Length: 7.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Nutrient/Eutrophication Biological

Indicators; Impairment Unknown

Suspected Sources: Heap-Leach Extraction Mining; Landfills; Source Unknown;

Silviculture Activities; Unspecified Urban Stormwater

Marrowbone Creek into Russell Fork Pike County

From River Mile 1.4 to 11.3 Segment Length: 9.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids Suspected Sources: Channelization; Highway/Road/Bridge Runoff

(Non-Construction Related); Loss of Riparian Habitat;

Post-Development Erosion and Sedimentation; Surface Mining

Middle Creek into Levisa Fork Floyd County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Impairment Unknown

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Source

Unknown

Middle Fork Rockcastle Creek into Rockcastle Creek Martin County

From River Mile 0.0 to 16.8 Segment Length: 16.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related); Loss of Riparian Habitat; Silviculture Harvesting; Surface

Mining; Unspecified Urban Stormwater

Miller Creek into Levisa Fork, Big Sandy River

Johnson County

From River Mile 0.0 to 6.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Surface Mining

Mud Creek into Levisa Fk Big Sandy River Floyd County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Turbidity

Suspected Sources: Loss of Riparian Habitat; Streambank Modifications/

Destabilization

Nats Creek into Levisa Fork Lawrence County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Open Fork into Paint Creek Morgan County

From River Mile 6.4 to 11.3 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; pH; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining; Agriculture;

Inappropriate Waste Disposal; Silviculture Activities

Otter Creek into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Sedimentation/Siltation; Total Dissolved

Solids; Organic Enrichment (Sewage) Biological Indicators;

Nitrogen (Total); Phosphorus (Total)

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

**Urban Stormwater** 

<u>Paddle Creek into Ice Dam Creek</u>
Boyd County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Industrial Point Source Discharge; Post-Development Erosion

and Sedimentation; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

Paint Creek into Levisa Fork, Big Sandy River

Johnson County

From River Mile 0.0 to 7.9 Segment Length: 7.9

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water; Pathogens;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Post-Development Erosion and Sedimentation; Upstream Impoundments (e.g., Pl-5 Irrigated

Crop Production NRCS Structures)

Panther Fork into Wolf Creek Martin County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

**Surface Mining** 

Peter Creek into Tug Fork Pike County

From River Mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

<u>Pigeonroost Fork into Wolf Creek</u> Martin County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Pond Creek into Tug Fork Pike County

From River Mile 3.4 to 9.7 Segment Length: 6.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Surface Mining

Puncheon Branch into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Petroleum/Natural Gas Production Activities (Permitted); Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

**Urban Stormwater** 

See TMDLs Planned for Development During 2007.

Raccoon Creek into Johns Creek Pike County

From River Mile 5.6 to 7.4 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Surface Mining

KDOW awarded \$134,308 in federal Section 319(h) Grant funds (FFY1997) to the Big Sandy RC&D, Inc. to significantly reduce the number of critically eroding sites through BMP demonstrations, education, planning and training. Johns Creek is one of five subwatersheds targeted by the RC&D for erosion control.

Right Fork Beaver Creek into Beaver Creek Floyd County

From River Mile 0.0 to 17.4 Segment Length: 17.4

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Pathogens; pH; Organic Enrichment (Sewage) Biological

Indicators

Suspected Sources: Acid Mine Drainage; Channelization; Loss of Riparian Habitat;

Managed Pasture Grazing; Petroleum/Natural Gas Production

Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Surface

Mining; Inappropriate Waste Disposal; Silviculture Activities

See TMDLs Planned for Development During 2007.

Right Fork Beaver Creek into Beaver Creek Knott County

From River Mile 30.3 to 33.4 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Loss of Riparian Habitat; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Surface Mining

See TMDLs Planned for Development During 2007.

Rock Fork into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 7.0 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Rockcastle Creek into Tug Fork

Lawrence County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Post-Development Erosion and Sedimentation; Surface Mining

Rockcastle Creek into Tug Fork Martin County

From River Mile 3.7 to 13.3 Segment Length: 9.55

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Channelization; Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related); Surface Mining; Sediment Resuspension (Contaminated

Sediment); Unspecified Urban Stormwater

Rockcastle Creek into Tug Fork Martin County

From River Mile 13.3 to 15.3 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Rockhouse Fork into Rockcastle Creek Martin County

From River Mile 0.0 to 6.3 Segment Length: 6.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation; Surface Mining

Russell Fork into Levisa Fork, Big Sandy River Pike County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

Salisbury Branch into Right Fork Beaver Creek Knott County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sulfates; Total Dissolved Solids; Nutrient/Eutrophication

**Biological Indicators** 

Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Salt Lick Creek into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 6.8 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Impairment Unknown Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than

Hydromodification

See TMDLs Planned for Development During 2007.

Shelby Creek into Levisa Fork, Big Sandy River Pike County

From River Mile 0.0 to 6.1 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Surface Mining

Shelby Creek into Levisa Fork, Big Sandy River Pike County

From River Mile 6.1 to 13.3 Segment Length: 7.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Organic Enrichment (Sewage)

**Biological Indicators** 

Suspected Sources: Loss of Riparian Habitat; Septage Disposal

Simpson Branch into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

Urban Stormwater

Sizemore Branch into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sulfates; Total Dissolved Solids

Suspected Sources: Petroleum/Natural Gas Production Activities (Permitted);

Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

Spewing Camp Branch into Left Fork Beaver Creek Floyd County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport), Primary Contact Recreation

(Nonsupport), Secondary Contact Recreation (Nonsupport)

Pollutant(s): Sulfates; Total Suspended Solids (TSS); pH; Impairment

Unknown

Suspected Sources: Surface Mining

Steele Creek into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Surface

Mining; Habitat Modification - Other Than Hydromodification;

Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Stephens Branch into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Ammonia (Un-ionized); Sedimentation/Siltation; Sulfates;

Organic Enrichment (Sewage) Biological Indicators

Suspected Sources: Industrial Point Source Discharge; Managed Pasture Grazing;

On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems); Surface Mining; Habitat

Modification - Other Than Hydromodification; Unspecified

**Urban Stormwater** 

See TMDLs Planned for Development During 2007.

Toms Creek into Levisa Fork Johnson County

From River Mile 0.0 to 8.0 Segment Length: 8.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation

Suspected Sources: Subsurface (Hardrock) Mining; Surface Mining

Tug Fork into Big Sandy River

Martin County

From River Mile 10.2 to 41.6 Segment Length: 31.4

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

<u>Tug Fork into Big Sandy River</u>

Martin County

From River Mile 71.9 to 77.7 Segment Length: 5.8

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Tug Fork into Big Sandy River Pike County

From River Mile 78.3 to 84.4 Segment Length: 6.1

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: On-site Treatment Systems (Septic Systems and Similar

Decentralized Systems)

<u>Turkey Creek into Right Fork Beaver Creek</u> Floyd County

From River Mile 0.0 to 5.9 Segment Length: 5.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Impairment Unknown Suspected Sources: Managed Pasture Grazing; Petroleum/Natural Gas Production

Activities (Permitted); Post-Development Erosion and Sedimentation; Site Clearance (Land Development or Redevelopment); Subsurface (Hardrock) Mining; Surface Mining; Habitat Modification - Other Than Hydromodification

See TMDLs Planned for Development During 2007.

Upper Pidgeon Branch into Elkhorn Creek Pike County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Nitrogen (Total)

Suspected Sources: Surface Mining; Source Unknown

See TMDLs Planned for Development During 2007.

Wilson Creek into Right Fork Beaver Creek Floyd County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Organic Enrichment

(Sewage) Biological Indicators

Suspected Sources: Managed Pasture Grazing; On-site Treatment Systems (Septic

Systems and Similar Decentralized Systems);

Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Surface Mining; Habitat Modification - Other Than Hydromodification; Unspecified Urban Stormwater

See TMDLs Planned for Development During 2007.

Wolf Creek into Tug Fork Martin County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids

Suspected Sources: Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related); Surface Mining; Sediment Resuspension (Contaminated

Sediment); Unspecified Urban Stormwater

Wolf Creek into Tug Fork Martin County

From River Mile 6.5 to 17.6 Segment Length: 11.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids

Suspected Sources: Dredging (e.g., for Navigation Channels);

Highway/Road/Bridge Runoff (Non-Construction Related); Surface Mining; Sediment Resuspension (Contaminated

Sediment); Unspecified Urban Stormwater

Wolf Creek into Tug Fork

Martin County

From River Mile 17.6 to 20.5 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related);

**Surface Mining** 

Wolfpen Branch into Grassy Creek Pike County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water; Total Dissolved

**Solids** 

Suspected Sources: Channelization; Loss of Riparian Habitat; Silviculture

Harvesting; Surface Mining

# 12.2 Big Sandy River Basin Lakes

<u>Dewey Lake</u> Floyd County

Acres: 1100

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Total Suspended Solids (TSS)

Suspected Sources: Surface Mining

<u>Paintsville Reservoir</u> Johnson County

Acres: 1139

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury Suspected Sources: Source Unknown

#### 12.3 Little Sandy River Basin Streams

Allcorn Creek into Little Sandy River Greenup County

From River Mile 1.4 to 3.9 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Loss of Riparian Habitat; Livestock (Grazing or Feeding

Operations)

Barrett Creek into Little Sandy River Carter County

From River Mile 0.0 to 7.2 Segment Length: 7.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Highway/Road/Bridge Runoff (Non-Construction Related); Site

Clearance (Land Development or Redevelopment)

<u>Cane Creek into Little Sandy River</u>

Greenup County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown Suspected Sources: Source Unknown

Dry Fork into Little Fork Little Sandy River

Lawrence County

From River Mile 1.2 to 4.5 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Suspected Sources: Silviculture Harvesting

East Fork Little Sandy River into Little Sandy River Boyd County

From River Mile 24.9 to 26.4 Segment Length: 1.5

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Loss of Riparian Habitat

East Fork Little Sandy River into Little Sandy River Boyd County

From River Mile 27.1 to 30.0 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Surface Mining

Ellingtons Bear Creek into East Fork Little Sandy River Boyd County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Temperature, Water;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Loss of Riparian Habitat; Source Unknown

Everman Creek into Little Sandy River Carter County

From River Mile 0.0 to 5.7 Segment Length: 5.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Source Unknown

Garner Creek into East Fork Little Sandy River Boyd County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Managed Pasture Grazing; Silviculture Harvesting

Left Fork Redwine Creek into Redwine Creek Elliott County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Source Unknown; Livestock (Grazing or Feeding Operations)

Lick Fork into Newcombe Creek Elliott County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Managed Pasture Grazing; Petroleum/Natural Gas Production

> Activities (Permitted); Post-Development Erosion and Sedimentation; Subsurface (Hardrock) Mining; Habitat Modification - Other Than Hydromodification; Unspecified

**Urban Stormwater** 

Little Fork into Little Sandy River Carter County

From River Mile 4.8 to 6.0 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Loss of Riparian Habitat; Livestock (Grazing or Feeding

Operations)

<u>Little Fork into Little Sandy River</u>

Carter County

From River Mile 12.0 to 23.8 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Surface Mining; Livestock (Grazing

or Feeding Operations)

Little Fork into Little Sandy River Elliott County

From River Mile 23.8 to 27.7 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Managed Pasture Grazing; Non-Irrigated Crop

Production; Silviculture Harvesting

<u>Little Fork into Little Sandy River</u>
Elliott County

From River Mile 27.7 to 30.5 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Loss of Riparian Habitat; Livestock (Grazing or Feeding

Operations)

Little Sandy River into Ohio River Greenup County

From River Mile 0.0 to 0.2 Segment Length: 0.2

Impaired Use(s): Primary Contact Recreation (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Source Discharges

<u>Little Sandy River into Ohio River</u>
Elliott County

From River Mile 71.8 to 74.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Habitat Modification - Other Than Hydromodification

Lower Stinson Creek into Little Sandy River Carter County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation
Supported Sources: Non-Imparted Crop Production

Suspected Sources: Non-Irrigated Crop Production

Middle Fork into Little Sandy River Elliott County

From River Mile 5.7 to 7.5 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Other Recreational Pollution Sources; Source Unknown

Newcombe Creek into Little Sandy River Elliott County

From River Mile 0.0 to 11.9 Segment Length: 11.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Impairment Unknown Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Impacts from Abandoned Mine Lands (Inactive); Managed Pasture Grazing; Mine Tailings; Petroleum/Natural Gas Production Activities (Permitted); Post-Development Erosion and Sedimentation; Silviculture Harvesting; Subsurface (Hardrock) Mining; Crop Production (Crop Land or Dry Land); Habitat Modification - Other Than Hydromodification;

Unspecified Urban Stormwater

Oldtown Creek into Little Sandy River Greenup County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Oil and Grease; Sedimentation/Siltation; Temperature, Water;

**Turbidity** 

Suspected Sources: Loss of Riparian Habitat; Source Unknown; Livestock (Grazing

or Feeding Operations)

Right Fork Newcombe Creek into Newcombe Creek Elliott County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Sulfates; Total Dissolved Solids Suspected Sources: Managed Pasture Grazing; Petroleum/Natural Gas Production

> Activities (Permitted); Subsurface (Hardrock) Mining; Surface Mining; Crop Production (Crop Land or Dry Land); Habitat Modification - Other Than Hydromodification

Rocky Branch into Newcombe Creek Elliott County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Petroleum/Natural Gas Production Activities (Permitted);

Post-Development Erosion and Sedimentation; Surface Mining;

Habitat Modification - Other Than Hydromodification;

Unspecified Urban Stormwater

Straight Creek into Little Fork Little Sandy River Carter County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Non-Irrigated Crop Production; Silviculture Harvesting

<u>Tunnel Branch into Little Sandy River</u>

Greenup County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Loss of Riparian Habitat; Post-Development Erosion and

Sedimentation

UT to East Fork into East Fork Little Sandy River Greenup County

From River Mile 0.0 to 0.3 Segment Length: 0.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids; Organic

Enrichment (Sewage) Biological Indicators

Suspected Sources: Channelization; On-site Treatment Systems (Septic Systems

and Similar Decentralized Systems)

Wells Creek into Little Sandy River Elliott County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Impacts from Abandoned Mine Lands (Inactive); Managed

Pasture Grazing; Non-Irrigated Crop Production; Silviculture

Harvesting

Williams Creek into East Fork Little Sandy River Boyd County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Streambank Modifications/Destabilization; Source Unknown

# 12.4 Little Sandy River Basin Lakes

<u>Grayson Lake</u> Carter County

Acres: 1512

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Methylmercury
Suspected Sources: Source Unknown

#### 12.5 Ohio River Basin Streams

Newberry Branch into Ohio River Greenup County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Total Dissolved Solids;

Nutrient/Eutrophication Biological Indicators

Suspected Sources: Channelization; Highway/Road/Bridge Runoff

(Non-Construction Related); Non-Irrigated Crop Production

UT to Chinns Branch into Chinns Branch Greenup County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Channelization; Loss of Riparian Habitat; Post-Development

**Erosion and Sedimentation** 

#### Big Sandy-Little Sandy-Tygarts Basin Unit Tygarts Creek Basin Streams

#### 12.6 Tygarts Creek Basin Streams

Backs Branch into Tygarts Creek Greenup County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Loss of Riparian Habitat; Managed Pasture Grazing

Jacobs Fork into Tygarts Creek Carter County

From River Mile 3.6 to 5.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Dredge Mining; Dredging (e.g., for Navigation

Channels); Managed Pasture Grazing

Schultz Creek into Tygarts Creek Greenup County

From River Mile 4.7 to 10.8 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Impairment Unknown

Suspected Sources: Dredging (e.g., for Navigation Channels); Source Unknown

Smith Creek into Buffalo Creek Carter County

From River Mile 2.0 to 4.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Sedimentation/Siltation; Temperature, Water

Suspected Sources: Source Unknown; Livestock (Grazing or Feeding Operations)

Trough Camp into Tygarts Creek Carter County

From River Mile 1.5 to 6.1 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Sedimentation/Siltation

Suspected Sources: Channelization; Post-Development Erosion and Sedimentation

Tygarts Creek into Ohio River Greenup County

From River Mile 0.0 to 45.7 Segment Length: 45.7

Impaired Use(s): Primary Contact Recreation (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture; Land Disposal

See TMDLs Planned for Development During 2006.

# Big Sandy-Little Sandy-Tygarts Basin Unit Tygarts Creek Basin Streams

White Oak Creek into Tygarts Creek Greenup County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Impairment Unknown

Suspected Sources: Highways, Roads, Bridges, Infrastructure (New Construction);

Habitat Modification - Other Than Hydromodification

#### Ohio River Basin Unit Streams

#### Chapter 13. Ohio River Basin Unit 303(d) List

The Ohio River Valley Water Sanitation Commission (ORSANCO) has reassessed the Ohio River mainstem for the 2006 reporting period. Support status for the Primary Contact Recreation Use was determined based on data collected during the summer recreational season (May-Oct.) during 2003 to 2005. The Partial Support listings for the Fish Consumption Use due to Dioxin and PCBs are based on data collected from 1997 to 2004. The river miles for most segments have changed from the 2004 list to reflect the latest assessments. ORSANCO is continuing to collect data for PCB, Dioxin, and Pathogen TMDL development for the Ohio River. Additional data is required to complete the TMDLs.

Ohio River into Mississippi River Boyd County

From River Mile 317.0 to 357.0 Segment Length: 40.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Lewis County

From River Mile 357.0 to 362.0 Segment Length: 5.0 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

**Pathogens** 

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Lewis County

From River Mile 362.0 to 383.0 Segment Length: 21.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Lewis County

From River Mile 383.0 to 388.0 Segment Length: 5.0 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

**Pathogens** 

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

#### Ohio River Basin Unit Streams

Ohio River into Mississippi River

Lewis County

From River Mile 388.0 to 393.0 Segment Length: 5.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Lewis County

From River Mile 393. 0 to 397.0 Segment Length: 4.0 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Lewis County

From River Mile 397.0 to 461.0 Segment Length: 64.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Campbell County

From River Mile 461.0 to 477.0 Segment Length: 16.0

Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

**Pathogens** 

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Kenton County

From River Mile 477.0 to 484.0 Segment Length: 7.0

Impaired Use(s): Primary Contact Recreation (Partial Support), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Boone County

From River Mile 484.0 to 488.0 Segment Length: 4.0 Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Boone County

From River Mile 488.0 to 491.0 Segment Length: 3.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Boone County

From River Mile 491.0 to 501.0 Segment Length: 10.0 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Nonsupport)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Boone County

From River Mile 501.0 to 521.0 Segment Length: 20.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River Gallatin County

From River Mile 521.0 to 541.0 Segment Length: 20.0 Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Ohio River into Mississippi River Carroll County

From River Mile 541.0 to 593.0 Segment Length: 52.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Jefferson County

From River Mile 593.0 to 608.0 Segment Length: 15.0 Impaired Use(s): Primary Contact Recreation (Partial Support), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Jefferson County

From River Mile 608.0 to 621.0 Segment Length: 13.0 Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Jefferson County

From River Mile 621.0 to 629.0 Segment Length: 8.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River

Jefferson County

From River Mile 629.0 to 709.0 Segment Length: 80.0 Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

**Pathogens** 

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

<u>Ohio River into Mississippi River</u>
From River Mile 709.0 to 719.0

Impaired Use(s): Fish Consumption (Partial Support), Primary Contact Recreation

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River Hancock County

From River Mile 719.0 to 785.0 Segment Length: 66.0 Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

<u>Ohio River into Mississippi River</u>
From River Mile 785.0 to 789.0

Henderson County
Segment Length: 4.0

Impaired Use(s): Primary Contact Recreation (Partial Support ); Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River Henderson County

From River Mile 789.0 to 844.0 Segment Length: 55.0

Impaired Use(s): Primary Contact Recreation (Nonsupport), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Ohio River into Mississippi River

Union County

From River Mile 844.0 to 849.0 Segment Length: 5.0 Impaired Use(s): Primary Contact Recreation (Partial Support), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River

Union County

From River Mile 849.0 to 862.0 Segment Length: 13.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River Union County

From River Mile 862.0 to 873.0 Segment Length: 11.0 Impaired Use(s): Primary Contact Recreation (Partial Support), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

Pathogens

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Agriculture; Combined Sewer Overflows

Ohio River into Mississippi River Crittenden County

From River Mile 873.0 to 894.0 Segment Length: 21.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

Ohio River into Mississippi River Livingston County

From River Mile 894.0 to 910.0 Segment Length: 16.0 Impaired Use(s): Primary Contact Recreation (Partial Support), Fish Consumption

(Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls;

**Pathogens** 

Suspected Sources: Source Unknown; On-site Treatment Systems (Septic Systems and

Similar Decentralized Systems); Unspecified Urban Stormwater;

Ohio River into Mississippi RiverLivingston CountyFrom River Mile 910.0 to 981.0Segment Length: 71.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Dioxin (Including 2,3,7,8-TCDD); Polychlorinated Biphenyls

Suspected Sources: Source Unknown

#### Appendix A. Table of Category 5A Listings for the 5 BMUs

Category 5A is the list of impaired waterbody/pollutant combinations that require TMDLs (i.e., the 303(d) List). This Appendix contains most of the narrative information found in Chapters 8 through 12, in tabular format. Chapter 13 narrative information (from the Ohio River mainstem) can be found in Appendix B.

One difference between the narrative information and this Appendix is the Designated Uses listed here do not contain the Minimum Use Criteria; only two streams in Kentucky (Bayou Creek and Little Bayou Creek, in McCracken County) are impaired for the Minimum Use Criteria, see Chapter 10, Section 10.5 for further information.

This Appendix also lists a waterbody identifier number (Waterbody ID) and a USGS Hydrologic Unit Code 8 (HUC8) number for each impaired segment.

| Key:                        |  |                           |  |  |  |  |
|-----------------------------|--|---------------------------|--|--|--|--|
|                             | Drinking Water Source: Usually a lake or reservoir, designated as a drinking supply  |                           |  |  |  |  |
| DWS                         | for towns and cities.  |                           |  |  |  |  |
|                             |  |                           |  |  |  |  |
| IMPAIRMENTS &               |  |                           |  |  |  |  |
| SOURCES                     |  |                           |  |  |  |  |
| assess surface waters acro  | designated by the Environmental Protection oss the nation. Each impairment and source I d by the Assessment Database (ADB), an ele | has a numerical and       |  |  |  |  |
| Kentucky to report assess   |  | ectronic database used by |  |  |  |  |
|                             |  |                           |  |  |  |  |
| The Environmental Prote     | ction Agency's world wide web site has the i   | mpairment and source      |  |  |  |  |
| tables with all available e | xplanation. Refer to the web address below,  | or contact the Kentucky   |  |  |  |  |
| Division of Water for add   | litional assistance. http://www.epa.gov/water  | rs/adb/docs.htm Refer to  |  |  |  |  |
| the Section 'ADB Domain     | Value Lists', and the 'Impairments' and 'Sou   | irces' documents.         |  |  |  |  |

|                   |                     |                           |                 |         |          |           |    | Desig              | nated | Uses                  |                 |   |   |
|-------------------|---------------------|---------------------------|-----------------|---------|----------|-----------|----|--------------------|-------|-----------------------|-----------------|---|---|
|                   |                     |                           |                 |         |          | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County   | BIO       | õм | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Kentucky Riv      | er Rasin            |                           | ]               |         |          |           |    |                    |       |                       |                 |   |   |
| Arnolds Creek     | 0.0 to 10.8         | Ten Mile<br>Crk           | 486059_00       | 5100205 | Grant    | PS        |    |                    |       |                       |                 | Sediment/Siltation  | Non-Irrig Crop Prod,<br>Strmbank Mod/Destable.  |
| Bailey Run        | 0.0 to 2.9          | Cedar Brook               | 486229_01       | 5100205 | Anderson | PS        |    |                    |       |                       |                 | Sediment/Siltation,<br>TDS  | Post-Devel.<br>Erosion/Sediment.,<br>Unknown, Urban<br>Stormwater   |
| Balls Fork        | 8.3 to 11.3         | Troublesome<br>Crk        | 486305_00       | 5100201 | Knott    | NS        |    |                    |       |                       |                 | Sediment/Siltation, TDS   | Pasture Grazing, Non-Irrig<br>Crop Prod, Post-Devel.<br>Erosion/Sediment., Surface<br>Mining                      |
| Bantas Fork       | 0.0 to 6.2          | Salt River<br>Sixmile Crk | 486321_00       | 5100205 | Henry    | PS        |    |                    |       |                       |                 | Sediment/Siltation  | Agriculture, Habitat Mod-<br>not Hydro  |
| Baughman<br>Fork  | 0.0 to 2.7          | Boone Creek               | 486478_01       | 5100205 | Fayette  | NS        |    |                    |       |                       |                 | Nutrient/Eutroph.<br>Bio. Indicators,<br>Org. Enrichment<br>(Sewage) Bio. | Pasture Grazing, Package<br>Plants/Other Permitted<br>Small Dischrge  |
| Beals Run         | 0.0 to 1.9          | South<br>Elkhorn Crk      | 486507_01       | 5100205 | Woodford | NS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                            | Hwys/Rd/Brdgs Infrastructure (New Construction), Land Clearance (Devel./Redevelop.), Livestock-Grazing/Feed. Op's |
| Benson Creek      | 0.0 to 4.6          | Kentucky<br>River         | 486877_01       | 5100205 | Franklin | PS        |    |                    |       |                       |                 | Sediment/Siltation  | Agriculture, Habitat Mod-<br>not Hydro  |

|                         |                           |                                 |                        |                    |                   |           |              | Desig             | nated | Uses                  |                 |   |  |
|-------------------------|---------------------------|---------------------------------|------------------------|--------------------|-------------------|-----------|--------------|-------------------|-------|-----------------------|-----------------|---|--|
|                         |                           |                                 |                        |                    |                   | Aqu<br>Li | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name       | Impaired<br>Segment       | Receiving<br>Waterbody          | Waterbody<br>ID        | HUC 8              | County            | BIO       | WQ           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                                 | Sources  |
| Benson Creek            | 4.6 to 6.7                | Kentucky<br>River               | 486877_02              | 5100205            | Franklin          | PS        |              |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.    | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Septic<br>Tanks/Decentral. Systems<br>Agriculture, Habitat Mod-<br>not Hydro           |
| Benson Creek            | 6.7 to 13.4               | Kentucky<br>River               | 486877_03              | 5100205            | Franklin          | NS        |              |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.    | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Agriculture,<br>Habitat Mod-not Hydro  |
| Big Caney<br>Creek      | 0.3 to 8.0                | Quicksand<br>Crk                | 487150_00              | 5100201            | Breathitt         | PS        |              |                   |       |                       |                 | Sediment/Siltation,<br>TDS, Turbidity       | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable.,<br>Sub/Surface Mining |
| Big Twin<br>Creek       | 0.0 to 3.8                | Kentucky<br>River               | 487286_00              | 5100205            | Owen              | PS        |              |                   |       |                       |                 | Sediment/Siltation                          | Agriculture, Habitat Mod-<br>not Hydro  Aband. Mine Land Impacts, Riparian Habitat Loss, Silviculture,                     |
| Big Willard<br>Creek    | 0.0 to 4.5                | North Fork<br>Kentucky<br>River | 510708_00              | 5100201            | Perry             | NS        |              |                   |       |                       |                 | Sediment/Siltation,<br>TDS, Turbidity       | Strmbank Mods,<br>Subsurface Mining,<br>Surface Mining   |
| Boltz Lake              | 92 acres                  | N/A                             | 487668_01              | 5100205            | Grant             |           | PS           |                   |       |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph. | Agriculture, Urban<br>Stormwater   |
| Boone Creek             | 7.4 to 12.6               | Kentucky<br>River               | 487688_02              | 5100205            | Fayette           | DC.       | PS           | NS                |       |                       |                 | Pathogens, Nutrient/Eutroph.                | Livestock-Grazing/Feed. Op's   |
| Boone Creek Brush Creek | 7.4 to 12.6<br>0.0 to 6.6 | River<br>Red River              | 487688_02<br>510969_00 | 5100205<br>5100204 | Fayette<br>Powell | PS        | PS           | NS                |       |                       |                 | Nutrient/Eutroph. Unknown                   | Op's<br>Unknown  |

|                     |                     |                        |                 |         |           |     |              | Desig             | gnated | Uses                  |                 |  |   |
|---------------------|---------------------|------------------------|-----------------|---------|-----------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|---|
|                     |                     |                        |                 |         |           | -   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO | Ом           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Buckhorn<br>Creek   | 0.0 to 2.4          | Troublesome<br>Crk     | 488268_01       | 5100201 | Breathitt | NS  | NS           | NS                |        |                       |                 | Sediment/Siltation,<br>TDS, Pathogens,<br>Turbidity    | Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable., Unknown,<br>Coal Mining            |
| Buckhorn<br>Creek   | 2.4 to 6.8          | Troublesome<br>Crk     | 488268_02       | 5100201 | Breathitt | PS  |              |                   |        |                       |                 | Sediment/Siltation, TDS                                | Impacts fr. Aband. Mine<br>Lands  |
| Bull Creek          | 0.0 to 2.0          | Collins Fork           | 511048_00       | 5100203 | Knox      | PS  |              |                   |        |                       |                 | Sediment/Siltation                                     | Non-Irrig Crop Prod   |
| Bullock Pen<br>Lake | 134 acres           | N/A                    | 488380_01       | 5100205 | Grant     |     | PS           |                   |        |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph.            | Septic Tanks/Decentral. Systems Agriculture   |
| Cane Creek          | 0.0 to 3.1          | Red River              | 511187_00       | 5100204 | Powell    |     |              | NS                |        |                       |                 | Pathogens  | Livestock-Grazing/Feed. Op's  |
| Cane Run            | 0.0 to 3.0          | North<br>Elkhorn Crk   | 488799_01       | 5100205 | Scott     | NS  |              |                   |        |                       |                 | Sediment/Siltation                                     | Pasture Grazing, Non-Irrig<br>Crop Prod   |
| Cane Run            | 3.0 to 9.6          | North<br>Elkhorn Crk   | 488799_02       | 5100205 | Scott     | PS  | PS           | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph. | Hwys/Rd/Brdgs, Landfills,<br>Package Plant/Other Small<br>Dischrge., Livestock-<br>Grazing/Feed. Op's |
| Cane Run            | 9.6 to 17.4         | North<br>Elkhorn Crk   | 488799_03       | 5100205 | Fayette   | NS  | NS           | NS                |        |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                  | Livestock-Grazing/Feed. Op's, Urban Stormwater  |
| Canev Creek         | 0.0 to 1.5          | Eagle Crk              | 488843_01       | 5100205 | Owen      | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)         | Channelization, Riparian<br>Habitat Loss, Pasture<br>Grazing  |

|                         |                     |                                 |                 |         |         |          |              | Desig | gnated              | Uses                  |                 |  |   |
|-------------------------|---------------------|---------------------------------|-----------------|---------|---------|----------|--------------|-------|---------------------|-----------------------|-----------------|--|---|
|                         |                     |                                 |                 |         |         | Aqı<br>L | ıatic<br>ife | Rec   | ntact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County  | BIO      | WQ           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Carr Creek<br>Reservoir | 710 acres           | N/A                             | 488975_00       | 5100201 | Knott   |          | PS           |       | PS                  |                       |                 | Oxygen - Diss,<br>Sediment/Silt,<br>TSS, Nutrient/<br>Eutroph,<br>Org.Enrich<br>(Sewage) | Surface Mining, Unknown   |
| Carr Fork               | 15.6 to 26.4        | North Fork<br>Kentucky<br>River | 511230 03       | 5100201 | Knott   |          |              | NS    | NS                  |                       |                 | Pathogens  | Unknown   |
| Cat Creek               | 0.0 to 8.0          | Red River                       | 511245_01       | 5100204 | Powell  | PS       |              |       |                     |                       |                 | Sediment/Siltation   | Riparian Habitat Loss   |
| Cedar Creek             | 0.0 to 9.4          | Kentucky<br>River               | 489184_01       | 5100205 | Owen    | PS       | PS           |       |                     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.   | Grazing-Riparian Zones,<br>Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Pasture<br>Grazing, Silviculture |
| Cedar Creek<br>Lake     | 784 acres           | N/A                             | CLN211_00       | 5100205 | Lincoln |          |              |       |                     | PS                    |                 | Methyl mercury   | Unknown   |
| Chambers<br>Fork        | 0.7 to 1.1          | Baptist Fork                    | 489323_01       | 5100204 | Wolfe   | PS       |              |       |                     |                       |                 | Sediment/Siltation   | Riparian Habitat Loss,<br>Pasture Grazing   |
| Clarks Run              | 0.0 to 4.3          | Dix River                       | 489554_01       | 5100205 | Boyle   | PS       |              |       |                     |                       |                 | Org.Enrich.<br>(Sewage)<br>Org.Enrich.<br>(Sewage),                                      | Municipal Pt. Source Dischrge, Urban Runoff/Storm Sewers Municipal Pt. Source Dischrge, Urban                             |
| Clarks Run              | 4.3 to 6.6          | Dix River                       | 489554_02       | 5100205 | Boyle   | NS       |              |       |                     |                       |                 | Unknown  | Stormwater  |
| Clarks Run              | 8.1 to 13.5         | Dix River                       | 489554_03       | 5100205 | Boyle   | PS       |              |       |                     |                       |                 | Sediment/Siltation   | Strmbank Mod/Destable.  |
| Collins Fork            | 2.4 to 6.3          | Goose Crk                       | 511474_00       | 5100203 | Clay    | PS       |              |       |                     |                       |                 | Sediment/Siltation   | Habitat Mod-not Hydro   |

|                   |                     |                                  |                 |         |            |          |              | Desig             | gnated | Uses                  |                 |  |  |
|-------------------|---------------------|----------------------------------|-----------------|---------|------------|----------|--------------|-------------------|--------|-----------------------|-----------------|--|--|
|                   |                     |                                  |                 |         |            | Aqı<br>L | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County     | BIO      | WQ           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Cope Fork         | 0.0 to 1.9          | Frozen Crk                       | 490072_00       | 5100201 | Breathitt  | PS       |              |                   |        |                       |                 | Sediment/Siltation, TDS                              | Channelization, Riparian<br>Habitat Loss, Pasture<br>Grazing, Non-Irrig Crop<br>Prod, Strmbank<br>Mod/Destable., Surface<br>Mining, Silviculture |
| Copper Creek      | 2.2 to 5.0          | Dix River                        | 511529_01       | 5100205 | Rockcastle | PS       |              |                   |        |                       |                 | Sediment/Siltation                                   | Riparian Habitat Loss,<br>Pasture Grazing  |
| Crane Creek       | 0.0 to 5.4          | South Fork<br>Kentucky<br>River  | 511620_01       | 5100203 | Clay       | PS       |              |                   |        |                       |                 | Sediment/Siltation                                   | Channelization, Riparian<br>Habitat Loss, Post-Devel.<br>Erosion/Sediment.   |
| Crystal Creek     | 0.0 to 2.3          | Kentucky<br>River                | 511669_01       | 5100201 | Lee        | PS       |              |                   |        |                       |                 | Org.Enrich.<br>(Sewage)                              | Landfills  |
| Cutshin Creek     | 9.7 to 10.7         | Middle Fork<br>Kentucky<br>River | 511693_01       | 5100202 | Leslie     | PS       |              |                   |        |                       |                 | Sediment/Siltation                                   | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Surface Mining  |
| Defeated<br>Creek | 0.4 to 1.6          | Carr Creek<br>Reservoir          | 490786_01       | 5100201 | Knott      |          |              | NS                | NS     |                       |                 | Pathogens  | Unknown  |
| Dix River         | 33.3 to<br>36.1     | Kentucky<br>River                | 517054_02       | 5100205 | Garrard    |          |              | PS                |        |                       |                 | Pathogens  | Pasture Grazing, Unknown   |
| Dry Run           | 0.0 to 3.1          | North<br>Elkhorn Crk             | 491240_00       | 5100205 | Scott      | PS       |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Unknown | Pasture Grazing, Unknown   |
| Eagle Creek       | 15.3 to<br>28.5     | Kentucky<br>River                | 491407_01       | 5100205 | Owen       |          |              | NS                |        |                       |                 | Pathogens  | Unknown  |

|                          |                     |                                 |                 |         |           |           |              | Desig              | nated | Uses                  |                 |   |   |
|--------------------------|---------------------|---------------------------------|-----------------|---------|-----------|-----------|--------------|--------------------|-------|-----------------------|-----------------|---|---|
|                          |                     |                                 |                 |         |           | Aqu<br>Li | ıatic<br>ife | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO       | Ом           | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments                                 | Sources   |
| Eagle Creek              | 31.6 to 36.5        | Kentucky<br>River               | 491407_02       | 5100205 | Grant     | NS        |              |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.    | Pasture Grazing, Crop Prod  |
| Eagle Creek              | 50.8 to 58.5        | Kentucky<br>River               | 491407_03       | 5100205 | Grant     | PS        | PS           |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.    | Livestock-Grazing/Feed.<br>Op's, Crop Prod                                |
| East Fork Otter<br>Creek | 0.0 to 2.7          | Kentucky<br>River               | 491474_00       | 5100205 | Madison   | PS        |              |                    |       |                       |                 | Nutrient/Eutroph.                           | Pasture Grazing, Crop Prod  |
| East Hickman<br>Creek    | 4.2 to 10.2         | Hickman<br>Crk                  | 491487_01       | 5100205 | Fayette   | PS        | PS           | NS                 |       |                       |                 | Pathogens,<br>Nutrient/Eutroph.             | Livestock-Grazing/Feed.<br>Op's, Urban Stormwater                         |
| East Hickman<br>Creek    | 12.6 to<br>14.0     | Hickman<br>Crk                  | 491487_02       | 5100205 | Fayette   |           |              | NS                 |       |                       |                 | Pathogens                                   | Urban Stormwater  |
| Elk Creek                | 0.0 to 1.6          | Eagle Crk                       | 491658_00       | 5100205 | Owen      | PS        |              |                    |       |                       |                 | Unknown                                     | Riparian Habitat Loss,<br>Unknown   |
| Elkhorn Creek            | 0.0 to 18.2         | Kentucky<br>River               | 491690_01       | 5100205 | Franklin  |           |              | PS                 |       | PS                    |                 | Mercury,<br>Pathogens                       | Unknown, Agriculture  |
| Elmer Davis<br>Lake      | 149 acres           | N/A                             | CLN035_01       | 5100205 | Owen      |           | PS           |                    |       |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph. | Agriculture   |
| Flat Creek               | 0.0 to 7.1          | Kentucky<br>River               | 492179_00       | 5100205 | Franklin  | PS        |              |                    |       |                       |                 | Sediment/Siltation                          | Agriculture, Habitat Mod-<br>not Hydro                                    |
| Frozen Creek             | 0.0 to 13.9         | North Fork<br>Kentucky<br>River | 492582_01       | 5100201 | Breathitt | PS        |              |                    |       |                       |                 | Sediment/Siltation                          | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment.                |
| Goose Creek              | 0.0 to 1.8          | Benson Crk                      | 493013_01       | 5100205 | Shelby    | PS        |              |                    |       |                       |                 | Sediment/Siltation,<br>Unknown              | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Agriculture,<br>Habitat Mod-not Hydro |

|                    |                     |                                 |                 |         |           |           |              | Desig              | nated | Uses                  |                 |                                       |   |
|--------------------|---------------------|---------------------------------|-----------------|---------|-----------|-----------|--------------|--------------------|-------|-----------------------|-----------------|---------------------------------------|---|
|                    |                     |                                 |                 |         |           | Aqu<br>Li | ıatic<br>ife | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                       |   |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO       | WQ           | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments                           | Sources   |
| Goose Creek        | 1.9 to 4.2          | Benson Crk                      | 493013_02       | 5100205 | Shelby    | PS        |              |                    |       |                       |                 | Unknown                               | Grazing-Riparian Zones,<br>Pasture Grazing,<br>Livestock-Grazing/Feed.<br>Op's, Agriculture                                   |
| Goose Creek        | 0.0 to 8.3          | South Fork<br>Kentucky<br>River | 512349_01       | 5100203 | Clay      |           |              | PS                 |       |                       |                 | Pathogens                             | Land Disposal (Onsite<br>Wastewater Systems-<br>Septic Tanks and/or<br>Straight Pipes)  |
| Grapevine<br>Creek | 0.0 to 1.1          | North Fork<br>Kentucky<br>River | 512371_00       | 5100201 | Perry     | NS        |              |                    |       |                       |                 | Sediment/Siltation,<br>TDS, Turbidity | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining |
| Hanging Fork       | 0.0 to 15.0         | Dix River                       | 493684_01       | 5100205 | Lincoln   |           |              | NS                 |       |                       |                 | Pathogens                             | Livestock-Grazing/Feed.<br>Op's   |
| Hardwick<br>Creek  | 0.0 to 3.2          | Red River                       | 512561_00       | 5100204 | Powell    |           |              | NS                 |       |                       |                 | Pathogens                             | Septic Tanks/Decentral.<br>Systems Livestock-<br>Grazing/Feed. Op's   |
| Hatton Creek       | 0.0 to 4.2          | Red River                       | 512588_00       | 5100204 | Powell    | PS        |              |                    |       |                       |                 | Unknown                               | Unknown Impacts fr. Aband. Mine   |
| Hawes Fork         | 0.0 to 4.4          | Quicksand<br>Crk                | 493879_00       | 5100201 | Breathitt | NS        |              |                    |       |                       |                 | Sediment/Siltation,<br>TDS, Turbidity | Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining                         |

|                    |                     |                                 |                 |         |           |          |              | Desig             | nated | Uses                  |                 |  |  |
|--------------------|---------------------|---------------------------------|-----------------|---------|-----------|----------|--------------|-------------------|-------|-----------------------|-----------------|--|--|
|                    |                     |                                 |                 |         |           | Aqu<br>L | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO      | $\tilde{O}M$ | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Hell Creek         | 0.0 to 3.5          | North Fork<br>Kentucky<br>River | 512636_00       | 5100201 | Lee       | PS       |              |                   |       |                       |                 | TDS  | Impacts fr. Aband. Mine<br>Lands, Silviculture,<br>Petroleum / Natr'l Gas<br>Prod, Surface Mining                |
| Herrington<br>Lake | 2940 acres          | N/A                             | 494090_01       | 5100205 | Garrard   |          | NS           |                   |       | PS                    |                 | Methyl mercury,<br>Oxygen -<br>Dissolved,<br>Nutrient/Eutroph. | Internal Nutrient Recycling, Municipal Pt. Source Dischrge, Septic Tanks/Decentral. Systems Unknown, Agriculture |
| Hickman<br>Creek   | 0.0 to 6.0          | Kentucky<br>River               | 494112_01       | 5100205 | Jessamine | PS       |              |                   |       |                       |                 | Nutrient/Eutroph.  | Municipal Pt. Source<br>Dischrge, Livestock-<br>Grazing/Feed. Op's   |
| Hickman<br>Creek   | 6.0 to 25.5         | Kentucky<br>River               | 494112_02       | 5100205 | Jessamine | PS       |              |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                       | Municipal Pt. Source<br>Dischrge, Non-Irrig Crop<br>Prod, Livestock-<br>Grazing/Feed. Op's                       |
| Holly Creek        | 0.0 to 6.2          | North Fork<br>Kentucky<br>River | 494406_01       | 5100201 | Wolfe     | PS       |              |                   |       |                       |                 | Sediment/Siltation   | Heap-leach Ext Mining,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Agriculture                       |
| Horse Creek        | 0.0 to 8.3          | Goose Crk                       | 512793_01       | 5100203 | Clay      | PS       |              |                   |       |                       |                 | Sediment/Siltation   | Riparian Habitat Loss,<br>Pasture Grazing, Surface<br>Mining   |

|                   |                     |                        |                 |         |           |           |             | Desi | gnated              | Uses                  |                 |   |  |
|-------------------|---------------------|------------------------|-----------------|---------|-----------|-----------|-------------|------|---------------------|-----------------------|-----------------|---|--|
|                   |                     |                        |                 |         |           | Aqu<br>Li | atic<br>ife | Rec  | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO       | ōм          | PCR  | SCR                 | Fish<br>Tissue        | DWS             | Impairments                                 | Sources  |
| Hunting Creek     | 0.0 to 2.6          | Quicksand<br>Crk       | 494791_00       | 5100201 | Breathitt | NS        |             |      |                     |                       |                 | Sediment/Siltation,<br>Turbidity            | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable.,<br>Subsurface Mining,<br>Surface Mining |
| Indian Creek      | 2.6 to 7.8          | Red River              | 512905_01       | 5100204 | Menifee   | PS        |             |      |                     |                       |                 | Sediment/Siltation,<br>TDS                  | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Surface<br>Mining  |
| Johnson Fork      | 0.0 to 0.5          | Lacey Crk              | 495407_01       | 5100204 | Wolfe     | PS        |             |      |                     |                       |                 | Sediment/Siltation,<br>TDS                  | Riparian Habitat Loss,<br>Pasture Grazing,<br>Petroleum/ Natr'l Gas Prod,<br>Residential Districts   |
| Judy Creek        | 0.0 to 1.5          | Red River              | 513089_01       | 5100204 | Powell    | NS        |             |      |                     |                       |                 | Unknown                                     | Unknown  |
| Kentucky<br>River | 0.3 to 11.5         | Ohio River             | 513130_01       | 5100205 | Owen      |           |             |      |                     | NS                    |                 | Methyl mercury                              | Atmospheric Depositions-<br>Toxics, Unknown  |
| Kentucky<br>River | 53.5 to<br>118.2    | Ohio River             | 513130_03       | 5100205 | Franklin  |           |             |      |                     | NS                    |                 | Methyl mercury                              | Unknown  |
| Kentucky<br>River | 154.0 to<br>210.0   | Ohio River             | 513130_08       | 5100205 | Jessamine |           |             | PS   |                     | PS                    |                 | Methyl mercury,<br>Pathogens                | Unknown, Agriculture   |
| Lacy Creek        | 0.0 to 7.3          | Red River              | 495895_01       | 5100204 | Wolfe     | PS        |             |      |                     |                       |                 | Sediment/Siltation                          | Channelization, Heap-<br>leach Ext Mining, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Agriculture                                  |
| Lake Reba         | 78 acres            | N/A                    | 501636_01       | 5100205 | Madison   |           | NS          |      |                     |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph. | Golf Courses, Urban<br>Stormwater  |
| Laurel Creek      | 3.8 to 4.8          | Goose Crk              | 513241_00       | 5100203 | Clay      | PS        |             |      |                     |                       |                 | Nutrient/Eutroph.                           | Pasture Grazing, Non-Irrig<br>Crop Prod  |

|                                 |                     |                                 |                 |         |           |          |             | Desig             | gnated | Uses                  |                 |                                |   |
|---------------------------------|---------------------|---------------------------------|-----------------|---------|-----------|----------|-------------|-------------------|--------|-----------------------|-----------------|--------------------------------|---|
|                                 |                     |                                 |                 |         |           | Aqu<br>L | atic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |                                |   |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO      | М           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                    | Sources   |
| Left Fork<br>Island Creek       | 0.0 to 5.0          | Island Crk                      | 513314_00       | 5100203 | Owsley    | PS       |             |                   |        |                       |                 | Sediment/Siltation             | Non-Irrig Crop Prod, Intro.<br>Non-Native Organisms<br>(Accident/Intent.)   |
| Left Fork<br>Millstone<br>Creek | 1.6 to 2.9          | Millstone<br>Crk                | 496243_01       | 5100201 | Letcher   | NS       |             | NS                | NS     |                       |                 | Sediment/Siltation,<br>TDS, pH | Surface Mining  |
| Lick Creek                      | 0.0 to 5.4          | Eagle Crk                       | 496473_01       | 5100205 | Carroll   | PS       |             |                   |        |                       |                 | Sediment/Siltation,<br>TDS     | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Post-Devel.<br>Erosion/Sediment., Urban<br>Stormwater                       |
| Line Fork                       | 9.1 to 11.6         | Defeated<br>Crk                 | 513437_01       | 5100201 | Letcher   | PS       |             |                   |        |                       |                 | Sediment/Siltation             | Surface Mining  |
| Line Fork                       | 11.6 to 27.5        | Defeated<br>Crk                 | 513437_02       | 5100201 | Letcher   |          |             | PS                |        |                       |                 | Pathogens                      | Septic Tanks/Decentral.<br>Systems Sewage<br>Dischrge./Unsewered<br>Areas   |
| Little Willard<br>Creek         | 0.0 to 2.5          | North Fork<br>Kentucky<br>River | 513541_01       | 5100201 | Perry     | NS       |             |                   |        |                       |                 | Sediment/Siltation,<br>TDS     | Channelization, Riparian<br>Habitat Loss, Post-Devel<br>Erosion/ Sediment., Land<br>Clearance, Strmbank<br>Mod/Destab., Surface<br>Mining |
| Long Fork                       | 0.0 to 4.6          | Buckhorn<br>Crk                 | 497111_01       | 5100201 | Breathitt | PS       |             |                   |        |                       |                 | Sediment/Siltation,<br>TDS     | Surface Mining  |
| Lost Creek                      | 0.0 to 3.7          | Troublesome<br>Crk              | 497178_01       | 5100201 | Breathitt |          |             | NS                |        |                       |                 | Pathogens                      | Unknown   |

|                        |                     |                                 |                 |         |           |          |              | Desig              | gnated | Uses                  |                 |   |   |
|------------------------|---------------------|---------------------------------|-----------------|---------|-----------|----------|--------------|--------------------|--------|-----------------------|-----------------|---|---|
|                        |                     |                                 |                 |         |           | Aqı<br>L | ıatic<br>ife | Con<br>Reci<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO      | $\tilde{Q}W$ | PCR                | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Lost Creek             | 3.7 to 9.0          | Troublesome<br>Crk              | 497178_02       | 5100201 | Breathitt | NS       |              |                    |        |                       |                 | Sediment/Siltation,<br>TDS, Turbidity                     | Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable, Coal<br>Mining  |
| Lotts Creek            | 0.4 to 1.0          | North Fork<br>Kentucky<br>River | 497201_01       | 5100201 | Knott     | PS       |              |                    |        |                       |                 | Sediment/Siltation  | Riparian Habitat Loss,<br>Land Clearance<br>(Devel./Redevelop.)                   |
| Lotts Creek            | 1.2 to 6.0          | Youngs Fork                     | 497201_02       | 5100201 | Perry     | NS       |              |                    |        |                       |                 | Sediment/Siltation,<br>TDS, Turbidity                     | Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable., Coal<br>Mining |
| Lower Buffalo<br>Creek | 0.0 to 2.4          | South Fork<br>Kentucky<br>River | 513677_00       | 5100203 | Owsley    | PS       |              |                    |        |                       |                 | Sediment/Siltation  | Riparian Habitat Loss   |
| Lower Howard<br>Creek  | 2.7 to 6.2          | Kentucky<br>River               | 497285_00       | 5100205 | Clark     | NS       |              |                    |        |                       |                 | Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage),<br>Unknown | Upstream Impound.,<br>Unknown, Livestock-<br>Grazing/Feed. Op's                   |
| Lulbegrud<br>Creek     | 0.0 to 7.3          | Red River                       | 497344_01       | 5100204 | Clark     | PS       |              |                    |        |                       |                 | Sediment/Siltation  | Unknown   |
| Marble Creek           | 0.1 to 3.9          | Kentucky<br>River               | 497527_01       | 5100205 | Jessamine | PS       |              |                    |        |                       |                 | Sediment/Siltation  | Strmbank Mod/Destable.  |
| McConnell<br>Run       | 0.0 to 4.4          | North Fork<br>Elkhorn Crk       | 497799_00       | 5100205 | Scott     | PS       |              |                    |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                  | Pasture Grazing   |
| Meadow Creek           | 0.5 to 3.7          | South Fork<br>Kentucky<br>River | 513890_01       | 5100203 | Owsley    | PS       |              |                    |        |                       |                 | Sediment/Siltation  | Riparian Habitat Loss,<br>Pasture Grazing, Non-Irrig<br>Crop Prod                 |

|                                   |                     |                                  |                 |         |          |          |              | Desig | gnated              | Uses                  |                 |  |  |
|-----------------------------------|---------------------|----------------------------------|-----------------|---------|----------|----------|--------------|-------|---------------------|-----------------------|-----------------|--|--|
|                                   |                     |                                  |                 |         |          | Aqı<br>L | ıatic<br>ife | Rec   | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                 | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County   | BIO      | Ом           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                                    | Sources  |
| Middle Fork<br>Kentucky<br>River  | 67.0 to 73.4        | Kentucky<br>River                | 513931_04       | 5100202 | Leslie   | PS       | PS           | PS    |                     |                       |                 | Sediment/Siltation,<br>TDS, Pathogens          | Riparian Habitat Loss,<br>Non-Irrig Crop Prod,<br>Petroleum/ Natr'l Gas,<br>Range. Grazing, Surface<br>Mining, Inactive Mining |
| Middle Fork,<br>Kentucky<br>River | 61.5 to 64.2        | Kentucky<br>River                | 513931_03       | 5100202 | Leslie   |          |              | NS    | NS                  |                       |                 | Pathogens                                      | Unknown  |
| Mill Creek                        | 0.0 to 3.3          | Rockhouse<br>Creek               | 498258_01       | 5100201 | Letcher  | NS       |              |       |                     |                       |                 | Sediment/Siltation,                            | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Petroleum/<br>Natr'l Gas Prod, Surface<br>Mining                 |
| Mocks Branch                      | 1.6 to 5.7          | Dix River                        | 498468_01       | 5100205 | Boyle    | PS       |              |       |                     |                       |                 | Sediment/Siltation                             | Riparian Habitat Loss,<br>Strmbank Mod/Destable.   |
| Muddy Creek                       | 0.0 to 20.2         | Kentucky<br>River                | 514141_01       | 5100205 | Madison  |          |              | NS    |                     |                       |                 | Pathogens                                      | Livestock-Grazing/Feed.<br>Op's  |
| Muncy Creek                       | 2.7 to 4.7          | Middle Fork<br>Kentucky<br>River | 514159_01       | 5100202 | Leslie   | NS       |              |       |                     |                       |                 | Sediment/Siltation                             | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment.   |
| Noland Creek                      | 0.1 to 1.2          | Kentucky<br>River                | 499508_01       | 5100204 | Estill   | PS       |              |       |                     |                       |                 | Sediment/Siltation                             | Crop Prod  |
| North Benson<br>Creek             | 0.8 to 2.0          | Benson Crk                       | 499533_00       | 5100205 | Franklin | PS       |              |       |                     |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage) | Hwy/Rd/Brdg Runoff<br>(Non-Constr),<br>Hwys/Rd/Brdgs<br>Infrastructure (New<br>Construction), Agriculture                      |

|                                     |                     |                        |                 |         |           | Designated Uses |              |                   |     |                       |                 |  |  |
|-------------------------------------|---------------------|------------------------|-----------------|---------|-----------|-----------------|--------------|-------------------|-----|-----------------------|-----------------|--|--|
|                                     |                     |                        |                 |         |           | Aqu<br>L        | ıatic<br>ife | Con<br>Rec<br>tio |     | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                   | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO             | Ом           | PCR               | SCR | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| North Elkhorn<br>Creek              | 66.0 to 73.8        | Elkhorn Crk            | 499540_03       | 5100205 | Fayette   | PS              |              | NS                |     |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Hwy/Rd/Brdg Runoff,<br>Municipal Pt. Source<br>Dischrge, Land Clearance<br>Unknown, Agriculture,<br>Habitat Mod-not Hydro,<br>Urban Runoff/Storm<br>Sewers |
| North Fork<br>Kentucky<br>River     | 145.5 to<br>147.9   | Kentucky<br>River      | 514290_07       | 5100201 | Letcher   | NS              |              |                   |     |                       |                 | Sediment/Siltation   | Non-Irrig Crop Prod, Crop<br>Prod , Habitat Mod-not<br>Hydro, Urban<br>Runoff/Storm Sewers   |
| North Fork<br>Kentucky<br>River     | 147.9 to 162.0      | Kentucky<br>River      | 514290_08       | 5100201 | Letcher   | NS              |              |                   |     |                       |                 | Sediment/Siltation   | Grazing-Riparian Zones,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod,<br>Silviculture, Urban<br>Runoff/Storm Sewers                                       |
| North Fork<br>North Benson<br>Creek | 0.0 to 2.2          | North<br>Benson Crk    | 499560_00       | 5100205 | Franklin  | PS              |              |                   |     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.   | Riparian Habitat Loss, Post-Devel. Erosion/Sediment., Agriculture  |
| Otter Creek                         | 0.0 to 4.1          | Kentucky<br>River      | 500025_01       | 5100205 | Madison   | PS              | PS           |                   |     |                       |                 | Nutrient/Eutroph,<br>Organic Enrich.   | Livestock-Grazing/Feed<br>Op's, Mun. Pt Source<br>Dischrge, Crop Prod  |
| Paint Lick<br>Creek                 | 0.0 to 7.5          | Kentucky<br>River      | 500121_01       | 5100205 | Garrard   |                 |              | PS                |     |                       |                 | Pathogens  | Livestock-Grazing/Feed. Op's   |
| Panbowl Lake                        | 98 acres            | N/A                    | 500145_01       | 5100201 | Breathitt |                 | NS           | ~                 |     |                       |                 | Oxygen -<br>Dissolved,<br>Org.Enrich.<br>(Sewage)                                  | Internal Nutrient<br>Recycling, Septage<br>Disposal  |

|                        |                     |                                  |                 |         |           |          |              | Desig              | nated | Uses                  |                 |                                       |  |
|------------------------|---------------------|----------------------------------|-----------------|---------|-----------|----------|--------------|--------------------|-------|-----------------------|-----------------|---------------------------------------|--|
|                        |                     |                                  |                 |         |           | Aqu<br>L | ıatic<br>ife | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                       |  |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County    | BIO      | МQ           | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments                           | Sources  |
| Plum Branch            | 0.0 to 3.9          | Red River                        | 514662_01       | 5100204 | Powell    | PS       |              |                    |       |                       |                 | Sediment/Siltation                    | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Agriculture   |
| Polls Creek            | 0.0 to 4.7          | Cutshin Crk                      | 514679_00       | 5100202 | Leslie    | PS       |              |                    |       |                       |                 | Unknown                               | Unknown  |
| Potter Fork            | 0.0 to 4.4          | Boone Fork                       | 501199_00       | 5100201 | Letcher   | NS       |              |                    |       |                       |                 | Org.Enrich.<br>(Sewage)               | Septic Tanks/Decentral.<br>Sys)  |
| Puncheon<br>Camp Creek | 0.0 to 3.2          | Middle Fork<br>Kentucky<br>River | 501441_00       | 5100202 | Breathitt | PS       |              |                    |       |                       |                 | Unknown                               | Unknown  |
| Quicksand<br>Creek     | 0.0 to 17.0         | North Fork<br>Kentucky<br>River  | 501481_01       | 5100201 | Breathitt | PS       | PS           | PS                 |       |                       |                 | Pathogens,<br>Turbidity,<br>Unknown   | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable.,<br>Unknown, Coal Mining                   |
| Quicksand<br>Creek     | 21.7 to 30.8        | North Fork<br>Kentucky<br>River  | 501481_02       | 5100201 | Breathitt | NS       |              |                    |       |                       |                 | Sediment/Siltation,<br>TDS, Turbidity | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Strmbank Mod/Destable., Surface Mining, Habitat Mod-not Hydro, Coal Mining, Silviculture |
| Rattlesnake<br>Creek   | 0.0 to 1.2          | Eagle Crk                        | 501593_01       | 5100205 | Grant     | NS       |              |                    |       |                       |                 | Unknown                               | Unknown, Natr'l<br>Conditions-Water Quality<br>Standards Use Attainability<br>Analyses Needed  |

|                                  |                     |                                    |                 |         |         |          |                 | Desig | gnated              | Uses                  |                 |                            |  |
|----------------------------------|---------------------|------------------------------------|-----------------|---------|---------|----------|-----------------|-------|---------------------|-----------------------|-----------------|----------------------------|--|
|                                  |                     |                                    |                 |         |         | Aqu<br>L | ıatic<br>ife    |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |                            |  |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody             | Waterbody<br>ID | HUC 8   | County  | BIO      | $\overline{O}M$ | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                | Sources  |
| Red Bird River                   | 0.0 to 15.0         | South Fork<br>of Kentucky<br>River | 514862_01       | 5100203 | Clay    |          |                 | PS    |                     |                       |                 | Pathogens                  | Land Disposal (Onsite<br>Wastewater Systems-<br>Septic tanks and/or<br>Straight Pipes) |
| Red Lick<br>Creek                | 0.0 to 8.4          | Station<br>Camp Crk                | 510193_01       | 5100204 | Madison | PS       | PS              | PS    |                     |                       |                 | Pathogens                  | Land Clearance<br>(Devel./Redevelop.),<br>Unknown                                      |
| Red River                        | 64.1 to 67.6        | Kentucky<br>River                  | 514872_04       | 5100204 | Wolfe   | PS       |                 |       |                     |                       |                 | Sediment/Siltation         | Riparian Habitat Loss,<br>Pasture Grazing  |
| Red River                        | 70.0 to 83.9        | Kentucky<br>River                  | 514872_05       | 5100204 | Wolfe   | PS       |                 |       |                     |                       |                 | Sediment/Siltation         | Riparian Habitat Loss,<br>Pasture Grazing, Crop Prod                                   |
| Red River                        | 89.5 to<br>93.4     | Kentucky<br>River                  | 514872_06       | 5100204 | Wolfe   | PS       |                 |       |                     |                       |                 | Sediment/Siltation         | Crop Prod  |
| Richland<br>Creek                | 0.0 to 0.8          | Eagle Crk                          | 501823_00       | 5100205 | Owen    | PS       |                 |       |                     |                       |                 | Sediment/Siltation         | Specialty Crop Prod  |
| Right Fork<br>Buffalo Creek      | 0.0 to 2.1          | Buffalo Crk                        | 514933_01       | 5100203 | Owsley  | PS       |                 |       |                     |                       |                 | Unknown                    | Unknown  |
| Right Fork<br>Lacy Creek         | 0.0 to 2.2          | Lacy Crk                           | 501895_01       | 5100204 | Wolfe   | PS       |                 |       |                     |                       |                 | Sediment/Siltation         | Crop Prod  |
| Right Fork<br>Millstone<br>Creek | 0.0 to 1.6          | Millstone<br>Crk                   | 501910_01       | 5100201 | Letcher | NS       |                 |       |                     |                       |                 | Sediment/Siltation,<br>TDS | Surface Mining   |

|                        |                     |                                 |                 |         |          |     |              | Desig             | nated | Uses                  |                 |   |   |
|------------------------|---------------------|---------------------------------|-----------------|---------|----------|-----|--------------|-------------------|-------|-----------------------|-----------------|---|---|
|                        |                     |                                 |                 |         |          | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County   | BIO | ãм           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Rockhouse<br>Creek     | 0.0 to 3.6          | North Fork<br>Kentucky<br>River | 502192_01       | 5100201 | Letcher  | PS  | PS           | NS                |       |                       |                 | Sediment/Siltation,<br>TDS, Pathogens,<br>Turbidity | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Septic<br>Tanks/Decentral. Systems<br>Silviculture, Strmbank<br>Mod/Destable.,<br>Sub/Surface Mining  |
| Rose Fork              | 0.0 to 3.1          | Red River                       | 502332_01       | 5100204 | Wolfe    | NS  |              |                   |       |                       |                 | Sediment/Siltation                                  | Crop Prod   |
| Sexton Creek           | 0.1 to 17.2         | Goose Crk                       | 515329_01       | 5100203 | Clay     | PS  | PS           | PS                | PS    |                       |                 | Sediment/Siltation, pH                              | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Crop Prod   |
| Silver Creek           | 0.0 to 11.1         | Kentucky<br>River               | 503507_01       | 5100205 | Madison  |     |              | PS                |       |                       |                 | Pathogens   | Unknown   |
| Silver Creek           | 11.2 to 29.8        | Kentucky<br>River               | 503507_02       | 5100205 | Madison  | PS  |              |                   |       |                       |                 | Sediment/Siltation                                  | Riparian Habitat Loss,<br>Pasture Grazing, Non-Irrig<br>Crop Prod, Post-Devel.<br>Erosion/Sediment.   |
| Snow Creek             | 0.0 to 3.9          | Lulbegrud<br>Crk                | 515528_01       | 5100204 | Powell   | PS  |              |                   |       |                       |                 | Sediment/Siltation                                  | Riparian Habitat Loss,<br>Pasture Grazing, Post-<br>Devel. Erosion/Sediment.  |
| South Elkhorn<br>Creek | 5.0 to 16.6         | Elkhorn Crk                     | 503901_01       | 5100205 | Franklin | NS  |              |                   |       |                       |                 | Chlorine,<br>Sediment/Siltation,<br>TDS             | Erosion fr. Derelict/Barren<br>Land, Riparian Habitat<br>Loss, Pasture Grazing,<br>Mun. Pt. Source Dischrge,<br>Non-Irrig Crop Prod,<br>Package Plant/Other Small<br>Dischrge, Sediment<br>Resuspension (Clean) |

|                                  |                     |                                  |                 |         |           |           |    | Desig       | gnated | Uses                  |                 |  |  |
|----------------------------------|---------------------|----------------------------------|-----------------|---------|-----------|-----------|----|-------------|--------|-----------------------|-----------------|--|--|
|                                  |                     |                                  |                 |         |           | Aqu<br>Li |    | Con<br>Reci | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County    | BIO       | бм | PCR         | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| South Elkhorn<br>Creek           | 16.6 to<br>34.5     | Elkhorn Crk                      | 503901_02       | 5100205 | Woodford  | NS        |    | NS          |        |                       |                 | Chlorine,<br>Sediment/Siltation,<br>TDS, Pathogens,<br>Org. Enrich.<br>Nutrient/Eutroph. | Riparian Habitat Loss,<br>Man. Pasture Grazing,<br>Municipal Pt. Source<br>Dischrge, Non-Irrig Crop<br>Prod, Range. Grazing,<br>Livestock-Grazing/Feed.<br>Op's, Agriculture |
| South Elkhorn<br>Creek           | 34.5 to 52.7        | Elkhorn Crk                      | 503901_03       | 5100205 | Woodford  | NS        |    |             |        |                       |                 | Chlorine,<br>Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)                         | Riparian Habitat Loss,<br>Pasture Grazing, Municipal<br>Pt Source Dischrge, Non-<br>Irrig Crop Prod, Post-<br>Devel. Erosion/Sediment.                                       |
| South Fork<br>Quicksand<br>Creek | 0.0 to 16.9         | Quicksand<br>Crk                 | 503941_01       | 5100201 | Breathitt | NS        |    |             |        |                       |                 | Sediment/Siltation,<br>TDS   | Riparian Habitat Loss,<br>Petroleum/ Natr'l Gas Prod<br>(Permit), Surface Mining   |
| Spears Creek                     | 0.1 to 6.3          | Mocks<br>Branch                  | 504043_01       | 5100205 | Boyle     | PS        |    |             |        |                       |                 | Sediment/Silt,<br>Nutrient /Eutroph.   | Riparian Habitat Loss,<br>Pasture Grazing, Strmbank<br>Mod/Destable.   |
| Spring Fork                      | 3.1 to 6.9          | Quicksand<br>Crk                 | 504137_00       | 5100201 | Breathitt | NS        |    |             |        |                       |                 | Sediment/Siltation,<br>TDS, Turbidity  | Impacts fr Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destabal,<br>Subsurface Mining,<br>Surface Mining                                   |
| Squabble<br>Creek                | 0.0 to 4.7          | Middle Fork<br>Kentucky<br>River | 515639_01       | 5100202 | Perry     | PS        |    |             |        |                       |                 | Sediment/Siltation, TDS  | Riparian Habitat Loss,<br>Land Clearance<br>(Devel./Redevelop.),<br>Surface Mining   |

|                              |                     |                                  |                 |         |         |           |    | Desig              | nated | Uses                  |                 |  |  |
|------------------------------|---------------------|----------------------------------|-----------------|---------|---------|-----------|----|--------------------|-------|-----------------------|-----------------|--|--|
|                              |                     |                                  |                 |         |         | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County  | BIO       | ОМ | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
| Stanford City<br>Lake / Rice |                     |                                  |                 |         |         |           |    |                    |       |                       |                 |  |  |
| Lake / Rice<br>Lake          | 43 acres            | N/A                              | 504225_01       | 5100205 | Lincoln |           |    |                    |       |                       | PS              | Unknown                                  | Unknown  |
| Station Camp<br>Creek        | 0.0 to 21.3         | Kentucky<br>River                | 515669_01       | 5100204 | Jackson | PS        | PS |                    |       |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Man. Pasture Grazing,<br>Non-Irrig Crop Prod, Other<br>Rec Pollution Sources |
| Stevens Creek                | 14.5 to<br>17.3     | Eagle Crk                        | 504362_02       | 5100205 | Owen    | PS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph  | Pasture Grazing  |
| Stillwater<br>Creek          | 0.0 to 3.5          | Red River                        | 515715_01       | 5100204 | Wolfe   | PS        |    |                    |       |                       |                 | Sediment/Siltation                       | Heap-leach Ext Mining,<br>Riparian Habitat Loss,<br>Agriculture  |
| Stinnett Creek               | 1.3 to 4.7          | Middle Fork<br>Kentucky<br>River | 515718_01       | 5100202 | Leslie  | NS        |    |                    |       |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Residential Districts, Land<br>Clearance<br>(Devel./Redevelop.)              |
| Sturgeon<br>Creek            | 8.0 to 12.2         | Kentucky<br>River                | 515768_01       | 5100204 | Lee     | PS        |    |                    |       |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Non-Irrig Crop Prod,<br>Surface Mining                                       |
| Sugar Creek                  | 4.8 to 6.0          | Kentucky<br>River                | 504657_01       | 5100205 | Garrard | PS        |    |                    |       |                       |                 | TDS                                      | Hwy/Rd/Brdg Runoff<br>(Non-Constr)   |
| Sulphur Creek                | 0.0 to 1.4          | Drennon Crk                      | 504735_00       | 5100205 | Henry   | NS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Agriculture, Habitat Mod-<br>not Hydro   |
| Swift Camp<br>Creek          | 0.0 to 13.8         | Red River                        | 515834_00       | 5100204 | Wolfe   | PS        |    |                    |       |                       |                 | Unknown                                  | Unknown  |

|                      |                     |                                 |                 |         |           |          |              | Desig             | gnated | Uses                  |                 |  |   |
|----------------------|---------------------|---------------------------------|-----------------|---------|-----------|----------|--------------|-------------------|--------|-----------------------|-----------------|--|---|
|                      |                     |                                 |                 |         |           | Aqu<br>L | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name    | Impaired<br>Segment | Receiving<br>Waterbody          | Waterbody<br>ID | HUC 8   | County    | BIO      | ОМ           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Tate Creek           | 0.0 to 6.5          | Kentucky<br>River               | 504972_01       | 5100205 | Madison   | NS       |              |                   |        |                       |                 | Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage)                | Municipal Pt. Source<br>Dischrge, Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod              |
| Ten Mile<br>Creek    | 0.0 to 2.9          | Eagle Crk                       | 485704_01       | 5100205 | Grant     | PS       | PS           | PS                |        |                       |                 | Pathogens,<br>Unknown  | Unknown   |
| Three Forks<br>Creek | 0.0 to 7.6          | Eagle Crk                       | 505232_00       | 5100205 | Grant     | PS       |              |                   |        |                       |                 | Sediment/Siltation   | Unknown   |
| Town Branch          | 0.0 to 9.2          | South<br>Elkhorn Crk            | 505386_01       | 5100205 | Fayette   | PS       |              | NS                |        |                       |                 | Pathogens,<br>Nutrient/ Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Agriculture,<br>Urban Runoff/Storm<br>Sewers                |
| Town Branch          | 9.2 to 10.6         | South<br>Elkhorn Crk            | 505386_02       | 5100205 | Fayette   |          | NS           | NS                |        |                       |                 | Pathogens,<br>Nutrient/ Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Urban<br>Runoff/Storm Sewers                                |
| Town Branch          | 10.6 to<br>12.1     | South<br>Elkhorn Crk            | 505386_03       | 5100205 | Fayette   | PS       |              |                   |        |                       |                 | Unknown  | Unknown   |
| Trace Fork           | 0.2 to 2.4          | Stillwater<br>Crk               | 505441_01       | 5100201 | Knott     |          |              | NS                | NS     |                       |                 | Pathogens  | Unknown   |
| Troublesome<br>Creek | 0.0 to 45.1         | North Fork<br>Kentucky<br>River | 505515_01       | 5100201 | Breathitt | NS       | NS           |                   |        |                       |                 | Sediment/Siltation,<br>TDS, Turbidity                        | Municipal Pt. Source Dischrge, Petroleum/ Natr'l Gas, Petroleum/ Natr'l Gas Prod, Coal Mining |

|   |                     |                                     |                     |         |            |           |    | Desig              | nated | Uses                  |                 |  |   |
|---|---------------------|-------------------------------------|---------------------|---------|------------|-----------|----|--------------------|-------|-----------------------|-----------------|--|---|
|   |                     |                                     |                     |         |            | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name                           | Impaired<br>Segment | Receiving<br>Waterbody              | Waterbody<br>ID     | HUC 8   | County     | BIO       | бм | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments                                      | Sources   |
| Upper Devil<br>Creek                        | 0.0 to 1.0          | North Fork<br>Kentucky<br>River     | 516120_00           | 5100201 | Wolfe      | PS        |    |                    |       |                       |                 | Sediment/Siltation                               | Impacts fr. Aband. Mine<br>Lands, Surface Mining,<br>Reclamation Inactive<br>Mining, Inappropriate<br>Waste Disposal,<br>Silviculture |
| Upper Howard<br>Creek                       | 0.0 to 3.2          | Kentucky<br>River                   | 485707_00           | 5100205 | Clark      | PS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Unknown                   | Range. Grazing, Unknown   |
| Upper Twin<br>Creek                         | 0.0 to 3.6          | Middle Fork<br>Kentucky<br>River    | 505917_00           | 5100202 | Breathitt  | PS        |    |                    |       |                       |                 | Unknown  | Unknown   |
| UT Cane Run                                 | 0.0 to 3.5          | Cane Run                            | 488799-<br>6.13_00  | 5100205 | Scott      |           |    | NS                 |       |                       |                 | Pathogens  | Livestock-Grazing/Feed.<br>Op's, Municipal Pt Sources   |
| UT to Engle<br>Fork                         | 0.0 to 0.5          | Engle Fork                          | 491781-<br>1.1_01   | 5100201 | Perry      | NS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Water<br>Temperature, TDS | Channelization, Riparian<br>Habitat Loss, Surface<br>Mining   |
| UT to North<br>Branch<br>Lulbegrud<br>Creek | 0.0 to 2.2          | North<br>Branch<br>Lulbegrud<br>Crk | 497344-<br>2.3_01   | 5100204 | Montgomery | NS        |    |                    |       |                       |                 | Unknown  | Unknown   |
| UT to North<br>Elkhorn Creek                | 0.0 to 5.6          | North<br>Elkhorn Crk                | 499540-<br>66_01    | 5100205 | Fayette    | PS        |    |                    |       |                       |                 | Sediment/Siltation,<br>TDS,<br>Nutrient/Eutroph. | Riparian Habitat Loss,<br>Pasture Grazing, Post-<br>Devel. Erosion/Sediment.,<br>Strmbank Mod/Destable.                               |
| UT to Smith<br>Fork                         | 0.0 to 0.55         | Smith Fork                          | 503789_01           | 5100205 | Madison    | PS        |    |                    |       |                       |                 | Sediment/Siltation                               | Heap-leach Ext Mining,<br>Agriculture   |
| UT to Swift<br>Camp Creek                   | 0.0 to 1.5          | Swift Camp<br>Crk                   | 515834-<br>11.97_00 | 5100204 | Wolfe      | NS        |    |                    |       |                       |                 | Sediment/Siltation                               | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment.,   |

|                         |                     |                        |                 |         |           |          |              | Desig             | nated | Uses                  |                 |  |  |
|-------------------------|---------------------|------------------------|-----------------|---------|-----------|----------|--------------|-------------------|-------|-----------------------|-----------------|--|--|
|                         |                     |                        |                 |         |           | Aqu<br>L | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO      | МQ           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                                      | Sources  |
|                         |                     |                        |                 |         |           |          |              |                   |       |                       |                 |  | Septage Disposal   |
| West Fork Mill<br>Creek | 0.0 to 1            | Mill Crk               | 506440_00       | 5100205 | Carroll   | PS       |              |                   |       |                       |                 | Sediment/Siltation                               | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Urban<br>Stormwater |
| West Hickman<br>Creek   | 0.0 to 3.0          | Hickman<br>Crk         | 506457_01       | 5100205 | Jessamine | PS       | PS           | PS                |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)            | Municipal Pt. Source<br>Dischrge, Urban<br>Stormwater  |
| West Hickman<br>Creek   | 3.0 to 8.6          | Hickman<br>Crk         | 506457_02       | 5100205 | Jessamine | PS       |              |                   |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)   | Urban Stormwater   |
| White Lick<br>Creek     | 0.0 to 2.8          | Paint Lick<br>Crk      | 506590_00       | 5100205 | Garrard   | PS       |              |                   |       |                       |                 | TSS  | Non-Irrig Crop Prod,<br>Specialty Crop Prod  |
| White Oak<br>Creek      | 0.0 to 2.8          | Kentucky<br>River      | 506613_01       | 5100205 | Garrard   | NS       |              |                   |       |                       |                 | Sediment/Siltation,<br>TDS,<br>Nutrient/Eutroph. | Riparian Habitat Loss,<br>Pasture Grazing, Municipal<br>Pt. Source Dischrge                                  |
| Wilgreen Lake           | 169 acres           | N/A                    | 505023_00       | 5100205 | Madison   |          | NS           |                   |       |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph.,     | Non-Irrig Crop Prod,<br>Septic Tanks/Decentral.<br>Systems Livestock-<br>Grazing/Feed. Op's                  |
| Wolf Run                | 0.0 to 4.1          | Town<br>Branch         | 507029_00       | 5100205 | Fayette   | NS       | NS           | NS                |       |                       |                 | Pathogens,<br>Nutrient /Eutroph.                 | Channelization, Urban<br>Stormwater  |
| Wooten Creek            | 0.0 to 3.0          | Cutshin Crk            | 516483_00       | 5100202 | Leslie    | NS       |              |                   |       |                       |                 | Unknown  | Unknown  |

|                     |                     |                        |                 |         |         |           |    | Desig       | nated | Uses                  |                 |   |   |
|---------------------|---------------------|------------------------|-----------------|---------|---------|-----------|----|-------------|-------|-----------------------|-----------------|---|---|
|                     |                     |                        |                 |         |         | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO       | ÕМ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Licking River       | Basin               |                        |                 |         |         |           |    |             |       |                       |                 |   |   |
| Allison Creek       | 0.0 to 4.9          | Fleming<br>Creek       | 485886_00       | 5100101 | Fleming | NS        | NS |             |       |                       |                 | Phosphorus, Total   | Animal Feeding Op (NPS)   |
| Banklick Creek      | 0.0 to 3.5          | Licking<br>River       | 486315_01       | 5100101 | Kenton  | PS        |    | NS          |       |                       |                 | Sediment/Silt,<br>Pathogens, Org.<br>Enrich (Sewage)              | Hwys/Rd/Brdgs (New<br>Constr), Municipal Pt.<br>Source Dischrge, Urban<br>Stormwater/Runoff |
| Banklick Creek      | 3.5 to 8.2          | Licking<br>River       | 486315_02       | 5100101 | Kenton  |           | NS | NS          |       |                       |                 | Sed/Silt,<br>Pathogens,<br>Nut/Eutroph,<br>Org.Enrich<br>(Sewage) | Septic Tanks/Decentral. Systems Agriculture   |
| Banklick Creek      | 8.2 to 19.2         | Licking<br>River       | 486315_03       | 5100101 | Kenton  |           | PS | PS          |       |                       |                 | Pathogens, Nutr/<br>Eutroph,<br>Org.Enrich/Sewage                 | Septic Tanks/Decentral. Systems Agriculture   |
| Beaver Creek        | 10.0 to<br>14.4     | Licking<br>River       | 510489_00       | 5100101 | Menifee | PS        |    |             |       |                       |                 | Sediment/Siltation  | Pasture Grazing, Non-Irrig<br>Crop Prod   |
| Blacks Creek        | 0.0 to 3.4          | Hinkston<br>Crk        | 487421_00       | 5100102 | Bourbon | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                          | Livestock-Grazing/Feed.<br>Op's   |
| Blackwater<br>Creek | 3.8 to 11.7         | Licking<br>River       | 510765_01       | 5100101 | Morgan  |           |    | NS          |       |                       |                 | Pathogens   | Unknown   |
| Boone Creek         | 0.0 to 5.0          | Hinkston<br>Crk        | 487686_00       | 5100102 | Bourbon | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                          | Livestock-Grazing/Feed.<br>Op's   |
| Broke Leg<br>Creek  | 0.0 to 1.0          | Blackwater<br>Crk      | 510936_01       | 5100101 | Morgan  | PS        |    |             |       |                       |                 | Unknown   | Unknown, Habitat Mod-not<br>Hydro   |

|                    |                     |                          |                 |         |           |           |                 | Desig             | nated | Uses                  |                 |                                  |  |
|--------------------|---------------------|--------------------------|-----------------|---------|-----------|-----------|-----------------|-------------------|-------|-----------------------|-----------------|----------------------------------|--|
|                    |                     |                          |                 |         |           | Aqu<br>Li |                 | Con<br>Rec<br>tie | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                  |  |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County    | BIO       | $\overline{O}M$ | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                      | Sources  |
| Broke Leg<br>Creek | 1.0 to 4.4          | Blackwater<br>Crk        | 510936_02       | 5100101 | Morgan    | PS        |                 |                   |       |                       |                 | Sediment/Siltation               | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Upstream<br>Source, Runoff fr.<br>Forest/Grassland/Parkland                                  |
| Brushy Fork        | 0.0 to 5.8          | South Fk<br>Grassy Crk   | 488131_01       | 5100101 | Pendleton | PS        |                 |                   |       |                       |                 | Sediment/Siltation               | Strmbank Mod/Destable.,<br>Crop Prod, Agriculture,<br>Forest/Grassland/Parkland<br>Runoff  |
| Burning Fork       | 0.0 to 3.3          | Licking<br>River         | 488450_01       | 5100101 | Magoffin  | NS        |                 | NS                |       |                       |                 | Sediment/Siltation,<br>Pathogens | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Municipal Pt.<br>Source Dischrge, Unknown                          |
| Caney Creek        | 0.0 to 4.2          | Licking<br>River         | 511201_00       | 5100101 | Morgan    | PS        |                 |                   |       |                       |                 | Sediment/Siltation, Turbidity    | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable,<br>Subsurface/Surface Mining |
| Caskey Fork        | 0.0 to 2.3          | Grassy Fork              | 489059_01       | 5100101 | Morgan    | NS        |                 |                   |       |                       |                 | Unknown                          | Land Clearance, Unknown  |
| Cave Run Lake      | 8270 acres          | N/A                      | 511277_00       | 5100101 | Rowan     |           | PS              | PS                | PS    | PS                    |                 | Methyl mercury,<br>pH            | Atmospheric Depositions-<br>Toxics, Unknown,<br>Upstream Source  |
| Christy Creek      | 0.0 to 4.3          | Triplett Crk             | 511363 00       | 5100101 | Rowan     | PS        |                 |                   |       |                       |                 | Sediment/Siltation,<br>Unknown   | Non-Irrig Crop Prod  |
| Clarks Run         | 0.0 to 2.1          | North Fork Licking River | 489555_01       | 5100101 | Mason     | PS        |                 |                   |       |                       |                 | Sediment/Siltation               | Crop Prod  |

|                     |                     |                        |                     |         |          |     |                 | Desig | nated               | Uses                  |                 |   |  |
|---------------------|---------------------|------------------------|---------------------|---------|----------|-----|-----------------|-------|---------------------|-----------------------|-----------------|---|--|
|                     |                     |                        |                     |         |          | -   | Aquatic<br>Life |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID     | HUC 8   | County   | BIO | Ом              | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Coffee Creek        | 0.0 to 4.1          | Williams<br>Crk        | 489772_01           | 5100101 | Morgan   | NS  |                 |       |                     |                       |                 | Sediment/Siltation  | Channel Erosion/Incision<br>fr. Upstream Hydro,<br>Channelization, Strmbank<br>Mod/Destable., Agriculture            |
| Cooper Run          | 0.0 to 10.1         | Stoner Crk             | 490062_00           | 5100102 | Bourbon  | NS  |                 |       |                     |                       |                 | Nutrient/Eutroph.   | Livestock-Grazing/Feed.<br>Op's  |
| Craintown<br>Branch | 0.0 to 3.6          | Fleming<br>Creek       | 490277_00           | 5100101 | Fleming  | PS  | PS              |       |                     |                       |                 | Phosphorus (Total)  | Animal Feeding Operations (NPS)  |
| Crane Creek         | 0.0 to 2.9          | Fox Creek              | 511622_01           | 5100101 | Fleming  | PS  |                 |       |                     |                       |                 | Sediment/Siltation  | Riparian Habitat Loss,<br>Sand/Gravel/Rock Mining<br>Quarries, Strmbank<br>Mod/Destable., Crop Prod ,<br>Agriculture |
| Crooked Creek       | 0.0 to 9.1          | Licking<br>River       | 490377_00           | 5100101 | Nicholas |     |                 | NS    |                     |                       |                 | Pathogens   | Unknown  |
| Doe Run Lake        | 51 acres            | N/A                    | CLN082_00           | 5100101 | Kenton   |     | PS              |       |                     |                       |                 | Oxygen -<br>Dissolved,<br>Nutrient/Eutroph.,<br>Diss. Gas Supersat. | Unknown, Upstream<br>Source  |
| Doty Branch         | 0.0 to 2.3          | Fleming<br>Crk         | 492236-<br>12.8_01  | 5100101 | Fleming  | NS  |                 |       |                     |                       |                 | Nutrient/Eutroph.   | Animal Feed. Op.'s,<br>Agriculture   |
| Doty Branch         | 2.3 to 4.0          | Fleming<br>Crk         | Not yet<br>assigned | 5100101 | Fleming  | NS  |                 |       |                     |                       |                 | Org.Enrich.<br>(Sewage)   | Animal Feed. Op.'s,<br>Agriculture   |
| Dry Creek           | 0.0 to 0.5          | Triplett Crk           | 511917_01           | 5100101 | Rowan    | PS  |                 |       |                     |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                      | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Urban<br>Runoff/Storm Sewers   |

|                   |                     |                        |                 |         |         |     |                 | Desig | nated              | Uses                  |                 |  |   |
|-------------------|---------------------|------------------------|-----------------|---------|---------|-----|-----------------|-------|--------------------|-----------------------|-----------------|--|---|
|                   |                     |                        |                 |         |         | -   | Aquatic<br>Life |       | tact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO | ОM              | PCR   | SCR                | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Elk Fork          | 0.0 to 4.9          | Licking<br>River       | 512038_01       | 5100101 | Morgan  | PS  |                 |       |                    |                       |                 | Sediment/Siltation   | Impacts fr. Hydrostructure<br>Flow Reg/Mod,<br>Agriculture, Habitat Mod-<br>not Hydro, Silviculture                           |
| Elk Fork          | 4.9 to 10.5         | Licking<br>River       | 512038_02       | 5100101 | Morgan  | NS  |                 |       |                    |                       |                 | Sediment/Siltation, Turbidity                                | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining |
| Elk Fork          | 12.6 to 14.7        | Licking<br>River       | 512038_03       | 5100101 | Morgan  | PS  |                 |       |                    |                       |                 | Sediment/Siltation, Turbidity                                | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining |
| Fannins Fork      | 1.5 to 3.4          | Elk Fork               | 491979_01       | 5100101 | Morgan  | PS  |                 |       |                    |                       |                 | Sediment/Siltation   | Crop Prod   |
| Flat Creek        | 0.0 to 0.9          | Licking<br>River       | 492182_00       | 5100101 | Bath    |     |                 | NS    |                    |                       |                 | Pathogens  | Unknown   |
| Flat Run          | 0.0 to 2.2          | Stoner Crk             | 492217_00       | 5100102 | Bourbon | NS  |                 |       |                    |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                     | Livestock-Grazing/Feed.<br>Op's   |
| Fleming Creek     | 0.0 to 12.8         | Licking<br>River       | 492236_01       | 5100101 | Fleming | PS  | PS              |       |                    |                       |                 | Nutrient/Eutroph.,<br>Phosphorus (Total)                     | Animal Feed. Op.'s  |
| Fleming Creek     | 12.8 to<br>16.0     | Licking<br>River       | 492236_02       | 5100101 | Fleming | PS  |                 |       |                    |                       |                 | Nutrient/Eutroph.  | Animal Feed. Op.'s,<br>Agriculture  |
| Fleming Creek     | 20.8 to 39.4        | Licking<br>River       | 492236_04       | 5100101 | Fleming | NS  | NS              |       |                    |                       |                 | Nutr/Eutroph,<br>Org.Enrich<br>(Sewage),<br>Phosphorus,Total | Animal Feed. Op.'s, Urban<br>Runoff/Storm Sewers  |

|                   |                     |                                |                 |         |            |     |                 | Desig | nated                      | Uses           |                 |   |  |
|-------------------|---------------------|--------------------------------|-----------------|---------|------------|-----|-----------------|-------|----------------------------|----------------|-----------------|---|--|
|                   |                     |                                |                 |         |            |     | Aquatic<br>Life |       | Contact<br>Recrea-<br>tion |                | Drink.<br>Water |   |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody         | Waterbody<br>ID | HUC 8   | County     | BIO | ОM              | PCR   | SCR                        | Fish<br>Tissue | DWS             | Impairments   | Sources  |
| Fox Creek         | 0.0 to 10.1         | Licking<br>River               | 512230_01       | 5100101 | Fleming    | PS  | PS              | PS    | PS                         |                |                 | Sediment/Siltation,<br>Pathogens                            | Grazing-Riparian Zones,<br>Unknown, Natr'l Sources |
| Fox Creek         | 20.1 to 22.7        | Licking<br>River               | 512230_02       | 5100101 | Fleming    | NS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    |  |
| Grassy Creek      | 4.6 to 10.0         | Licking<br>River               | 512382_01       | 5100101 | Morgan     | PS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Unknown, Crop Prod                                 |
| Hinkston<br>Creek | 20.8 to 31.0        | South Fork<br>Licking<br>River | 494298_03       | 5100102 | Bourbon    |     |                 | PS    |                            |                |                 | Pathogens   | Livestock-Grazing/Feed. Op's                       |
| Hinkston<br>Creek | 41.8 to<br>49.1     | South Fork<br>Licking<br>River | 494298_05       | 5100102 | Bourbon    | PS  |                 | NS    |                            |                |                 | Sediment/Siltation,<br>Pathogens                            | Agriculture  |
| Hinkston<br>Creek | 51.5 to<br>65.9     | South Fork<br>Licking<br>River | 494298_06       | 5100102 | Montgomery | NS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Grazing-Riparian Zones                             |
| Houston Creek     | 0.0 to 9.0          | Stoner Crk                     | 494646_01       | 5100102 | Bourbon    |     |                 | NS    |                            |                |                 | Pathogens   | Unknown  |
| Houston Creek     | 9.0 to 12.7         | Stoner Crk                     | 494646_02       | 5100102 | Bourbon    | PS  |                 |       |                            |                |                 | Nutrient/Eutroph.   | Golf Courses                                       |
| Johnson Creek     | 0.0 to 3.1          | Licking<br>River               | 495397_00       | 5100101 | Magoffin   |     |                 | NS    |                            |                |                 | Pathogens   | Unknown  |
| Johnson Creek     | 0.0 to 3.5          | Licking<br>River               | 495400_01       | 5100101 | Robertson  |     |                 | NS    |                            |                |                 | Pathogens   | Unknown  |
| Kincaid Lake      | 183 acres           | N/A                            | CLN045_00       | 5100101 | Pendleton  |     | PS              |       |                            |                |                 | Oxygen - Diss,<br>Nutrient/Eutroph.,<br>Diss. Gas Supersat. | Agriculture  |
| Lees Creek        | 0.0 to 4.3          | Licking<br>River               | 496181_01       | 5100101 | Mason      | PS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Grazing-Riparian Zones,<br>Crop Prod               |

|                                 |                     |                        |                 |         |          |     |                 | Desig | nated                      | Uses           |                 |  |   |
|---------------------------------|---------------------|------------------------|-----------------|---------|----------|-----|-----------------|-------|----------------------------|----------------|-----------------|--|---|
|                                 |                     |                        |                 |         |          | _   | Aquatic<br>Life |       | Contact<br>Recrea-<br>tion |                | Drink.<br>Water |  |   |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County   | BIO | бм              | PCR   | SCR                        | Fish<br>Tissue | DWS             | Impairments  | Sources   |
| Left Fork<br>White Oak<br>Creek | 0.0 to 1.8          | Licking<br>River       | 496271_00       | 5100101 | Morgan   | PS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Turbidity   | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable.,<br>Subsurface Mining,<br>Surface Mining                                      |
| Lick Creek                      | 0.0 to 2.1          | Licking<br>River       | 496483_01       | 5100101 | Magoffin | PS  |                 |       |                            |                |                 | Sediment/Siltation   | Grazing-Riparian Zones,<br>Riparian Hab Loss,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod, Wet<br>Weather Dischrge.,<br>Impervious Surface/Parking<br>Lot, Manure Runoff, Rural |
| Licking River                   | 0.0 to 4.8          | Ohio River             | 513416_01       | 5100101 | Campbell |     |                 | PS    |                            |                |                 | Pathogens  | SSOs, Urban Runoff/Storm<br>Sewers  |
| Licking River                   | 4.8 to 14.9         | Ohio River             | 513416_02       | 5100101 | Campbell |     |                 | PS    |                            |                |                 | Pathogens  | Unknown   |
| Licking River                   | 31.0 to<br>37.6     | Ohio River             | 513416_04       | 5100101 | Kenton   |     |                 | PS    |                            |                |                 | Pathogens  | Unknown   |
| Licking River                   | 174.4 to<br>180.8   | Ohio River             | 513416_10       | 5100101 | Rowan    |     |                 |       | PS                         |                |                 | Pathogens  | Unknown   |
| Licking River                   | 224.3 to 241.3      | Ohio River             | 513416_11       | 5100101 | Morgan   |     |                 | NS    | PS                         |                |                 | Pathogens  | Unknown   |
| Licking River                   | 265.0 to 271.6      | Ohio River             | 513416_12       | 5100101 | Magoffin | PS  |                 |       |                            |                |                 | Sediment/Siltation,<br>Turbidity,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Grazing Riparian Zones,<br>Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destabal., Non-Point<br>Source Runoff, Urban<br>Runoff/Storm Sewers                            |

|                              |                     |                                |                 |                |          | Designated Uses |                 |     |                   |                       |                 |  |  |
|------------------------------|---------------------|--------------------------------|-----------------|----------------|----------|-----------------|-----------------|-----|-------------------|-----------------------|-----------------|--|--|
|                              |                     |                                |                 |                |          | _               | Aquatic<br>Life |     | tact<br>rea-<br>n | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody         | Waterbody<br>ID | HUC 8          | County   | BIO             | õм              | PCR | SCR               | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
|                              | 271.6 to            | Ol. D.                         | ]               | <b>5100101</b> | 3.5 65   |                 |                 |     |                   |                       |                 | a ti vali                                | B 5  |
| Licking River                | 294.1<br>294.1 to   | Ohio River                     | 513416_13       | 5100101        | Magoffin | NS              |                 |     |                   |                       |                 | Sediment/Siltation                       | Resource Extraction  |
| Licking River                | 302.4               | Ohio River                     | 513416_14       | 5100101        | Magoffin | NS              |                 |     |                   |                       |                 | Sediment/Siltation                       | Surface Mining   |
| Little Beaver<br>Creek       | 0.0 to 3.3          | Beaver Crk                     | 496612_01       | 5100101        | Harrison | PS              |                 |     |                   |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Grazing-Riparian Zones,<br>Hwy/Rd/Brdg Runoff<br>(Non-Constr), Crop Prod             |
| Little Stoner<br>Creek       | 0.0 to 5.0          | Stoner Crk                     | 496870_00       | 5100102        | Clark    |                 |                 | NS  |                   |                       |                 | Pathogens                                | Unknown  |
| Locust Creek                 | 0.0 to 11.8         | Licking<br>River               | 496939_01       | 5100101        | Fleming  | PS              |                 |     |                   |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Grazing-Riparian Zones,<br>Crop Prod   |
| Logan Run                    | 0.0 to 2.3          | Fleming<br>Creek               | 496986_00       | 5100101        | Fleming  | NS              |                 |     |                   |                       |                 | Nutrients/Eutroph.                       | Agriculture  |
| Mash Fork                    | 0.0 to 3.0          | Horsepen<br>Fork               | 497650_01       | 5100101        | Magoffin | PS              |                 |     |                   |                       |                 | Unknown                                  | Unknown, Crop Prod   |
| Middle Fork<br>Licking River | 0.0 to 2.5          | Licking<br>River               | 498128_00       | 5100101        | Magoffin |                 |                 | NS  |                   |                       |                 | Pathogens                                | Septic Tanks/Decentral. Systems Agriculture  |
| Mill Creek                   | 0.0 to 21.6         | South Fork<br>Licking<br>River | 498263_01       | 5100102        | Harrison | PS              |                 |     |                   |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Land Clearance<br>(Devel./Redevelop.),<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod |
| North Fork<br>Licking River  | 18.5 to 52.5        | Licking<br>River               | 499554_02       | 5100101        | Bracken  | NS              |                 | NS  |                   |                       |                 | Sediment/Siltation,<br>Pathogens         | Agriculture  |
| North Fork<br>Licking River  | 8.4 to 12           | Licking<br>River               | 514292_01       | 5100101        | Morgan   |                 |                 | NS  |                   |                       |                 | Pathogens                                | Unknown  |

|                             |                     |                                |                 |         |            |           |    | Desig                      | nated | Uses                  |                 |  |  |
|-----------------------------|---------------------|--------------------------------|-----------------|---------|------------|-----------|----|----------------------------|-------|-----------------------|-----------------|--|--|
|                             |                     |                                |                 |         |            | Aqu<br>Li |    | Contact<br>Recrea-<br>tion |       | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody         | Waterbody<br>ID | HUC 8   | County     | BIO       | õм | PCR                        | SCR   | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
| North Fork<br>Licking River | 12.0 to<br>13.1     | Licking<br>River               | 514292_02       | 5100101 | Morgan     | PS        |    |                            |       |                       |                 | Sediment/Siltation                       | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Upstream<br>Source, Intro. Non-Native<br>Organisms<br>(Accident/Intent.) |
| Oldfield Fork               | 0.0 to 3.6          | Grassy<br>Creek                | 499901_01       | 5100101 | Morgan     | NS        |    |                            |       |                       |                 | Sediment/Siltation                       | Crop Prod  |
| Phillips Creek              | 0.0 to 5.3          | Licking<br>River               | 500540_00       | 5100101 | Campbell   |           |    | NS                         |       |                       |                 | Pathogens                                | Unknown  |
| Prickly Ash<br>Creek        | 0.0 to 3.1          | Slate Crk                      | 514770_00       | 5100101 | Bath       | NS        |    |                            |       |                       |                 | Nutrient/Eutroph.                        | Agriculture  |
| Puncheon<br>Camp Creek      | 0.0 to 1.1          | Licking<br>River               | 501442_00       | 5100101 | Magoffin   |           |    | NS                         |       |                       |                 | Pathogens                                | Unknown  |
| Rock Fork                   | 0.0 to 4.0          | N Fork<br>Triplett Crk         | 515026_01       | 5100101 | Rowan      | PS        |    |                            |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Dredging , Crop Prod   |
| Salt Lick Creek             | 3.0 to 8.0          | Licking<br>River               | 515191_01       | 5100101 | Bath       | PS        |    |                            |       |                       |                 | Sediment/Siltation                       | Non-Irrig Crop Prod,<br>Range. Grazing   |
| Scrubgrass<br>Creek         | 0.0 to 1.6          | Cassidy Crk                    | 503123_00       | 5100101 | Nicholas   | NS        |    |                            |       |                       |                 | Unknown                                  | Unknown  |
| Slate Creek                 | 0.0 to 13.6         | Licking<br>River               | 515470_01       | 5100101 | Bath       |           |    | PS                         |       |                       |                 | Pathogens                                | Unknown  |
| Spruce Creek                | 0.0 to 1.7          | Slate Crk                      | 504170_01       | 5100101 | Montgomery | PS        |    |                            |       |                       |                 | Sediment/Siltation                       | Grazing-Riparian Zones   |
| Stoner Creek                | 0.0 to 5.5          | South Fork<br>Licking<br>River | 504482_01       | 5100102 | Bourbon    |           |    | PS                         |       |                       |                 | Pathogens                                | Unknown  |
| Stoner Creek                | 5.5 to 15.0         | South Fork<br>Licking<br>River | 504482_02       | 5100102 | Bourbon    |           |    | NS                         |       |                       |                 | Pathogens                                | Unknown  |
| Stony Creek                 | 0.0 to 3.0          | Licking<br>River               | 504500_00       | 5100101 | Nicholas   | NS        |    |                            |       |                       |                 | Unknown                                  | Unknown  |

|                    |                     |                          |                 |         |          |     |                 | Desig | nated  | Uses           |                    |  |   |  |  |
|--------------------|---------------------|--------------------------|-----------------|---------|----------|-----|-----------------|-------|--------|----------------|--------------------|--|---|--|--|
|                    |                     |                          |                 |         |          | -   | Aquatic<br>Life |       | quatic |                | tact<br>rea-<br>on | Con-<br>sump-<br>tion  | Drink.<br>Water   |  |  |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County   | BIO | ÕМ              | PCR   | SCR    | Fish<br>Tissue | DWS                | Impairments  | Sources   |  |  |
| Straight Creek     | 0.0 to 1.8          | Elk Fork                 | 504549_00       | 5100101 | Morgan   | NS  |                 |       |        |                |                    | Sediment/Siltation, Turbidity  | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining       |  |  |
| Strodes Creek      | 2.7 to 19.3         | Stoner Crk               | 504593_00       | 5100102 | Bourbon  | PS  | PS              | NS    |        |                |                    | Sediment/Siltation, Pathogens, Nutrient/Eutroph., Org.Enrich. (Sewage) | Hwys/Rd/Brdgs Infrastructure (New Construction), Municipal Pt. Source Dischrge, Agriculture, Habitat Modnot Hydro, Urban Stormwater |  |  |
| Threemile<br>Creek | 0.1 to 4.7          | Licking<br>River         | 505251_00       | 5100101 | Campbell | NS  |                 | NS    |        |                |                    | Pathogens,<br>Org.Enrich.<br>(Sewage)                                  | SSO/Collect Sys Failure,<br>Unknown   |  |  |
| Townsend<br>Creek  | 0.0 to 4.9          | S Fk<br>Licking<br>River | 505401_01       | 5100102 | Bourbon  |     |                 | NS    |        |                |                    | Pathogens  | Unknown   |  |  |
| Trace Fork         | 0.0 to 3.1          | Licking<br>River         | 505437_00       | 5100101 | Magoffin | PS  |                 |       |        |                |                    | Sediment/Siltation,<br>TDS, Turbidity                                  | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining       |  |  |

|                                 |                     |                        |                   |         |         |           |    | Desig             | nated | Uses                  |                 |  |  |
|---------------------------------|---------------------|------------------------|-------------------|---------|---------|-----------|----|-------------------|-------|-----------------------|-----------------|--|--|
|                                 |                     |                        |                   |         |         | Aqu<br>Li |    | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8   | County  | BIO       | МØ | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Triplett Creek                  | 5.9 to 12.3         | Licking<br>River       | 516023_01         | 5100101 | Rowan   | PS        | PS | NS                | PS    |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Hwys/Rd/Brdgs Infrastructure, Impacts fr. Hydrostructure Flow, Municipal Pt. Source Dischrge, Unknown, Agriculture, Urban Runoff/Storm Sewers                              |
| UT to Mill<br>Creek             | 0.0 to 4            | Mill Crk               | 498265-<br>7.0_01 | 5100101 | Fleming | NS        |    |                   |       |                       |                 | Sediment/Siltation,<br>Total Kjeldahl<br>Nitrogen,<br>Phosphorus (Total)           | Dairies, Hwy/Rd/Brdg<br>Runoff (Non-Constr),<br>Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's, Manure Runoff, Intro.<br>Non-Native Org's<br>(Accident/Intent.) |
| UT to UT to Lees Creek Williams | 0.0 to 1.6          | UT to Lees<br>Crk      | 496181-<br>4.3_01 | 5100101 | Mason   | NS        |    |                   |       |                       |                 | Sediment/Siltation,<br>Total Kjeldahl<br>Nitrogen,<br>Nitrate/Nitrite as N         | Grazing-Riparian Zones, Riparian Habitat Loss, Livestock-Grazing/Feed. Op's, Manure Runoff, Intro. Non-Native Organisms (Accident/Intent.)                                 |
| Creek                           | 0.0 to 5.3          | Elk Fork               | 506817_00         | 5100101 | Morgan  |           |    | NS                |       |                       |                 | Pathogens  | Unknown  |
| Ohio River Tr                   | ihutaries           |                        | 1                 |         |         |           |    |                   |       |                       |                 |  |  |
| Allen Fork                      | 2.0 to 4.6          | Woolper<br>Crk         | 485869_00         | 5090203 | Boone   | PS        |    |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.   | Habitat Mod-not Hydro,<br>Urban Stormwater   |

|                    |                     |                        |                 |         |          |           |   | Desig              | nated | Uses                  |                 |  |  |
|--------------------|---------------------|------------------------|-----------------|---------|----------|-----------|---|--------------------|-------|-----------------------|-----------------|--|--|
|                    |                     |                        |                 |         |          | Aqu<br>Li |   | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County   | BIO       | й | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Big Sugar<br>Creek | 0.7 to 2.0          | Ohio River             | 487280_01       | 5090203 | Gallatin | PS        |   |                    |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                       | Hwy/Rd/Brdg Runoff<br>(Non-Construction), Land<br>Clearance<br>(Devel./Redevelop.), Crop<br>Prod |
| Bracken Creek      | 2.8 to 11.0         | Ohio River             | 487783_01       | 5090201 | Bracken  | PS        |   |                    |       |                       |                 | Nutrient/Eutroph.  | Animal Feed. Op.'s,<br>Grazing-Riparian Zones,<br>Crop Prod                                      |
| Briery Branch      | 0.2 to 2.2          | Ohio River             | 487905_01       | 5090201 | Lewis    | PS        |   |                    |       |                       |                 | Nutrient/Eutroph.  | Grazing-Riparian Zones,<br>Crop Prod , Rural<br>(Residential Areas)                              |
| Brush Creek        | 0.0 to 1.6          | Twelve<br>Mile Creek   | 488069_00       | 5090201 | Campbell |           |   | NS                 |       |                       |                 | Pathogens  | Municipal Point Sources  |
| Cabin Creek        | 3.6 to 11.3         | Ohio River             | 488566_00       | 5090201 | Mason    | NS        |   |                    |       |                       |                 | Sediment/Siltation   | Agriculture, Habitat Mod-<br>not Hydro   |
| Clary Branch       | 0.0 to 1.9          | Salt Lick<br>Crk       | 489562_01       | 5090201 | Lewis    |           |   |                    |       |                       |                 | Sediment/Siltation   | Dredging , Hwy /Rd/Brdg<br>Runoff (Nonconstr), Runoff<br>fr. Forest/Grassland<br>/Parkland       |
| Dry Creek          | 0.2 to 7.0          | Ohio River             | 491168_00       | 5090203 | Boone    | PS        |   |                    |       |                       |                 | Nutr/Eutroph,<br>Org.Enrich.<br>(Sewage)                             | Municipal Pt. Source<br>Dischrge, Agriculture,<br>Urban Stormwater                               |
| Dry Creek          | 1.1 to 3.0          | Ohio River             | 491178_00       | 5090203 | Gallatin | PS        |   |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod               |

|                                |                           |                             |                        |         |                |           |    | Desig              | nated | Uses                  |                 |   |   |
|--------------------------------|---------------------------|-----------------------------|------------------------|---------|----------------|-----------|----|--------------------|-------|-----------------------|-----------------|---|---|
|                                |                           |                             |                        |         |                | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name              | Impaired<br>Segment       | Receiving<br>Waterbody      | Waterbody<br>ID        | HUC 8   | County         | BIO       | õм | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Fourmile<br>Creek              | 0.2 to 8.5                | Ohio River                  | 492390_01              | 5090201 | Campbell       |           |    | NS                 |       |                       |                 | Pathogens   | Municipal Pt. Source<br>Dischrge, SSO/Collect Sys<br>Failure  |
| Goose Creek                    | 0.0 to 1.9                | Locust Crk                  | 493006_00              | 5090201 | Bracken        | PS        |    |                    |       |                       |                 | Unknown   | Surface Mining, Natr'l<br>Sources   |
| Gunpowder<br>Creek             | 0.0 to 15.4               | Ohio River                  | 493502_01              | 5090203 | Boone          | NS        |    |                    |       |                       |                 | Sediment/Siltation  | Land Clearance (Devel./Redevelop.)  |
| Gunpowder<br>Creek             | 15.4 to<br>17.1           | Ohio River                  | 493502_02              | 5090203 | Boone          | NS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient /Eutroph.,<br>Org.Enrich.<br>(Sewage)               | Hwy/Rd/Brdg Runoff ,<br>Riparian Habitat Loss, Land<br>Clearance, Strmbank<br>Mod/Destable., Agriculture,<br>Urban Stormwater |
| Gunpowder<br>Creek             | 18.9 to 21.6              | Ohio River                  | 493502_03              | 5090203 | Boone          | PS        |    |                    |       |                       |                 | Unknown   | Urban Stormwater  |
| Laurel Fork                    | 5.8 to 15.9               | Kinniconick<br>Crk          | 513259_01              | 5090201 | Lewis          | PS        |    |                    |       |                       |                 | Sediment/Siltation,<br>Turbidity, Nutrient<br>/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Dredging , Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod , Silviculture,<br>Dischrge./Unsewered Areas                        |
| Locust Creek                   | 0.0 to 4.1                | Ohio River                  | 496941_01              | 5090201 | Bracken        |           |    | NS                 |       |                       |                 | Pathogens   | Unknown   |
| Locust Creek  Montgomery Creek | 4.1 to 12.2<br>0.0 to 6.5 | Ohio River  Kinniconick Crk | 496941_02<br>498512_01 | 5090201 | Bracken  Lewis | NS<br>PS  |    |                    |       |                       |                 | Unknown  Sediment/Siltation, Nutrient/Eutroph., Org.Enrich. (Sewage)                | Unknown Dredging , Grazing- Riparian Zones, Land Clearance (Devel./Redevelop.), Crop Prod , Sewage Dischrge./Unsewered Areas  |

|                                |                          |                                  |                        |                    |                |           |    | Desig       | nated | Uses                  |                 |  |   |
|--------------------------------|--------------------------|----------------------------------|------------------------|--------------------|----------------|-----------|----|-------------|-------|-----------------------|-----------------|--|---|
|                                |                          |                                  |                        |                    |                | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name              | Impaired<br>Segment      | Receiving<br>Waterbody           | Waterbody<br>ID        | HUC 8              | County         | BIO       | WQ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Salt Lick Creek                | 0.2 to 7.2               | Ohio River                       | 502828_01              | 5090201            | Lewis          | PS        |    |             |       |                       |                 | Sediment/Siltation,  | Hwy/Rd/Brdg Runoff (Non-Constr), Riparian Habitat Loss, Impervious Surface/Parking Lot, Intro. Non-Native Organisms (Accident/Intent.), Runoff fr. Forest/Grassland /Parkland |
| Snag Creek                     | 0.5 to 5.5               | Ohio River                       | 503833_00              | 5090201            | Bracken        |           |    | NS          |       |                       |                 | Pathogens  | Unknown   |
| South Fork<br>Gunpowder<br>Crk | 0.0 to 2.0               | Gunpowder<br>Creek               | 503926_01              | 5090203            | Boone          | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Turbidity,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Package Plant/Other Small<br>Dischrge., Post-Devel.<br>Erosion/Sediment., Land<br>Clearance<br>(Devel./Redevelop.),<br>Agriculture  |
| South Fork<br>Gunpowder<br>Crk | 4.1 to 6.8               | Gunpowder<br>Creek               | 503926_02              | 5090203            | Boone          |           |    | NS          |       |                       |                 | Pathogens  | Unknown   |
| Tenmile Creek                  | 0.1 to 1.2               | Ohio River                       | 505071_01              | 5090201            | Campbell       | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.   | Land Clearance, Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod  |
| Trace Creek Woolper Creek      | 0.2 to 4.6<br>2.8 to 7.2 | Kinniconick<br>Crk<br>Ohio River | 505424_01<br>485711_01 | 5090201<br>5090203 | Lewis<br>Boone | PS        |    | NS          |       |                       |                 | Sediment/Siltation, Nutrient/Eutroph., Org.Enrich. (Sewage) Pathogens              | Dredging, Grazing/Riparian/ Shoreline, Illegal Waste Dumps, Crop Prod , Silviculture, Sewage Dischrge/Unsewered Agriculture   |

|                   |                     |                        |                 |         |        |           |    | Desig       | nated | Uses                  |                 |   |  |
|-------------------|---------------------|------------------------|-----------------|---------|--------|-----------|----|-------------|-------|-----------------------|-----------------|---|--|
|                   |                     |                        |                 |         |        | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County | BIO       | МQ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Woolper Creek     | 11.9 to<br>14.0     | Ohio River             | 485711_02       | 5090203 | Boone  | NS        |    | NS          |       |                       |                 | Pathogens, TSS,<br>Nutrient /Eutroph.,<br>Org.Enrich.<br>(Sewage),<br>Unknown | Illegal/Inappropriate Waste<br>Disposal, Impacts fr.<br>Hydrostructure Flow<br>Reg/Mod, Urban<br>Runoff/Storm Sewers |

| Salt River Bas       | sin          |                   |                            |         |           |    |    |    |                                     |   |
|----------------------|--------------|-------------------|----------------------------|---------|-----------|----|----|----|-------------------------------------|---|
| Beargrass<br>Creek   | 0.5 to 1.8   | Ohio River        | 486584_00                  | 5140101 | Jefferson | NS |    |    | Cadmium,<br>Org.Enrich.<br>(Sewage) | Landfills, Municipal Pt.<br>Source Dischrge,<br>CSO/SSO/Collect Sys<br>Failure, Urban Stormwater        |
| Beech Creek          | 4.6 to 19.6  | Salt River        | 486700_01                  | 5140102 | Shelby    |    | NS | NS | Pathogens                           | Unknown   |
| Beech Fork           | 39.5 to 50.4 | Rolling<br>Fork   | 486703_02                  | 5140103 | Nelson    |    | NS |    | Pathogens                           | Agriculture   |
| Big South Fork       | 0.0 to 12.4  | Rolling<br>Fork   | 487258_01                  | 5140103 | Marion    |    | NS |    | Pathogens                           | Grazing-Riparian Zones  |
| Blue Spring<br>Ditch | 0.0 to 2.1   | Northern<br>Ditch | 501047-1.9-<br>15.0-5.1_01 | 5140102 | Jefferson |    | NS |    | Pathogens                           | Illegal/Inappropriate Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers |
| Brashears<br>Creek   | 0.0 to 13.0  | Salt River        | 487840_01                  | 5140102 | Spencer   |    | NS |    | Pathogens                           | Unknown   |
| Brooks Run           | 0.0 to 2.5   | Floyds Fork       | 487968_01                  | 5140101 | Bullitt   | NS |    |    | Org.Enrich.<br>(Sewage)             | Municipal Pt. Source<br>Dischrge  |

|                       |                     |                        |                 |         |            |           |    | Desig       | nated | Uses                  |                 |   |  |
|-----------------------|---------------------|------------------------|-----------------|---------|------------|-----------|----|-------------|-------|-----------------------|-----------------|---|--|
|                       |                     |                        |                 |         |            | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name     | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO       | ОM | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Brooks Run            | 2.5 to 4.1          | Floyds Fork            | 487968_02       | 5140102 | Bullitt    | PS        | PS | PS          |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                   | Municipal Pt. Source<br>Dischrge   |
| Brooks Run            | 4.1 to 6.1          | Floyds Fork            | 487968_03       | 5140102 | Bullitt    | PS        | PS | NS          |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                   | Municipal Pt. Source<br>Dischrge   |
| Bullitt Lick<br>Creek | 0.0 to 2.3          | Salt River             | 488374_00       | 5140102 | Bullitt    | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Turbidity                        | Riparian Habitat Loss, Post-<br>Devel. Erosion/Sediment.,<br>Land Clearance  |
| Cartwright<br>Creek   | 0.0 to 6.6          | Beech Fork             | 489030_01       | 5140103 | Washington | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph., | Riparian Habitat Loss,<br>Agriculture  |
| Cartwright<br>Creek   | 6.6 to 12.6         | Beech Fork             | 489030_02       | 5140103 | Washington | PS        |    |             |       |                       |                 | Unknown   | Unknown  |
| Chaplin River         | 0.0 to 23.1         | Beech Fork             | 489350_01       | 5140103 | Nelson     |           |    | NS          |       |                       |                 | Pathogens   | Unknown  |
| Chaplin River         | 63.0 to 69.7        | Beech Fork             | 489350_04       | 5140103 | Mercer     | NS        |    |             |       |                       |                 | Unknown   | Unknown  |
| Cheese Lick           | 0.7 to 4.4          | Sulphur Crk            | 489380_01       | 5140103 | Anderson   | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                | Grazing-Riparian Zones,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.  |
| Chenoweth<br>Run      | 0.0 to 5.2          | Floyds Fork            | 489391_01       | 5140102 | Jefferson  | PS        | PS | NS          |       |                       |                 | Pathogens   | Landfills, Municipal Pt. Source Dischrge, Package Plant/Other Small Dischrge., Livestock- Grazing/Feed. Op's, Urban Stormwater |

|                         |                     |                        |                 |         |            |           |    | Desig       | nated | Uses                  |                 |  |  |
|-------------------------|---------------------|------------------------|-----------------|---------|------------|-----------|----|-------------|-------|-----------------------|-----------------|--|--|
|                         |                     |                        |                 |         |            | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO       | ОМ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Chenoweth<br>Run        | 5.2 to 9.2          | Floyds Fork            | 489391_02       | 5140102 | Jefferson  |           |    | NS          |       |                       |                 | Pathogens  | Municipal Pt. Source<br>Dischrge, Stormwater,<br>Livestock   |
| Chickasaw<br>Park Pond  | 1.5 acres           | N/A                    | DOW015_00       | 5140101 | Jefferson  |           |    |             |       | PS                    |                 | Methyl mercury   | Unknown  |
| Clear Creek             | 0.0 to 4.4          | Rolling<br>Fork        | 489613_00       | 5140103 | Hardin     | NS        |    |             |       |                       |                 | Unknown  | Unknown  |
| Clear Creek             | 0.0 to 11.0         | Bullskin<br>Crk        | 489615_00       | 5140102 | Shelby     | NS        | NS |             |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                               | Livestock-Grazing/Feed.<br>Op's, Crop Prod , Urban<br>Stormwater   |
| Cox Creek               | 0.0 to 4.7          | Salt River             | 490220_01       | 5140102 | Bullitt    |           |    | PS          |       |                       |                 | Pathogens  | Unknown  |
| Cox Creek               | 11.2 to<br>15.5     | Salt River             | 490220_02       | 5140102 | Nelson     | PS        |    |             |       |                       |                 | Nutrient/Eutroph.,   | Confined Animal Feed.<br>Op.'s (CAFOS)   |
| Crooked Creek           | 5.6 to 12.8         | Rolling<br>Fork        | 490379_00       | 5140103 | Bullitt    | NS        |    |             |       |                       |                 | Unknown  | Unknown  |
| Currys Fork             | 0.0 to 4.8          | Floyds Fork            | 490506_01       | 5140102 | Oldham     | PS        |    | NS          |       |                       |                 | Sediment/Siltation<br>Pathogens  | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Municipal<br>(Urbanized High Density<br>Areas), Package<br>Plant/Other Small Dischrge. |
| Doe Run                 | 4.1 to 7.9          | Ohio River             | 490968_00       | 5140104 | Meade      |           |    | NS          |       |                       |                 | Pathogens  | Unknown  |
| East Fork<br>Beech Fork | 0.0 to 1.9          | Beech Fork             | 491439_01       | 5140103 | Washington | PS        |    |             |       |                       |                 | Unknown  | Unknown  |
| Fern Creek              | 0.0 to 1.3          | Northern<br>Ditch      | 492042_01       | 5140102 | Jefferson  |           | PS | NS          |       |                       |                 | Ammonia (Union), Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Landfills, Municipal Pt.<br>Source Dischrge, Urban<br>Stormwater   |

|                   |                     |                        |                 |         |            |           |    | Desig       | nated | Uses                  |                 |                                       |  |
|-------------------|---------------------|------------------------|-----------------|---------|------------|-----------|----|-------------|-------|-----------------------|-----------------|---------------------------------------|--|
|                   |                     |                        |                 |         |            | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                       |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO       | õм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments                           | Sources  |
| Fern Creek        | 1.3 to 4.4          | Northern<br>Ditch      | 492042_02       | 5140102 | Jefferson  |           | NS | NS          |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage) | Illegal/Inappropriate Waste<br>Disposal, Landfills,<br>Municipal Pt. Source<br>Dischrge, Urban<br>Runoff/Storm Sewers  |
| Fern Creek        | 4.4 to 5.9          | Northern<br>Ditch      | 492042_03       | 5140102 | Jefferson  |           | PS | NS          |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage) | Illegal/Inappropriate Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers  |
| Floyds Fork       | 0.0 to 11.6         | Salt River             | 492278_01       | 5140102 | Bullitt    |           |    | NS          |       |                       |                 | Pathogens                             | Unknown  |
| Floyds Fork       | 11.6 to 24.2        | Salt River             | 492278_02       | 5140102 | Jefferson  |           |    | NS          |       |                       |                 | Pathogens                             | Municipal Pt. Source Dischrge, Package Plant/Other Small Dischrge, Urban Runoff/Storm Sewers   |
| Floyds Fork       | 24.2 to<br>34.1     | Salt River             | 492278_03       | 5140103 | Jefferson  | NS        |    | PS          |       |                       |                 | Pathogens<br>Sediment/Siltation       | Municipal Point Source Discharges; Package Plant or Other Permitted Small Flows Discharges; Agriculture; Urban Runoff/Storm Sewers; Site Clearance (Land Development or Redevelopment) |
| Floyds Fork       | 34.1 to 61.9        | Salt River             | 492278_04       | 5140102 | Shelby     | PS        |    |             |       |                       |                 | Sediment/Siltation                    | Municipal (Urbanized High<br>Density Areas), Wet<br>Weather Dischrge (Pt and<br>Non-Pt)  |
| Glens Creek       | 0.0 to 4.8          | Chaplin R.             | 492904_01       | 5140103 | Washington | PS        |    |             |       |                       |                 | Sediment/Siltation                    | Strmbank Mod/Destable.   |

|                     |                     |                        |                 |         |              |           |    | Desig       | nated | Uses                  |                 |  |   |
|---------------------|---------------------|------------------------|-----------------|---------|--------------|-----------|----|-------------|-------|-----------------------|-----------------|--|---|
|                     |                     |                        |                 |         |              | Aqu<br>Li |    | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County       | BIO       | ОМ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Goose Creek         | 0.3 to 3.6          | Ohio River             | 493014_01       | 5140101 | Jefferson    |           | PS | NS          |       |                       |                 | Cadmium,<br>Pathogens,<br>Org.Enrich.<br>(Sewage)  | Illegal/Inapp. Waste<br>Disposal, Indus. Pt. Source<br>Dischrge, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers |
| Goose Creek         | 3.6 to 13.0         | Ohio River             | 493014_02       | 5140101 | Jefferson    |           | PS | NS          |       |                       |                 | Cadmium,<br>Pathogens,<br>Org.Enrich.<br>(Sewage)  | Unknown   |
| Guist Creek         | 15.4 to 27.6        | Brashears<br>Crk       | 493463_02       | 5140102 | Shelby       | PS        | PS |             |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)   | Upstream Impound.,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod, Urban<br>Stormwater   |
| Guist Creek<br>Lake | 317 acres           | N/A                    | 493464_00       | 5140102 | Shelby       |           | NS |             |       | PS                    | PS              | Manganese,<br>Methyl mercury,<br>Diss. Oxygen,<br>Nutrient/ Eutroph.,<br>Org.Enrich<br>(Sewage), Diss.Gas<br>Supersat. | Atmospheric Depositions-<br>Toxics, Septic<br>Tanks/Decentral. Systems,<br>Unknown, Natr'l Sources,<br>Agriculture, Rural       |
| Hardins Creek       | 0.0 to 5.0          | Sinking Crk            | 493728_01       | 5140104 | Breckinridge | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.   | Pasture Grazing, Non-Irrig<br>Crop Prod   |
| Hardins Creek       | 5.2 to 11.4         | Sinking Crk            | 493728_02       | 5140104 | Breckinridge | PS        |    |             |       |                       |                 | Org.Enrich.<br>(Sewage)  | Municipal Pt. Source<br>Dischrge  |

|                   |                     |                              |                 |         |           |           |    | Desig             | nated | Uses                  |                 |  |  |
|-------------------|---------------------|------------------------------|-----------------|---------|-----------|-----------|----|-------------------|-------|-----------------------|-----------------|--|--|
|                   |                     |                              |                 |         |           | Aqu<br>Lį |    | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody       | Waterbody<br>ID | HUC 8   | County    | BIO       | ãм | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                                    | Sources  |
| Hardins Creek     | 13.3 to 22.9        | Beech Fork                   | 493729_02       | 5140103 | Marion    | PS        |    |                   |       |                       |                 | Nitrate/Nitrite as<br>N, Phosphorus<br>(Total) | Grazing-Riparian Zones,<br>Riparian Habitat Loss,<br>Manure Runoff, Intro. Non-<br>Native Organisms<br>(Accident/Intent.)                    |
| Hardy Creek       | 0.0 to 1.4          | Little<br>Kentucky<br>River  | 493737_01       | 5140101 | Trimble   | NS        |    |                   |       |                       |                 | Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage)  | Grazing-Riparian Zones, Hwy/Rd/Brdg Runoff (Non-Constr), Riparian Habitat Loss, Strmbank Mod/Destable., Crop Prod, Urban Runoff/Storm Sewers |
| Hardy Creek       | 1.6 to 5.6          | Little<br>Kentucky<br>River  | 493737_02       | 5140101 | Trimble   | PS        |    |                   |       |                       |                 | Unknown  | Dredging , Unknown   |
| Harrods Creek     | 0.0 to 3.2          | Ohio River                   | 493826_01       | 5140101 | Oldham    |           |    | PS                |       |                       |                 | Pathogens                                      | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Package<br>Plant/Other Small Dischrge.   |
| Harrods Creek     | 3.2 to 33.3         | Ohio River                   | 493826_02       | 5140101 | Oldham    |           |    | PS                |       |                       |                 | Pathogens                                      | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Municipal<br>(Urbanized High Density<br>Areas), Package<br>Plant/Other Small Dischrge.                   |
| Hayden Creek      | 0.0 to 1.3          | Chaplin<br>River             | 493903_01       | 5140103 | Mercer    | NS        |    |                   |       |                       |                 | Other  | Unknown  |
| Hite Creek        | 0.0 to 5.5          | South Fork<br>Harrods<br>Crk | 494393_00       | 5140101 | Jefferson | NS        |    |                   |       |                       |                 | Unknown  | Municipal Pt. Source<br>Dischrge   |

|                             |                     |                          |                 |         |              |           |    | Desig       | nated | Uses                  |                 |   |  |
|-----------------------------|---------------------|--------------------------|-----------------|---------|--------------|-----------|----|-------------|-------|-----------------------|-----------------|---|--|
|                             |                     |                          |                 |         |              | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County       | BIO       | ãм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Jeptha Creek                | 0.0 to 0.7          | Guist Crk                | 495221_00       | 5140102 | Shelby       | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Livestock-Grazing/Feed.<br>Op's, Crop Prod   |
| Jones Creek                 | 0.0 to 3.9          | North<br>Rolling<br>Fork | 495492_00       | 5140103 | Marion       | PS        |    |             |       |                       |                 | Unknown   | Unknown  |
| Lake Jericho                | 137 acres           | N/A                      | 495230_00       | 5140101 | Henry        |           | NS |             |       |                       |                 | Oxygen - Diss,<br>Nutrient/Eutroph.,<br>Diss. Gas Supersat. | Livestock-Grazing/Feed.<br>Op's, Crop Prod ,<br>Agriculture  |
| Lick Run<br>Creek           | 0.0 to 3.5          | Ohio River               | 513414_00       | 5140104 | Breckinridge | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Pasture Grazing, Non-Irrig<br>Crop Prod, Crop Prod   |
| Little Goose<br>Creek       | 0.0 to 9.2          | Goose Crk                | 496745_00       | 5140101 | Jefferson    |           |    | PS          |       |                       |                 | Pathogens   | Urban Runoff/Storm<br>Sewers   |
| Little<br>Kentucky<br>River | 21.0 to 27.0        | Ohio River               | 496778_02       | 5140101 | Henry        | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Livestock-Grazing/Feed.<br>Op's, Crop Prod   |
| Logan Run                   | 0.0 to 2.3          | Fleming<br>Creek         | 496986_00       | 5100101 | Fleming      | NS        |    |             |       |                       |                 | Nutrient/Eutroph  | Agriculture  |
| Long Lick<br>Creek          | 0.0 to 10.5         | Salt River               | 497124_01       | 5140102 | Bullitt      | NS        |    |             |       |                       |                 | Sediment/Siltation  | Grazing-Riparian Zones,<br>Riparian Habitat Loss,<br>Strmbank Mods.,<br>Livestock-Grazing/Feed.<br>Op's, Manure Runoff, Intro.<br>Non-Native Organisms<br>(Accident/Intent.) |
| Long Run                    | 0.0 to 10.0         | Floyds Fork              | 497142_00       | 5140102 | Jefferson    |           |    | NS          |       |                       |                 | Pathogens   | Landfills, Municipal Pt.<br>Source Dischrge,<br>Livestock-Grazing/Feed.<br>Op's, Urban Stormwater  |

|                                   |                     |                             |                 |         |           |           |    | Desig       | nated | Uses                  |                 |  |  |
|-----------------------------------|---------------------|-----------------------------|-----------------|---------|-----------|-----------|----|-------------|-------|-----------------------|-----------------|--|--|
|                                   |                     |                             |                 |         |           | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                 | Impaired<br>Segment | Receiving<br>Waterbody      | Waterbody<br>ID | HUC 8   | County    | BIO       | Õм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| McNeely Lake                      | 51 acres            | N/A                         | 497757_00       | 5140102 | Jefferson |           |    |             |       | PS                    |                 | Methyl mercury   | Air Deposition - Toxics,<br>Unknown  |
| Mellins Branch                    | 0.0 to 1.5          | Little<br>Kentucky<br>River | 496047_01       | 5140101 | Carroll   | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                     | Grazing-Riparian Zones,<br>Land Clearance<br>(Devel./Redevelop.), Crop<br>Prod   |
| Middle Fk<br>Beargrass<br>Creek   | 5.8 to 15.3         | Beargrass<br>Crk            | 498112_04       | 5140101 | Jefferson |           | PS | NS          |       |                       |                 | Cadmium,<br>Pathogens  | Illegal/Inappropriate Waste<br>Disposal, SSO/Collect Sys<br>Failure, Urban<br>Runoff/Storm Sewers                                      |
| Middle Fork<br>Beargrass<br>Creek | 0.0 to 2.0          | Beargrass<br>Crk            | 498112_01       | 5140101 | Jefferson |           | NS | NS          |       |                       |                 | Cadmium,<br>Pathogens,<br>Org.Enrich.<br>(Sewage)            | Channelization,<br>SSO/Collect Sys Failure,<br>Urban Runoff/Storm<br>Sewers  |
| Middle Fork<br>Beargrass<br>Creek | 2.0 to 2.9          | Beargrass<br>Crk            | 498112_02       | 5140101 | Jefferson |           | PS | NS          |       |                       |                 | Cadmium,<br>Pathogens  | Combined Sewer Overflows, Landfills, Municipal Pt. Source Dischrge, Urban Stormwater   |
| Middle Fork<br>Beargrass<br>Creek | 2.9 to 5.8          | Beargrass<br>Crk            | 498112_03       | 5140101 | Jefferson |           | PS | NS          |       |                       |                 | Cadmium,<br>Pathogens  | Illegal/Inappropriate Waste<br>Disposal, SSO/Collect Sys<br>Failure, Urban<br>Runoff/Storm Sewers                                      |
| Mill Creek                        | 0.0 to 11.2         | Ohio River                  | 498268_00       | 5140101 | Jefferson |           | NS | NS          |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Org.Enrich.<br>(Sewage) | Illegal/Inappropriate Waste<br>Disposal, Indus. Pt. Source<br>Dischrge, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers |

|                                  |                     |                        |                        |         |           |           |    | Desig | gnated              | Uses                  |                 |  |   |
|----------------------------------|---------------------|------------------------|------------------------|---------|-----------|-----------|----|-------|---------------------|-----------------------|-----------------|--|---|
|                                  |                     |                        |                        |         |           | Aqu<br>Li |    | Rec   | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID        | HUC 8   | County    | BIO       | ОM | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Mill Creek<br>Cutoff             | 0.0 to 6.7          | Ohio River             | 498275_01              | 5140101 | Jefferson |           |    | NS    |                     |                       |                 | Pathogens  | Illegal/Inappropriate Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers   |
| Muddy Fork<br>Beargrass<br>Creek | 0.0 to 6.9          | Beargrass<br>Crk       | 499042_00              | 5140101 | Jefferson |           |    | NS    |                     |                       |                 | Pathogens  | Landfills, Municipal Pt.<br>Source Dischrge, Urban<br>Stormwater  |
| Northern Ditch                   | 0.0 to 7.3          | Southern<br>Ditch      | 501047-1.9-<br>15.0_01 | 5140102 | Jefferson |           | PS | NS    |                     |                       |                 | Ammonia (Unionized), Pathogens, Org.Enrich. (Sewage) | Illegal/Inappropriate Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers   |
| Otter Creek                      | 0.0 to 2.9          | Rolling<br>Fork        | 500024_01              | 5140103 | Larue     |           |    | PS    |                     |                       |                 | Pathogens  | Unknown   |
| Otter Creek                      | 0.0 to 10.7         | Ohio River             | 500026_00              | 5140104 | Meade     |           |    | PS    |                     |                       |                 | Pathogens  | Landfills, Municipal Pt.<br>Source Dischrge,<br>Livestock-Grazing/Feed.<br>Op's, Urban Stormwater   |
| Pennsylvania<br>Run              | 0.0 to 3.3          | Floyds Fork            | 500387_01              | 5140102 | Jefferson | NS        |    | NS    |                     |                       |                 | Sediment/Siltation,<br>Pathogens                     | Dredging, Illegal Waste Dumps, Rip Hab Loss, Mun. Pt. Source Dischrge, Strmbank Mod /Destabal, Upstream Impound, Urban Runoff/Storm Sewers, Runoff/ Forest/Grass/Park |

|                                 |                     |                        |                 |         |            |           |                 | Desig              | nated | Uses                  |                 |   |   |
|---------------------------------|---------------------|------------------------|-----------------|---------|------------|-----------|-----------------|--------------------|-------|-----------------------|-----------------|---|---|
|                                 |                     |                        |                 |         |            | Aqu<br>Li |                 | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO       | $\tilde{o}_{M}$ | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Pleasant Run                    | 4.2 to 6.9          | Beech Fork             | 500907_01       | 5140103 | Washington | PS        |                 |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                | Grazing in Riparian, Imp fr<br>Hydrostructure Flow<br>Reg/Mod, Riparian Habitat<br>Loss, Strmbank<br>Mod/Destab, Manure<br>Runoff |
| Plum Creek                      | 0.0 to 17.8         | Salt River             | 500965_01       | 5140102 | Spencer    | NS        |                 |                    |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                | Land Clearance, Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod , Agriculture  |
| Pond Creek                      | 0.0 to 1.5          | Ohio River             | 501047_00       | 5140101 | Oldham     | PS        |                 |                    |       |                       |                 | Chlorine,<br>Org.Enrich.<br>(Sewage)                    | Municipal Pt. Source<br>Dischrge  |
| Pond<br>Creek/Southern<br>Ditch | 5.1 to 8.1          | Salt River             | 501046_01       | 5140102 | Jefferson  | NS        | NS              | NS                 |       |                       |                 | Ammonia (Union.), Pathogens,<br>Org.Enrich.<br>(Sewage) | Septic Tanks/Decentral. Systems Package Plant/Other Small Dischrge., Urban Stormwater   |
| Pond<br>Creek/Southern<br>Ditch | 14.7 to<br>16.1     | Salt River             | 501046_02       | 5140102 | Jefferson  |           |                 | NS                 |       |                       |                 | Pathogens   | Urban Stormwater  |
| Pope Lick<br>Creek              | 2.0 to 5.2          | Floyds Fork            | 501089_00       | 5140102 | Jefferson  |           |                 | NS                 |       |                       |                 | Pathogens   | Landfills, Municipal Pt.<br>Source Dischrge, Urban<br>Stormwater  |

|                          |                           |                                 |                        |                    |                   |           |    | Desig              | nated | Uses                  |                 |  |   |
|--------------------------|---------------------------|---------------------------------|------------------------|--------------------|-------------------|-----------|----|--------------------|-------|-----------------------|-----------------|--|---|
|                          |                           |                                 |                        |                    |                   | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name        | Impaired<br>Segment       | Receiving<br>Waterbody          | Waterbody<br>ID        | HUC 8              | County            | BIO       | ОM | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Road Run<br>Rolling Fork | 0.0 to 7.1<br>0.0 to 40.7 | Cartwright<br>Crk<br>Salt River | 502031_01<br>502293_01 | 5140103<br>5140103 | Washington  Larue | PS        |    | NS                 |       |                       |                 | Phosphorus (Total) Pathogens   | Hydrostructure Flow<br>Reg/Mod, Riparian Habitat<br>Loss, Municipal Pt. Source<br>Dischrge, Strmbank<br>Mod/Destable., Imperv.<br>Surface/Parking Lot, Urban<br>Runoff/Storm Sewers |
| Rolling Fork             | 11.9 to                   | San River                       | 302293_01              | 3140103            | Larue             |           |    | No                 |       |                       |                 | Methyl mercury,  | Ulkilowii   |
| Salt River               | 26.2                      | Ohio River                      | 502830_01              | 5140102            | Bullitt           |           |    | NS                 |       | PS                    |                 | Pathogens  | Unknown   |
| Salt River               | 78.0 to<br>89.0           | Ohio River                      | 502830_05              | 5140102            | Anderson          |           |    |                    |       | NS                    |                 | Methyl mercury   | Atmospheric Depositions-<br>Toxics, Unknown   |
| Shelby Lake              | 17 acres                  | N/A                             | 503322_00              | 5140102            | Shelby            |           | PS |                    |       |                       |                 | Nutrient/Eutroph.  | Internal Nutrient Recycling,<br>Agriculture   |
| Short Creek              | 0.0 to 5.0                | Beech Fork                      | 503442_01              | 5140103            | Washington        | PS        |    |                    |       |                       |                 | Unknown  | Crop Prod w/Subsurface<br>Drainage, Wetland<br>Alterations, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Unknown,<br>Crop Prod  |
| Sinking Creek            | 8.7 to 15.4               | Ohio River                      | 515434_02              | 5140104            | Breckinridge      | PS        | PS | NS                 |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Agriculture,<br>Habitat Mod-not Hydro   |
| Sinking Creek            | 15.4 to 39.7              | Ohio River                      | 515434_03              | 5140104            | Breckinridge      |           |    | PS                 |       |                       |                 | Pathogens  | Municipal Point Sources,<br>Agriculture   |

|                                  |                     |                        |                    |         |           | Designated Uses |    |             |      |                       |                 |  |   |
|----------------------------------|---------------------|------------------------|--------------------|---------|-----------|-----------------|----|-------------|------|-----------------------|-----------------|--|---|
|                                  |                     |                        |                    |         |           | Aqu<br>Li       |    | Con<br>Reci | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID    | HUC 8   | County    | BIO             | бм | PCR         | SCR  | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| South Fork<br>Beargrass<br>Creek | 0.0 to 2.7          | Beargrass<br>Crk       | 503905_01          | 5140101 | Jefferson |                 | PS | NS          |      |                       |                 | Cadmium,<br>Pathogens,<br>Org.Enrich.<br>(Sewage)                | Illegal/Inapprop. Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers   |
| South Fork<br>Beargrass<br>Creek | 2.7 to 13.6         | Beargrass<br>Crk       | 503905_02          | 5140101 | Jefferson |                 | PS | NS          |      |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                            | Illegal/Inapprop. Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers   |
| Southern Ditch                   | 0.0 to 5.9          | Pond Crk               | 501047-<br>15.0_01 | 5140102 | Jefferson |                 |    | NS          |      |                       |                 | Pathogens  | Illegal/Inappropriate Waste<br>Disposal, Municipal Pt.<br>Source Dischrge, Urban<br>Runoff/Storm Sewers   |
| Sulphur Creek                    | 0.0 to 10.0         | Chaplin<br>River       | 504729_01          | 5140103 | Anderson  |                 |    | PS          |      |                       |                 | Pathogens  | Unknown   |
| Taylorsville<br>Lake             | 3050 acres          | N/A                    | CLN141_00          | 5140102 | Spencer   |                 | PS |             |      | PS                    |                 | Methyl mercury,<br>Oxygen -<br>Dissolved, Diss.<br>Gas Supersat. | Municipal Pt. Source Dischrge, Unknown, Livestock-Grazing/Feed. Op's, Upstream Source, Agriculture  |
| Thompson<br>Creek                | 0.0 to 9.2          | Chaplin<br>River       | 505206_01          | 5140103 | Mercer    | PS              |    |             |      |                       |                 | Sediment/Siltation   | Riparian Habitat Loss,<br>Strmbank Mod/Destable.  |
| Tioga Creek                      | 0.0 to 2.5          | Abrahams<br>Run        | 505301_01          | 5140104 | Hardin    | PS              |    |             |      |                       |                 | Sediment/Siltation   | Hwy/Rd/Brdg Runoff<br>(Non-Constr), NPS<br>Pollution fr. Military Base<br>Facilities (Other than Port<br>Facilities), Residential<br>Districts, Upstream Source |

|                           |                     |                        |                     |         |          |           |    | Desig       | nated | Uses                  |                 |  |  |
|---------------------------|---------------------|------------------------|---------------------|---------|----------|-----------|----|-------------|-------|-----------------------|-----------------|--|--|
|                           |                     |                        |                     |         |          | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name         | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID     | HUC 8   | County   | BIO       | Õм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| UT Pond Creek             | 0.0 to 0.5          | Pond Crk               | 501047-<br>1.5_01   | 5140101 | Oldham   | NS        |    |             |       |                       |                 | Chlorine,<br>Org.Enrich.<br>(Sewage)                                       | Package Plant/Other Small Dischrge.  |
| UT to Brooks<br>Run       | 0.0 to 2            | Brooks Run             | 487968-<br>4.3_01   | 5140102 | Bullitt  | NS        | NS | NS          |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                                      | Package Plant/Other Small<br>Dischrge., Urban<br>Runoff/Storm Sewers   |
| UT to Buffalo<br>Run      | 0.0 to 1.1          | Buffalo<br>Run         | 488333-<br>1.6_01   | 5140102 | Bullitt  | NS        |    |             |       |                       |                 | Sediment/Siltation   | Channelization, Hwy/Rd/Brdg Runoff (Non-Constr), Riparian Habitat Loss, Imperv. Surface /Parking Lot, Urban Stormwater, Urban Runoff/Storm Sewers  |
| UT to<br>Hammond<br>Creek | 0.0 to 1.8          | Hammond<br>Crk         | 493640-<br>5.2_01   | 5140102 | Anderson | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Total Kjeldahl<br>Nitrogen,<br>Nitrate/Nitrite as N | Grazing-Riparian Zones,<br>Impacts fr. Hydrostructure<br>Flow Reg/Mod, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Upstream<br>Impound., Livestock-Feed.<br>Op's, Manure Runoff |
| UT to Salt<br>River       | 0.0 to 2.4          | Salt River             | 502830-<br>124.5_01 | 5140102 | Mercer   | PS        |    |             |       |                       |                 | Sediment/Siltation   | Grazing-Riparian Zones,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Livestock-Feed. Op's,<br>Manure Runoff   |

|                                   |                     |                        |                        |         |            |           |    | Desig              | nated | Uses                  |                 |   |   |
|-----------------------------------|---------------------|------------------------|------------------------|---------|------------|-----------|----|--------------------|-------|-----------------------|-----------------|---|---|
|                                   |                     |                        |                        |         |            | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                 | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID        | HUC 8   | County     | BIO       | õм | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| UT to Southern<br>Ditch           | 0.0 to 2.6          | Southern<br>Ditch      | DOW014-<br>1.1_01      | 5140102 | Jefferson  | NS        |    |                    |       |                       |                 | Sediment/Siltation  | Channelization, Comm. Districts, Hwy/Rd/Brdg Runoff, Riparian Habitat Loss, Package Plant, Impervious Surface, Urban Runoff, Intro Non-Native Org's (Accidental/ Intentional) |
| UT to UT to<br>Guist Creek        | 0.0 to 2.4          | UT to Guist<br>Crk     | 493463-<br>33.0-1.4_01 | 5140102 | Shelby     | PS        |    |                    |       |                       |                 | Sediment/Siltation  | Grazing-Riparian Zones,<br>Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's, Manure Runoff   |
| Wetwoods<br>Creek (Slop<br>Ditch) | 0.0 to 3.7          | Northern<br>Ditch      | 501047-<br>15.0-3.8_01 | 5140102 | Jefferson  |           | PS | NS                 |       |                       |                 | Cadmium,<br>Pathogens   | Indus. Pt. Source Dischrge,<br>Municipal Pt. Source<br>Dischrge, Urban<br>Runoff/Storm Sewers   |
| Willisburg<br>Lake                | 126 acres           | N/A                    | 506852_00              | 5140103 | Washington |           | PS |                    |       |                       |                 | Diss.Oxygen, Nut.<br>/Eutroph., Diss.Gas<br>Supersat.                       | Unknown, Upstream<br>Source   |
| Wilson Creek                      | 0.0 to 2.2          | Rolling<br>Fork        | 506901_01              | 5140103 | Bullitt    | NS        |    |                    |       |                       |                 | Oxygen -<br>Dissolved,<br>Sediment/Siltation,<br>Total Kjeldahl<br>Nitrogen | Comm. Districts (Indus.<br>Parks), Municipal<br>(Urbanized High Density<br>Areas), Impervious<br>Surface/Parking Lot, Urban<br>Runoff/Storm Sewers                            |
| Withrow Creek                     | 0.0 to 3.9          | Beech Fork             | 506974_01              | 5140103 | Nelson     | PS        |    |                    |       |                       |                 | Diss.Oxygen, Nut. /Eutroph.   | Spill Impacts   |

|                   |                     |                        |                 |         |              |           |    | Desig              | nated | Uses                  |                 |                     |  |
|-------------------|---------------------|------------------------|-----------------|---------|--------------|-----------|----|--------------------|-------|-----------------------|-----------------|---------------------|--|
|                   |                     |                        |                 |         |              | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                     |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County       | BIO       | бм | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments         | Sources                                      |
|                   |                     |                        | T               | 1       |              |           |    |                    |       |                       |                 |                     |  |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Animal Feed. Op.'s,                          |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Channel Erosion/Incision fr. Upstream Hydro, |
| Yellowbank        |                     |                        |                 |         |              |           |    |                    |       |                       |                 | Sediment/Siltation, | Strmbank Mod/Destable.,                      |
| Creek             | 1.5 to 12.0         | Ohio River             | 516507_01       | 5140104 | Breckinridge | PS        |    |                    |       |                       |                 | Nutrient/Eutroph.   | Livestock-Grazing                            |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Channelization, Riparian                     |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Habitat Loss, Municipal Pt.                  |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Source Dischrge, Strmbank                    |
|                   |                     |                        |                 |         |              |           |    |                    |       |                       |                 |                     | Mod/Destable., Livestock-                    |
|                   |                     | Rolling                |                 |         |              |           |    |                    |       |                       |                 | Sediment/Siltation, | Grazing/Feed. Op's,                          |
| Younger Creek     | 0.0 to 4.5          | Fork                   | 507254_01       | 5140103 | Hardin       | PS        |    |                    |       |                       |                 | Nutrient/Eutroph.   | Silviculture                                 |

|                    |                     |                           |                 |         |            |           |              | Desig             | nated | Uses                  |                 |   |   |
|--------------------|---------------------|---------------------------|-----------------|---------|------------|-----------|--------------|-------------------|-------|-----------------------|-----------------|---|---|
|                    |                     |                           |                 |         |            | Aqu<br>Li | ıatic<br>ife | Con<br>Rec<br>tio |       | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County     | BIO       | õм           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                                       | Sources                                       |
| Lower Cumbe        | arland River        | Rocin                     | ]               |         |            |           |              |                   |       |                       |                 |   |   |
| Casey Creek        | 0.0 to 3.6          | Little River              | 489043_00       | 5130205 | Trigg      | PS        |              |                   |       |                       |                 | Sediment/Siltation                                | Sources Outside State<br>Jurisdiction/Borders |
| Claylick Creek     | 2.0 to 4.8          | Cumberland<br>River       | 489591_01       | 5130205 | Crittenden |           |              | NS                |       |                       |                 | Pathogens   | Agriculture                                   |
| Donaldson<br>Creek | 4.5 to 9.3          | Cumberland<br>River       | 491000_02       | 5130205 | Trigg      | PS        |              |                   |       |                       |                 | Unknown   | Dredge Mining                                 |
| Dry Creek          | 4.9 to 7.4          | Cumberland<br>River       | 491170_00       | 5130205 | Trigg      | NS        |              |                   |       |                       |                 | Unknown   | Unknown                                       |
| Dry Creek          | 0.0 to 3.5          | Cumberland<br>River       | 491176_00       | 5130205 | Caldwell   | PS        |              |                   |       |                       |                 | Unknown   | Unknown                                       |
| Dry Fork<br>Creek  | 5.0 to 5.8          | Noah<br>Springs<br>Branch | 491216_00       | 5130206 | Christian  | NS        |              |                   |       |                       |                 | Sediment/Siltation                                | Unknown                                       |
| Eddy Creek         | 8.4 to 10.5         | Cumberland<br>River       | 491550_01       | 5130205 | Lyon       |           |              | NS                |       |                       |                 | Pathogens   | Unknown                                       |
| Eddy Creek         | 13.3 to<br>16.1     | Cumberland<br>River       | 491550_03       | 5130205 | Caldwell   | PS        |              |                   |       |                       |                 | Unknown   | Unknown                                       |
| Elk Fork           | 22.0 to<br>29.0     | Red River                 | 491660_02       | 5130206 | Todd       | NS        |              | PS                |       |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage),<br>Unknown | Municipal Pt. Source<br>Dischrge              |
| Ferguson<br>Creek  | 0.0 to 1.1          | Cumberland<br>River       | 492034_01       | 5130205 | Livingston |           |              | NS                |       |                       |                 | Pathogens   | Unknown                                       |
| Ferguson<br>Creek  | 1.1 to 2.2          | Cumberland<br>River       | 492034_02       | 5130205 | Livingston | PS        |              |                   |       |                       |                 | Unknown   | Unknown                                       |
| Hematite Lake      | 90 acres            | N/A                       | 494017_00       | 5130205 | Trigg      |           | NS           |                   |       |                       |                 | Nutrient/Eutroph.                                 | Natr'l Sources                                |

|                   |                     |                        |                 |         |            |     |              | Desig             | nated | Uses                  |                 |  |  |
|-------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------------|-------|-----------------------|-----------------|--|--|
|                   |                     |                        |                 |         |            | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | Õм           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Hickory Creek     | 0.0 to 3.8          | Cumberland<br>River    | 494122_00       | 5130205 | Livingston |     |              | NS                |       |                       |                 | Pathogens  | Unknown  |
|                   |                     | Muddy Fork<br>(Little  |                 |         |            |     |              | No                |       |                       |                 | -  |  |
| Kenady Creek      | 0.0 to 3.9          | River)                 | 495638_00       | 5130205 | Trigg      | PS  |              |                   |       |                       |                 | Unknown  | Unknown  |
| Little River      | 20.4 to 23.6        | Cumberland<br>River    | 496838_01       | 5130205 | Trigg      | NS  |              |                   |       |                       |                 | Unknown  | Dam Construction (Not<br>Upstream Flood Control<br>Projects), Impacts fr.<br>Hydrostructure Flow,<br>Unknown |
| Little River      | 23.6 to 33.1        | Cumberland<br>River    | 496838_02       | 5130205 | Trigg      | PS  | PS           |                   |       | PS                    |                 | Iron, Methyl<br>Mercury,<br>Sediment/Siltation,<br>Nutrient/Eutroph.               | Unknown  |
| Little River      | 33.1 to<br>34.4     | Cumberland<br>River    | 496838_03       | 5130205 | Trigg      | NS  |              | PS                |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.                             | Agriculture, Habitat Mod-<br>not Hydro   |
| Little River      | 34.4 to<br>48.4     | Cumberland<br>River    | 496838_04       | 5130205 | Trigg      | PS  |              | PS                |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Unknown, Crop<br>Prod , Agriculture  |
| Little River      | 48.4 to 61.0        | Cumberland<br>River    | 496838_05       | 5130205 | Christian  | NS  |              | NS                |       |                       |                 | Sediment/Siltation, Pathogens, Nutrient/ Eutrophication, Org.Enrich. (Sewage)      | Municipal Pt. Source<br>Dischrge, Unknown, Crop<br>Prod  |

|                            |                     |                            |                 |         |           |     |              | Desig             | nated | Uses                  |                 |   |   |
|----------------------------|---------------------|----------------------------|-----------------|---------|-----------|-----|--------------|-------------------|-------|-----------------------|-----------------|---|---|
|                            |                     |                            |                 |         |           |     | ıatic<br>ife | Con<br>Rec<br>tio |       | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name          | Impaired<br>Segment | Receiving<br>Waterbody     | Waterbody<br>ID | HUC 8   | County    | BIO | õм           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Livingston<br>Creek        | 4.6 to 7.0          | Cumberland<br>River        | 496913_01       | 5130205 | Lyon      |     | NS           | NS                |       |                       |                 | Pathogens,<br>Unknown   | Unknown   |
| Livingston<br>Creek        | 11.6 to<br>15.4     | Cumberland<br>River        | 496913_02       | 5130205 | Lyon      | PS  |              |                   |       |                       |                 | Unknown   | Unknown   |
| Long Pond<br>Branch        | 2.7 to 3.1          | Muddy Fork<br>Little River | 497133_00       | 5130205 | Trigg     | NS  |              |                   |       |                       |                 | Sediment/Siltation  | Unknown   |
| Lower Branch               | 3.7 to 9.2          | North Fork<br>Little River | 497263_00       | 5130205 | Christian | PS  |              |                   |       |                       |                 | Unknown   | Unknown   |
| Muddy Fork                 | 14.5 to 26.6        | Little River               | 499043_02       | 5130205 | Trigg     | NS  |              |                   |       |                       |                 | Unknown   | Unknown   |
| North Fork<br>Little River | 0.0 to 0.3          | Little River               | 499555_01       | 5130205 | Christian | NS  | NS           | PS                |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage)  | Municipal Pt. Source<br>Dischrge, Unknown,<br>Agriculture, Urban<br>Runoff/Storm Sewers |
| North Fork<br>Little River | 0.3 to 6.9          | Little River               | 499555_02       | 5130205 | Christian | PS  |              | PS                |       |                       |                 | Sediment/Siltation, Pathogens, Nutrient/Eutroph., Org.Enrich. (Sewage) Sediment/Siltation, Pathogens, Nutrient /Eutroph., Org.Enrich. | Municipal Pt. Source<br>Dischrge, Agriculture   |
| North Fork<br>Little River | 6.9 to 11.6         | Little River               | 499555_03       | 5130205 | Christian | NS  |              | NS                |       |                       |                 | (Sewage),<br>Unknown  | Municipal Pt. Source<br>Dischrge, Agriculture   |
| North Fork<br>Little River | 11.6 to 12.3        | Little River               | 499555_04       | 5130205 | Christian | NS  |              | NS                |       |                       |                 | Pathogens,<br>Unknown   | Channelization, Unknown,<br>Habitat Mod-not Hydro                                       |

|                            |                     |                        |                 |         |            |     |              | Desig | gnated              | Uses                  |                 |   |   |
|----------------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------|---------------------|-----------------------|-----------------|---|---|
|                            |                     |                        |                 |         |            | _   | ıatic<br>ife |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name          | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | õм           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| N. J. P. J.                | 10.0                |                        |                 | 1       |            |     |              |       |                     | 1                     |                 |   |   |
| North Fork<br>Little River | 12.3 to<br>16.2     | Little River           | 499555_05       | 5130205 | Christian  |     |              | NS    |                     |                       |                 | Pathogens   | Unknown   |
| Pleasant Grove<br>Creek    | 0.0 to 2.2          | Red River              | 500832_00       | 5130206 | Logan      | PS  |              | NS    |                     |                       |                 | Pathogens,<br>Nutrient /Eutroph.,<br>Org.Enrich.<br>(Sewage)      | Grazing-Riparian Zones, Pasture Grazing, Septic Tanks/Decentral. Sys (Septic Sys/Decentralized Sys) |
| Red River                  | 50.1 to 54.2        | Cumberland<br>River    | 501672_01       | 5130206 | Logan      | PS  | PS           |       |                     |                       |                 | Unknown   | Unknown   |
| Red River                  | 73.5 to<br>80.5     | Cumberland<br>River    | 501672_05       | 5130206 | Simpson    | PS  |              |       |                     |                       |                 | Unknown   | Unknown   |
| Richland<br>Creek          | 0.6 to 5.3          | Cumberland<br>River    | 501820_00       | 5130205 | Livingston |     |              | NS    |                     |                       |                 | Pathogens   | Unknown   |
| Sandy Creek                | 0.0 to 2.3          | Cumberland<br>River    | 502979_00       | 5130205 | Livingston |     |              | NS    |                     |                       |                 | Pathogens   | Unknown   |
| Sinking Fork               | 2.2 to 5.6          | Little River           | 503569_01       | 5130205 | Trigg      | PS  | PS           |       |                     |                       |                 | Unknown   | Unknown   |
| Sinking Fork               | 13.6 to<br>16.6     | Little River           | 503569_02       | 5130205 | Christian  | NS  |              |       |                     |                       |                 | Org.Enrich<br>(Sewage),<br>Unknown                                | Unknown   |
| Skinframe<br>Creek         | 0.0 to 4.8          | Livingston<br>Crk      | 503607_00       | 5130205 | Lyon       | PS  |              | NS    |                     |                       |                 | Pathogens,<br>Unknown   | Unknown   |
| Skinner Creek              | 0.0 to 5.8          | Casey Crk              | 503615_00       | 5130205 | Trigg      | NS  |              |       |                     |                       |                 | Unknown   | Unknown   |
| South Fork<br>Little River | 0.0 to 10.5         | Little River           | 503934 01       | 5130205 | Christian  | NS  | NS           | NS    |                     |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient /Eutroph.,<br>Other | Municipal Pt. Source<br>Dischrge, Unknown,<br>Agriculture   |

|                            |                     |                            |                 |         |            |     |              | Desig             | nated | Uses                  |                 |                                     |  |
|----------------------------|---------------------|----------------------------|-----------------|---------|------------|-----|--------------|-------------------|-------|-----------------------|-----------------|-------------------------------------|--|
|                            |                     |                            |                 |         |            |     | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                     |  |
| Waterbody<br>Name          | Impaired<br>Segment | Receiving<br>Waterbody     | Waterbody<br>ID | HUC 8   | County     | BIO | МQ           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                         | Sources  |
|                            |                     | I                          | <u> </u>        | 1       |            |     | 1            |                   |       |                       | <u> </u>        | Sediment/Siltation,                 | Τ  |
| South Fork                 | 10.5 to             |                            |                 |         |            |     |              |                   |       |                       |                 | Pathogens,<br>Nutrient /Eutroph.,   |  |
| Little River               | 19.9                | Little River               | 503934_02       | 5130205 | Christian  | PS  |              | NS                |       |                       |                 | Other                               | Agriculture  |
| South Fork<br>Little River | 20.9 to<br>25.4     | Little River               | 503934_03       | 5130205 | Christian  | NS  |              |                   |       |                       |                 | Unknown                             | Unknown  |
| Spring Creek               | 3.0 to 3.7          | Livingston<br>Crk          | 504129_00       | 5130205 | Lyon       | NS  |              |                   |       |                       |                 | Unknown                             | Riparian Habitat Loss  |
| Sugar Creek                | 1.0 to 1.4          | Muddy Fork                 | 504647_00       | 5130205 | Christian  | NS  |              |                   |       |                       |                 | Sediment/Siltation                  | Agriculture  |
| Sugar Creek                | 2.1 to 6.7          | Cumberland<br>River        | 504655_00       | 5130205 | Livingston |     |              | PS                |       |                       |                 | Pathogens                           | Unknown  |
| Upper Branch               | 0.0 to 2.7          | North Fork<br>Little River | 505861_00       | 5130205 | Christian  | PS  |              |                   |       |                       |                 | Unknown                             | Unknown  |
|                            |                     |                            | 1               |         |            |     |              |                   |       |                       |                 |                                     |  |
| Mississippi Ri             |                     | 1                          |                 | 1       |            |     | I            |                   |       |                       | 1               |                                     | T  |
| Bayou de<br>Chien          | 14.0 to<br>25.9     | Obion Crk                  | 486489_02       | 8010201 | Hickman    |     |              | NS                |       |                       |                 | Pathogens                           | Agriculture  |
| Brush Creek                | 0.0 to 8.3          | Obion Crk                  | 488070_00       | 8010201 | Graves     | PS  |              |                   |       |                       |                 | Sediment/Siltation                  | Channelization, Dredging ,<br>Agriculture                        |
| Brush Creek                | 0.0 to 6.0          | Obion Crk                  | 488071_00       | 8010201 | Hickman    | PS  |              |                   |       |                       |                 | Sediment/Siltation                  | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod |
| Caldwell<br>Creek          | 0.0 to 3.05         | Terrapin Crk               | 488592_00       | 8010202 | Graves     | NS  |              |                   |       |                       |                 | Sediment/Siltation                  | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod |
| Cane Creek                 | 0.0 to 5.4          | Bayou de<br>Chien          | 488768_00       | 8010201 | Hickman    | PS  |              |                   |       |                       |                 | Sediment/Siltation,<br>Nut./Eutroph | Riparian Habitat Loss,<br>Non-Irrig Crop Prod                    |

|                          |                     |                        |                 |          |          |     |              | Desig | gnated              | Uses                  |                 |                                       |  |
|--------------------------|---------------------|------------------------|-----------------|----------|----------|-----|--------------|-------|---------------------|-----------------------|-----------------|---------------------------------------|--|
|                          |                     |                        |                 |          |          | _   | uatic<br>ife |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |                                       |  |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8    | County   | BIO | õм           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                           | Sources  |
|                          | 1                   | T                      |                 | <u> </u> |          | 1   |              |       |                     |                       | 1               |                                       |  |
| Cane Creek               | 0.0 to 3.8          | Shawnee<br>Crk         | 488772_00       | 8010100  | Ballard  | PS  |              |       |                     |                       |                 | Org.Enrich.<br>(Sewage)               | Municipal Pt. Source<br>Dischrge                                 |
| Central Creek            | 0.8 to 2.5          | Truman Crk             | 489283_01       | 8010201  | Carlisle | 1.0 |              | NS    |                     |                       |                 | Pathogens                             | Unknown  |
| Cooley Creek             | 0.6 to 2.3          | Mayfield<br>Crk        | 490025_00       | 8010201  | Graves   |     |              | NS    |                     |                       |                 | Pathogens                             | Indus. Pt. Source Dischrge                                       |
| Gilbert Creek            | 1.8 to 3.5          | Mayfield<br>Crk        | 492817_00       | 8010201  | Graves   | NS  |              |       |                     |                       |                 | Sediment/Siltation                    | Riparian Habitat Loss  |
| Goose Creek              | 0.0 to 4.4          | Wilson Crk             | 493008_00       | 8010201  | Graves   | PS  |              |       |                     |                       |                 | Sediment/Siltation                    | Channelization, Riparian<br>Habitat Loss                         |
| Hazel Creek              | 0.0 to 3.7          | Axe Lake               | 493948_00       | 8010100  | Ballard  | NS  |              |       |                     |                       |                 | Sediment/Siltation,<br>Nut./Eutroph.  | Channelization, Unknown  |
| Hurricane<br>Creek       | 0.0 to 3.7          | Obion Crk              | 494824_00       | 8010201  | Carlisle | PS  |              |       |                     |                       |                 | Sediment/Siltation                    | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod |
| Knob Creek               | 1.1 to 2.2          | Blackmore<br>Crk       | 495836_00       | 8010202  | Graves   | NS  |              |       |                     |                       |                 | Sediment/Siltation                    | Crop Prod  |
| Little Bayou<br>de Chein | 0.0 to 2.1          | Bayou de<br>Chien      | 496606_01       | 8010201  | Hickman  | PS  |              |       |                     |                       |                 | Sediment/Siltation                    | Riparian Habitat Loss,<br>Agriculture                            |
| Little Bayou<br>de Chein | 10.1 to 12.3        | Bayou de<br>Chien      | 496606_02       | 8010201  | Fulton   | NS  |              |       |                     |                       |                 | Sediment/Siltation                    | Crop Prod , Habitat Modother than Hydro                          |
| Little Creek             | 0.0 to 6.2          | Obion Crk              | 496690_00       | 8010201  | Hickman  | NS  |              |       |                     |                       |                 | Sediment/Siltation                    | Channelization, Riparian<br>Habitat Loss                         |
| Little Cypress<br>Creek  | 0.0 to 2.0          | Obion Crk              | 496699_00       | 8010201  | Graves   | NS  |              |       |                     |                       |                 | Sediment/Siltation                    | Unknown  |
| Little Mud<br>Creek      | 0.0 to 1.8          | Bayou de<br>Chien      | 496810_00       | 8010201  | Fulton   | PS  |              |       |                     |                       |                 | Sediment/Silt.,<br>Nutrient /Eutroph. | Non-Irrig Crop Prod  |

|                       |                           |                          |                        |         |                    |          |              | Desig             | gnated | Uses                  |                 |  |  |
|-----------------------|---------------------------|--------------------------|------------------------|---------|--------------------|----------|--------------|-------------------|--------|-----------------------|-----------------|--|--|
|                       |                           |                          |                        |         |                    | _        | ıatic<br>ife | Con<br>Rec<br>tio |        | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name     | Impaired<br>Segment       | Receiving<br>Waterbody   | Waterbody<br>ID        | HUC 8   | County             | BIO      | Õм           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Mayfield              | 0.0 / 2.4                 | Mississippi              | 407717 01              | 0010201 | G 11.1             | DC.      |              |                   |        |                       |                 |  | ***  |
| Creek  Mayfield Creek | 0.0 to 3.4<br>8.2 to 13.5 | River  Mississippi River | 497717_01<br>497717_02 | 8010201 | Carlisle  Carlisle | PS<br>NS | NS           | NS                |        |                       |                 | Unknown  Copper, Iron, Sediment/Siltation, Pathogens, Zinc | Unknown  Channelization, Unknown, Habitat Mod-not Hydro  |
| Mayfield<br>Creek     | 13.5 to<br>14.8           | Mississippi<br>River     | 497717_03              | 8010201 | Carlisle           | NS       |              |                   |        |                       |                 | Sediment/Siltation   | Agriculture  |
| Mayfield<br>Creek     | 19.2 to 32.9              | Mississippi<br>River     | 497717_06              | 8010201 | McCracken          | PS       |              |                   |        |                       |                 | Sediment/Siltation   | Channelization, Riparian<br>Habitat Loss   |
| Mayfield<br>Creek     | 32.9 to 34.9              | Mississippi<br>River     | 497717_07              | 8010201 | Graves             | PS       |              |                   |        |                       |                 | Sediment/Siltation   | Channelization, Riparian<br>Habitat Loss   |
| Mayfield<br>Creek     | 34.9 to<br>37.6           | Mississippi<br>River     | 497717_08              | 8010201 | Graves             |          | NS           |                   |        |                       |                 | Copper,<br>Sediment/Siltation                              | Channelization, Unknown,<br>Agriculture  |
| Mayfield<br>Creek     | 37.6 to 40.8              | Mississippi<br>River     | 497717_09              | 8010201 | Graves             | PS       |              |                   |        |                       |                 | Sediment/Siltation   | Channelization, Riparian<br>Habitat Loss, Habitat Mod-<br>not Hydro  |
| Mayfield<br>Creek     | 40.8 to<br>43.7           | Mississippi<br>River     | 497717_10              | 8010201 | Graves             | PS       |              |                   |        |                       |                 | Sediment/Siltation   | Channelization, Riparian<br>Habitat Loss   |
| Mayfield<br>Creek     | 57.7 to 59.8              | Mississippi<br>River     | 497717_11              | 8010201 | Calloway           | NS       |              |                   |        |                       |                 | Sediment/Siltation   | Crop Prod  |
| Mud Creek             | 0.0 to 6.4                | Bayou de<br>Chien        | 498982_00              | 8010201 | Fulton             | NS       |              |                   |        |                       |                 | Sediment/Siltation   | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod   |
| Obion Creek           | 1.3 to 15.8               | Mississippi<br>River     | 499767_01              | 8010201 | Fulton             | NS       | NS           |                   |        |                       |                 | Iron,<br>Sediment/Siltation                                | Channelization, Impacts fr.<br>Hydrostructure Flow<br>Reg./Mod, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod |

|                                 |                     |                        |                    |         |           |     |                 | Desig             | nated | Uses                  |                 |                                  |   |
|---------------------------------|---------------------|------------------------|--------------------|---------|-----------|-----|-----------------|-------------------|-------|-----------------------|-----------------|----------------------------------|---|
|                                 |                     |                        |                    |         |           |     | ıatic<br>ife    | Con<br>Rec<br>tio |       | Con-<br>sump-<br>tion | Drink.<br>Water |                                  |   |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID    | HUC 8   | County    | BIO | $\overline{O}M$ | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments                      | Sources   |
| Obion Creek                     | 38.6 to 42.0        | Mississippi<br>River   | 499767_03          | 8010201 | Hickman   | NS  |                 |                   |       |                       |                 | Unknown                          | Channelization, Unknown   |
| Obion Creek                     | 42.0 to<br>47.6     | Mississippi<br>River   | 499767_04          | 8010201 | Hickman   | PS  |                 |                   |       |                       |                 | Sediment/Siltation               | Channelization, Crop Prod   |
| Obion Creek                     | 47.6 to 56.0        | Mississippi<br>River   | 499767_05          | 8010201 | Graves    | PS  |                 |                   |       |                       |                 | Sediment/Siltation,<br>Unknown   | Unknown, Agriculture  |
| Opossum<br>Creek                | 0.0 to 2.2          | Obion Crk              | 499959_00          | 8010201 | Graves    | NS  |                 |                   |       |                       |                 | Sediment/Siltation               | Channelization  |
| Running<br>Slough               | 0.0 to 15.3         | Obion Crk              | 502469_00          | 8010202 | Fulton    | PS  |                 |                   |       |                       |                 | Sediment/Siltation,<br>Turbidity | Crop Prod   |
| Shawnee<br>Creek Slough         | 0.0 to 3.0          | Mississippi<br>River   | 503285_01          | 8010100 | Ballard   |     | NS              |                   |       |                       |                 | Iron                             | Unknown   |
| Shawnee<br>Creek Slough         | 8.9 to 17.9         | Mississippi<br>River   | 503285_03          | 8010100 | Ballard   | PS  |                 |                   |       |                       |                 | Sediment/Siltation               | Channelization, Riparian<br>Habitat Loss, Agriculture                 |
| South Fork<br>Bayou de<br>Chien | 2.0 to 7.2          | Bayou de<br>Chien      | 503904_00          | 8010201 | Graves    | NS  |                 |                   |       |                       |                 | Sediment/Siltation               | Crop Prod   |
| Swan Pond                       | 193 acres           | Minor<br>Slough        | 504837_00          | 8010201 | Ballard   |     | NS              |                   |       |                       |                 | Nutrient/Eutroph.                | Natr'l Sources, Agriculture   |
| UT to<br>Mayfield<br>Creek      | 0.0 to 1.0          | Mayfield<br>Crk        | 497717-<br>24.0_00 | 8010201 | McCracken | NS  |                 |                   |       |                       |                 | Sediment/Siltation               | Agriculture   |
| UT to<br>Mayfield<br>Creek      | 1.1 to 3.5          | Mayfield<br>Crk        | 497717-<br>25.6_00 | 8010201 | Graves    | NS  |                 |                   |       |                       |                 | Sediment/Siltation               | Riparian Habitat Loss,<br>Agriculture                                 |
| UT to Obion<br>Creek            | 1.6 to 2.2          | Obion Crk              | 499767-<br>16.3_00 | 8010201 | Hickman   | NS  |                 |                   |       |                       |                 | Unknown                          | Channel., Riparian Habitat<br>Loss, Strmbank<br>Mod/Destable, Unknown |

|                   |                     |                        |                 |       |        |           |    | Design              | nated | Uses                  |                 |             |         |
|-------------------|---------------------|------------------------|-----------------|-------|--------|-----------|----|---------------------|-------|-----------------------|-----------------|-------------|---------|
|                   |                     |                        |                 |       |        | Aqu<br>Li |    | Cont<br>Recr<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |             |         |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8 | County | BIO       | WQ | PCR                 | SCR   | Fish<br>Tissue        | DWS             | Impairments | Sources |

| Ohio River Tr         | ibutaries   |                 |           |         |           |    |    |    |    |  |  |
|-----------------------|-------------|-----------------|-----------|---------|-----------|----|----|----|----|--|--|
| Bayou Creek           | 0.0 to 6.5  | Ohio River      | 486491_00 | 5140206 | McCracken | NS | NS |    |    | Beta Part/Photon<br>Emit, Mercury,<br>Copper, Lead | Indus. Pt. Source Dischrge,<br>Inappropriate Waste<br>Disposal                         |
| Clanton Creek         | 0.0 to 4.9  | Humphrey<br>Crk | 489524_00 | 5140206 | Ballard   | NS |    |    |    | Sediment/Silt,<br>Nut./ Eutroph.                   | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod                       |
| Humphrey Crk          | 0.0 to 3.4  | Ohio River      | 494758_01 | 5140206 | Ballard   | PS |    |    |    | Unknown  | Unknown, Habitat Mod-<br>not Hydromod  |
| Humphrey Crk          | 3.4 to 11.0 | Ohio River      | 494758_02 | 5140206 | Ballard   |    |    | PS |    | Pathogens  | Unknown  |
| Little Bayou<br>Creek | 0.0 to 6.5  | Bayou Crk       | 496607_00 | 5140206 | McCracken | NS | NS |    | NS | Beta Part./Photon<br>Emitters, Copper,<br>Lead     | Indus. Pt. Source Dischrge,<br>Inappropriate Waste<br>Disposal                         |
| Massac Creek          | 3.6 to 4.2  | Ohio River      | 497670_01 | 5140206 | McCracken | PS | PS |    |    | Sediment/Siltation                                 | Dredge Mining, Hwy/Rd/Brdg Runoff (Non-Const), Rip Hab Loss, Post-Devel. Erosion /Sed. |
| Metropolis<br>Lake    | 36 acres    | N/A             | 498089_00 | 5140206 | McCracken |    |    |    | PS | Methyl mercury                                     | Unknown  |

| <b>Tennessee Riv</b> | er Basin   |             |           |         |          |    |    |  |            |         |
|----------------------|------------|-------------|-----------|---------|----------|----|----|--|------------|---------|
|                      |            | Little      |           |         |          |    |    |  | Pathogens, |         |
| Angle Creek          | 0.0 to 0.7 | Cypress Crk | 485958_00 | 6040006 | Marshall | PS | NS |  | Unknown    | Unknown |

|                   |                     |                           |                   |         |           |          |              | Desig             | nated | Uses                  |                 |  |  |
|-------------------|---------------------|---------------------------|-------------------|---------|-----------|----------|--------------|-------------------|-------|-----------------------|-----------------|--|--|
|                   |                     |                           |                   |         |           | Aqu<br>L | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID   | HUC 8   | County    | BIO      | $\bar{O}M$   | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Bear Creek        | 3.1 to 6.3          | Tennessee<br>River        | 486553_00         | 6040005 | Marshall  |          |              | NS                |       |                       |                 | Pathogens  | On-site Treatment Sys.<br>(Septic/Decentral. Sys),<br>Package Plants/Permitted<br>Small Dischrge |
| Bee Creek         | 0.0 to 1.8          | Clarks River              | 486666_00         | 6040006 | Calloway  |          |              | NS                |       |                       |                 | Pathogens  | Unknown  |
| Blizzard Pond     | 0.0 to 3.7          | West Fork<br>Clarks River | 506426-<br>1.4_01 | 6040006 | McCracken |          |              | NS                |       |                       |                 | Pathogens  | Unknown  |
| Camp Creek        | 0.0 to 5.4          | West Fork<br>Clarks River | 488685_00         | 6040006 | McCracken | PS       |              | PS                |       |                       |                 | Pathogens,<br>Unknown, Other   | Unknown  |
| Champion<br>Creek | 0.0 to 1.5          | Island Crk                | 489324_00         | 6040006 | McCracken | NS       |              |                   |       |                       |                 | Unknown  | Land Clearance<br>(Devel./Redevelop.)  |
| Chestnut<br>Creek | 0.0 to 3.0          | Clarks River              | 489424_00         | 6040006 | Marshall  | PS       |              | PS                |       |                       |                 | Pathogens,<br>Unknown, Other   | Unknown  |
| Clarks River      | 5.0 to 12.7         | Tennessee<br>River        | 489552_01         | 6040006 | McCracken | PS       |              |                   |       |                       |                 | Unknown  | Unknown  |
| Clarks River      | 50.9 to 59.9        | Tennessee<br>River        | 489552_07         | 6040006 | Calloway  | PS       |              | NS                |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Agriculture,<br>Urban Stormwater                               |
| Clarks River      | 59.9 to<br>61.9     | Tennessee<br>River        | 489552_08         | 6040006 | Calloway  | PS       |              | PS                |       |                       |                 | Pathogens,<br>Unknown  | Unknown  |
| Clayton Creek     | 0.8 to 3.3          | Clarks River              | 489601_01         | 6040006 | Calloway  | PS       |              |                   |       |                       |                 | Unknown  | Unknown  |
| Clayton Creek     | 3.3 to 7.1          | Clarks River              | 489601_02         | 6040006 | Calloway  |          |              | NS                |       |                       |                 | Pathogens  | Unknown  |
| Cypress Creek     | 6.3 to 7.7          | Tennessee<br>River        | 490528_02         | 6040006 | Marshall  | NS       |              |                   |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                                     | Riparian Habitat Loss,<br>Unknown  |

|                             |                     |                           |                 |         |            | Designated Uses |              |                   |      |                       |                 |  |  |
|-----------------------------|---------------------|---------------------------|-----------------|---------|------------|-----------------|--------------|-------------------|------|-----------------------|-----------------|--|--|
|                             |                     |                           |                 |         |            | Aqu<br>Li       | ıatic<br>ife | Con<br>Rec<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County     | BIO             | $\tilde{Q}W$ | PCR               | SCR  | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Cypress Creek               | 7.7 to 9.7          | Tennessee<br>River        | 490528_03       | 6040006 | Marshall   | NS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Damon Creek                 | 0.0 to 1.8          | West Fork<br>Clarks River | 490545_00       | 6040006 | Calloway   | NS              |              | NS                |      |                       |                 | Pathogens,<br>Unknown                                  | Animal Feed. Op.'s,<br>Unknown                       |
| Guess Creek                 | 0.0 to 2.6          | Tennessee<br>River        | 493458_00       | 6040006 | Livingston | PS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Island Creek                | 0.0 to 5.5          | Tennessee<br>River        | 495045_01       | 6040006 | McCracken  | PS              |              | NS                |      |                       |                 | Pathogens,<br>Unknown                                  | Unknown  |
| Island Creek                | 5.5 to 10.3         | Tennessee<br>River        | 495045_02       | 6040006 | McCracken  | PS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Jonathan<br>Creek           | 6.2 to 18.0         | Tennessee<br>River        | 495443_00       | 6040005 | Calloway   | PS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Little Cypress<br>Creek     | 0.0 to 3.4          | Cypress Crk               | 496700_01       | 6040006 | Marshall   | NS              |              | PS                |      |                       |                 | Pathogens,<br>Unknown                                  | Unknown  |
| Little Cypress<br>Creek     | 3.4 to 6.0          | Cypress Crk               | 496700_02       | 6040006 | Marshall   | NS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Middle Fork<br>Clarks River | 0.0 to 2.7          | Clarks River              | 498115_01       | 6040006 | Calloway   | PS              |              | NS                |      |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph. | Agriculture  |
| Middle Fork<br>Clarks River | 2.7 to 4.9          | Clarks River              | 498115_02       | 6040006 | Calloway   | PS              |              |                   |      |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.               | Agriculture  |
| Middle Fork<br>Creek        | 0.2 to 6.6          | Clarks River              | 498118_00       | 6040006 | Marshall   | PS              |              | NS                |      |                       |                 | Pathogens,<br>Unknown                                  | Unknown  |
| Reeves Branch               | 0.0 to 0.3          | Sugar Crk                 | 501706_00       | 6040006 | Marshall   | PS              |              |                   |      |                       |                 | Unknown  | Unknown  |
| Spring Creek                | 0.0 to 1.8          | West Fork<br>Clarks River | 504124_00       | 6040006 | Graves     | PS              |              |                   |      |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.               | Channelization,<br>Drainage/Filling/Loss<br>Wetlands |

|  |                     |                                   |                 |         |           | Designated Uses |              |     |                     |                       |                 |                                 |                                       |
|--|---------------------|-----------------------------------|-----------------|---------|-----------|-----------------|--------------|-----|---------------------|-----------------------|-----------------|---------------------------------|---------------------------------------|
|  |                     |                                   |                 |         |           | _               | ıatic<br>ife |     | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |                                 |                                       |
| Waterbody<br>Name                                | Impaired<br>Segment | Receiving<br>Waterbody            | Waterbody<br>ID | HUC 8   | County    | BIO             | Õм           | PCR | SCR                 | Fish<br>Tissue        | DWS             | Impairments                     | Sources                               |
| Tennessee<br>River                               | 21.1 to 22.4        | Ohio River                        | 517033_03       | 6040006 | Marshall  | PS              |              |     |                     |                       |                 | Unknown                         | Upstream Impoundment,<br>Unknown      |
| UT Old<br>Beaver Dam<br>Slough                   | 0.0 to 0.5          | Old Beaver<br>Dam Slough          | 95-0.4_00       | 6040006 | Marshall  | NS              |              |     |                     |                       |                 | Unknown                         | Unknown, Urban<br>Runoff/Storm Sewers |
| West Fork<br>Clarks River                        | 2.6 to 10.1         | Clarks River                      | 506426_01       | 6040006 | McCracken |                 |              | PS  |                     |                       |                 | Pathogens                       | Unknown                               |
| West Fork<br>Clarks River                        | 12.8 to<br>16.8     | Clarks River                      | 506426_02       | 6040006 | Graves    |                 |              | NS  |                     |                       |                 | Pathogens                       | Unknown, Agriculture                  |
| West Fork<br>Clarks River                        | 19.7 to 22.7        | Clarks River                      | 506426_04       | 6040006 | Marshall  |                 |              |     |                     | PS                    |                 | Methyl mercury                  | Unknown                               |
| West Fork<br>Clarks River                        | 22.7 to 27.3        | Clarks River                      | 506426_05       | 6040006 | Calloway  |                 |              | PS  |                     |                       |                 | Pathogens                       | Unknown                               |
| West Fork<br>Clarks River                        | 33.1 to 37.2        | Clarks River                      | 506426_06       | 6040006 | Calloway  | PS              |              |     |                     |                       |                 | Unknown                         | Unknown                               |
| West Fork<br>Clarks River<br>(Relict<br>Channel) | 0 to 13.8           | West Fork<br>Clarks River         | 506427_01       | 6040006 | Graves    | PS              |              |     |                     |                       |                 | Unknown                         | Unknown                               |
| Upper Cumb                                       | erland River        | Basin                             |                 |         |           |                 |              |     |                     |                       |                 |                                 |                                       |
| Bear Creek                                       | 0.0 to 3.2          | South Fork<br>Cumberland<br>River | 510462_00       | 5130104 | McCreary  | NS              |              | NS  | NS                  |                       |                 | pН                              | Subsurface Mining,<br>Surface Mining  |
| Becks Creek                                      | 0.0 to 4.0          | Jellico Crk                       | 510492_00       | 5130101 | Whitley   | PS              |              | PS  | PS                  |                       |                 | Sediment/Siltation, pH, Unknown | Surface Mining                        |

|                          |                     |                                  |                 |         |            |     |              | Desig | gnated              | Uses                  |                 |   |   |
|--------------------------|---------------------|----------------------------------|-----------------|---------|------------|-----|--------------|-------|---------------------|-----------------------|-----------------|---|---|
|                          |                     |                                  |                 |         |            | _   | ıatic<br>ife | Rec   | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody           | Waterbody<br>ID | HUC 8   | County     | BIO | õм           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                                   | Sources   |
| Big Indian<br>Creek      | 0.0 to 5.1          | Cumberland<br>River              | 487197_00       | 5130101 | Knox       | NS  |              |       |                     |                       |                 | Sediment/Siltation                            | Non-Irrig Crop Prod, Land<br>Clearance<br>(Devel./Redevelop.)   |
| Big Renox<br>Creek       | 0.0 to 5.8          | Cumberland<br>River              | 487232_00       | 5130103 | Cumberland | PS  |              |       |                     |                       |                 | Unknown                                       | Unknown   |
| Briary Creek             | 0.0 to 4.4          | Buck Crk                         | 487880_00       | 5130103 | Pulaski    | PS  |              |       |                     |                       |                 | Sediment/Siltation                            | Dredge Mining, Non-Irrig<br>Crop Prod, Other<br>Recreational Pollution<br>Sources   |
| Brush Creek              | 0.0 to 2.8          | Cumberland<br>River              | 488072_00       | 5130101 | Knox       | NS  |              |       |                     |                       |                 | Sediment/Siltation, Turbidity                 | Impacts fr. Aband. Mine<br>Lands, Riparian Habitat<br>Loss, Silviculture,<br>Strmbank Mod/Destable,<br>Subsurface Mining,<br>Surface Mining |
| Brush Creek              | 1.1 to 7.6          | Roundstone<br>Crk                | 510966_00       | 5130102 | Rockcastle |     |              | NS    |                     |                       |                 | Pathogens                                     | Septic Tanks/Decentral.<br>Systems, Agriculture   |
| Buck Creek               | 44.9 to<br>45.4     | Cumberland<br>River              | 511000_04       | 5130103 | Pulaski    |     |              |       |                     | PS                    |                 | Methyl mercury                                | Atmospheric Depositions-<br>Toxics, Unknown   |
| Clover Fork              | 29.1 to 30.3        | Cumberland<br>River              | 511423_06       | 5130101 | Harlan     | PS  |              | NS    |                     |                       |                 | Sediment/Siltation                            | Heap-leach Ext Mining,<br>Unknown   |
| Cloverlick<br>Creek      | 0.0 to 5.0          | Poor Fork<br>Cumberland<br>River | 511427_00       | 5130101 | Harlan     | NS  |              |       |                     |                       |                 | TSS   | Heap-leach Extraction<br>Mining   |
| Corbin City<br>Reservoir | 139 acres           | N/A                              | CLN052_00       | 5130101 | Laurel     |     | PS           |       |                     |                       | NS              | Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Internal Nutrient Recycling, Municipal Pt. Source Dischrge, Agriculture   |

|                                 |                     |                        |                 |         |            |     |              | Desig             | gnated | Uses                  |                 |                    |   |
|---------------------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------------|--------|-----------------------|-----------------|--------------------|---|
|                                 |                     |                        |                 |         |            | _   | ıatic<br>ife | Con<br>Rec<br>tio |        | Con-<br>sump-<br>tion | Drink.<br>Water |                    |   |
| Waterbody<br>Name               | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | Õм           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments        | Sources   |
| 1                               | i                   | İ                      | I               | l       | Ĭ          | ĺ   | ĺ            |                   | İ      | İ                     | I               | I                  | 1   |
| Cranks Creek                    | 1.9 to 2.5          | Martins Fork           | 490293_00       | 5130101 | Harlan     | PS  |              |                   |        |                       |                 | Unknown            | Upstream Impound,<br>Unknown  |
| Cranks Creek<br>Lake            | 219 acres           | N/A                    | CLN057_00       | 5130101 | Harlan     |     | PS           | PS                | PS     |                       |                 | рН                 | Impacts fr. Aband. Mine<br>Lands  |
| Crocus Creek                    | 4.8 to 13.8         | Cumberland<br>River    | 490359_02       | 5130103 | Cumberland | PS  |              |                   |        |                       |                 | Sediment/Siltation | Riparian Habitat Loss,<br>Agriculture   |
| Crocus Creek                    | 13.8 to<br>16.9     | Cumberland<br>River    | 490359_03       | 5130103 | Adair      | PS  |              |                   |        |                       |                 | Sediment/Siltation | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Agriculture<br>Agriculture, Sewage |
| Crooked Creek                   | 1.0 to 6.4          | Roundstone<br>Crk      | 511648_01       | 5130102 | Rockcastle |     |              | PS                |        |                       |                 | Pathogens          | Dischrge./Unsewered Areas   |
| Cumberland<br>River             | 649.0 to<br>650.6   | Ohio River             | 517018_06       | 5130101 | Bell       |     |              | NS                |        |                       |                 | Pathogens          | Municipal Point Source<br>Discharge, Decentralized<br>Treatment/Septic Systems,<br>SSO  |
| Cumberland<br>River             | 660.1 to 666.7      | Ohio River             | 517018_08       | 5130101 | Harlan     |     | PS           |                   |        |                       |                 | Iron, Unknown      | Unknown   |
| East Fork<br>Lynn Camp<br>Creek | 0.0 to 4.5          | Lynn Camp<br>Crk       | 511990_00       | 5130101 | Knox       | PS  |              |                   |        |                       |                 | Sediment/Siltation | Land Clearance<br>(Devel./Redevelop.)   |
| Elk Spring<br>Creek             | 0.0 to 7.8          | Beaver Crk             | 491678_00       | 5130103 | Wayne      | NS  |              |                   |        |                       |                 | Unknown            | Unknown   |
| Ewing Creek                     | 0.0 to 2.7          | Cumberland<br>River    | 491860_00       | 5130101 | Harlan     | NS  |              |                   |        |                       |                 | Sediment/Siltation | Post-Devel.<br>Erosion/Sediment., Surface<br>Mining                                     |

|                           |                     |                        |                 |         |            | Designated Uses |                 |     |                            |                |                 |  |  |
|---------------------------|---------------------|------------------------|-----------------|---------|------------|-----------------|-----------------|-----|----------------------------|----------------|-----------------|--|--|
|                           |                     |                        |                 |         |            |                 | Aquatic<br>Life |     | Contact<br>Recrea-<br>tion |                | Drink.<br>Water |  |  |
| Waterbody<br>Name         | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO             | WQ              | PCR | SCR                        | Fish<br>Tissue | DWS             | Impairments                              | Sources  |
| Ferris Fork<br>Creek      | 0.0 to 1.2          | Marrowbone<br>Crk      | 492053_00       | 5130103 | Cumberland | NS              |                 |     |                            |                |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's                      |
| Gilmore Creek             | 0.0 to 4.7          | Crab<br>Orchard Crk    | 492855_00       | 5130103 | Pulaski    | PS              |                 |     |                            |                |                 | Sediment/Siltation                       | Dredge Mining  |
| Goodin Creek              | 2.1 to 2.3          | Cumberland<br>River    | 492978_00       | 5130101 | Knox       | PS              |                 |     |                            |                |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Upstream Impound.                                    |
| Hatchell<br>Branch        | 0.0 to 1.0          | Eagle Crk              | 512583_00       | 5130101 | McCreary   | PS              |                 |     |                            |                |                 | Sediment/Siltation                       | Silviculture   |
| Indian Creek              | 0.0 to 4.1          | Buck Crk               | 494919_00       | 5130103 | Pulaski    | PS              |                 |     |                            |                |                 | Sediment/Siltation                       | Dredge Mining  |
| Jennys Branch             | 0.0 to 3.4          | Laurel Crk             | 512993_00       | 5130101 | McCreary   | PS              |                 |     |                            |                |                 | Sediment/Siltation                       | Silviculture   |
| Lake<br>Cumberland        | 50250<br>acres      | N/A                    | 511679_00       | 5130103 | Russell    |                 |                 |     |                            | PS             |                 | Methyl mercury                           | Unknown  |
| Laurel Fork<br>Clear Fork | 10.3 to<br>13.9     | Clear Fork             | 496040_02       | 5130101 | Whitley    | NS              |                 |     |                            |                |                 | Sediment/Siltation                       | Non-Irrig Crop Prod,<br>Silviculture   |
| Laurel River              | 0.0 to 2.3          | Cumberland<br>River    | 513263_01       | 5130101 | Laurel     | NS              |                 |     |                            |                |                 | Unknown                                  | Upstream Impound.,<br>Unknown  |
| Laurel River              | 24.9 to 27.9        | Cumberland<br>River    | 513263_02       | 5130101 | Laurel     | NS              |                 |     |                            |                |                 | Unknown                                  | Upstream Impound.,<br>Unknown  |
| Laurel River              | 36.6 to 46.3        | Cumberland<br>River    | 513263_04       | 5130101 | Laurel     | NS              |                 |     |                            |                |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Animal Feed. Op.'s,<br>Pasture Grazing, Non-Irrig<br>Crop Prod, Surface Mining |

|                             |                     |                                   |                 |         |        | Designated Uses |    |                            |     |                       |                 |   |  |
|-----------------------------|---------------------|-----------------------------------|-----------------|---------|--------|-----------------|----|----------------------------|-----|-----------------------|-----------------|---|--|
|                             |                     |                                   |                 |         |        | Aquatic<br>Life |    | Contact<br>Recrea-<br>tion |     | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody            | Waterbody<br>ID | HUC 8   | County | BIO             | ãм | PCR                        | SCR | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Left Fork<br>Straight Creek | 0.0 to 13.0         | Straight Crk                      | 513326_00       | 5130101 | Bell   | NS              |    | NS                         | NS  |                       |                 | Sediment/Siltation,<br>TSS, Turbidity, pH                   | Impacts fr. Aband. Mine Lands, Riparian Habitat Loss, Silviculture, Strmbank Mod/Destable., Subsurface Mining, Surface Mining, Unknown, Silviculture |
| Little Clear<br>Creek       | 0.0 to 10.4         | Clear Crk                         | 496670_01       | 5130101 | Bell   | PS              |    | NS                         | NS  |                       |                 | Sediment/Siltation, pH                                      | Heap-leach Ext Mining,<br>Silviculture   |
| Little Laurel<br>River      | 0.0 to 8.3          | Laurel River                      | 513497_01       | 5130101 | Laurel | NS              | NS | PS                         |     |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage)                       | Municipal Pt. Source<br>Dischrge   |
| Little Laurel<br>River      | 8.3 to 12.4         | Laurel River                      | 513497_02       | 5130101 | Laurel | NS              |    | NS                         |     |                       |                 | Sediment/Silt,<br>Pathogens,<br>Org.Enrich, Phos<br>(Total) | Combined Sewer Overflows, Municipal Pt. Source Dischrge, Land Clearance (Devel./Redevelop.)  |
| Little Laurel<br>River      | 12.4 to<br>14.6     | Laurel River                      | 513497_03       | 5130101 | Laurel |                 | NS | NS                         |     |                       |                 | Pathogens,<br>Nutrient/Eutroph.,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge, Agriculture  |
| Little Laurel<br>River      | 14.6 to 22.8        | Laurel River                      | 513497_04       | 5130101 | Laurel |                 |    | NS                         |     |                       |                 | Pathogens   | Livestock-Grazing/Feed.<br>Op's  |
| Little Poplar<br>Creek      | 0.0 to 2.8          | Cumberland<br>River               | 496830_00       | 5130101 | Knox   | PS              |    |                            |     |                       |                 | Sediment/Siltation  | Pasture Grazing, Non-Irrig<br>Crop Prod, Land Clearance<br>(Devel./Redevelop.)   |
| Little South<br>Fork        | 0.0 to 4.1          | South Fork<br>Cumberland<br>River | 513527_00       | 5130104 | Wayne  | PS              |    |                            |     |                       |                 | Sediment/Siltation  | Surface Mining, Coal<br>Mining (Subsurface)  |

|                                  |                     |                        |                 |         |            | Designated Uses |    |                            |     |                       |                 |  |   |
|----------------------------------|---------------------|------------------------|-----------------|---------|------------|-----------------|----|----------------------------|-----|-----------------------|-----------------|--|---|
|                                  |                     |                        |                 |         |            |                 |    | Contact<br>Recrea-<br>tion |     | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO             | ЙM | PCR                        | SCR | Fish<br>Tissue        | DWS             | Impairments                              | Sources   |
|                                  | 1                   | 1                      | <u> </u>        | 1       |            | 1               | 1  | ı                          | ı   | T                     | Γ               |  | Г   |
| Lynn Camp<br>Creek               | 0.0 to 4.5          | Laurel River           | 513739_01       | 5130101 | Laurel     | NS              |    | NS                         |     |                       |                 | Oil and Grease,<br>Pathogens, TSS        | Other Spill Impacts,<br>Unknown, Habitat Mod-<br>not Hydro, Urban<br>Runoff/Storm Sewers                      |
| Lynn Camp<br>Creek               | 4.6 to 10.7         | Laurel River           | 513739_02       | 5130101 | Whitley    | PS              |    |                            |     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Hwy/Rd/Brdgs Infra,<br>Pasture Grazing, Non-Irrig.<br>Crops, Post-Devel. Erosion<br>/Sediment, Land Clearance |
| Marrowbone<br>Creek              | 0.0 to 2.8          | Cumberland<br>River    | 497560_01       | 5130103 | Cumberland | PS              | PS |                            |     |                       |                 | Unknown                                  | Riparian Habitat Loss,<br>Unknown   |
| Marsh Creek                      | 13.3 to<br>16.3     | Cumberland<br>River    | 513798_03       | 5130101 | McCreary   | NS              |    |                            |     |                       |                 | Sediment/Siltation                       | Silviculture  |
| Marsh Creek                      | 19.0 to 24.1        | Cumberland<br>River    | 513798_04       | 5130101 | McCreary   | NS              |    |                            |     |                       |                 | Sediment/Siltation                       | Agriculture, Coal Mining  |
| Martins Fork                     | 10.1 to<br>15.5     | Clover Fork            | 497628_02       | 5130101 | Harlan     | PS              |    |                            |     |                       |                 | Unknown                                  | Unknown   |
| Martins Fork                     | 18.0 to 27.4        | Clover Fork            | 497628_03       | 5130101 | Harlan     |                 | NS | NS                         | NS  |                       |                 | pН                                       | Coal Mining   |
| Meadow Creek                     | 0.0 to 6.8          | Cumberland<br>River    | 497981_00       | 5130101 | Knox       | PS              |    |                            |     |                       |                 | Sediment/Siltation                       | Pasture Grazing, Non-Irrig<br>Crop Prod, Surface Mining   |
| Middle Fork<br>Richland<br>Creek | 0.0 to 1.2          | Richland<br>Crk        | 498135_00       | 5130101 | Knox       | PS              |    |                            |     |                       |                 | Sediment/Siltation                       | Hwys/Rd/Brdgs<br>Infrastructure, Land<br>Clearance, Surface Mining  |
| Mitchell Creek                   | 0.0 to 3.6          | Sinking Crk            | 514033_00       | 5130102 | Laurel     | NS              |    |                            |     |                       |                 | Unknown                                  | Land Clearance<br>(Devel./Redevelop.)   |

|                         |                     |                                   |                 |         |            |     |              | Desig | gnated              | Uses                  |                 |  |   |
|-------------------------|---------------------|-----------------------------------|-----------------|---------|------------|-----|--------------|-------|---------------------|-----------------------|-----------------|--|---|
|                         |                     |                                   |                 |         |            | _   | ıatic<br>ife |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody            | Waterbody<br>ID | HUC 8   | County     | BIO | ОM           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                                    | Sources   |
| Mud Creek               | 0.0 to 5.1          | Clear Fork                        | 514128_00       | 5130101 | Whitley    | PS  |              |       |                     |                       |                 | Sediment/Siltation                             | Hwys/Rd/Brdgs<br>Infrastructure, Non-Irrig<br>Crop Prod, Land Clearance           |
| Pitman Creek            | 4.0 to 5.7          | Cumberland<br>River               | 514627_01       | 5130103 | Pulaski    | PS  |              |       |                     |                       |                 | Unknown  | Municipal Pt. Source<br>Dischrge  |
| Poor Fork               | 14.9 to<br>16.3     | Cumberland<br>River               | 514707_03       | 5130101 | Harlan     | PS  |              |       |                     |                       |                 | Sediment/Siltation                             | Hwys/Rd/Brdgs<br>Infrastructure (New<br>Construction)                             |
| Poor Fork               | 25.1 to 27.5        | Cumberland<br>River               | 514707_05       | 5130101 | Harlan     |     |              | NS    |                     |                       |                 | Pathogens                                      | Unknown   |
| Raccoon Creek           | 0.0 to 2.7          | South Fork<br>Rockcastle<br>River | 514818_00       | 5130102 | Laurel     | PS  |              |       |                     |                       |                 | Nutrient/Eutroph.                              | Livestock-Grazing/Feed.<br>Op's, Crop Prod ,<br>Silviculture                      |
| Renfro Creek            | 0.0 to 3.0          | Roundstone<br>Crk                 | 514888_00       | 5130102 | Rockcastle | PS  |              |       |                     |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage) | Package Plant/Other Small<br>Dischrge., Upstream<br>Impound., Urban<br>Stormwater |
| Richland<br>Creek       | 0.0 to 6.2          | Cumberland<br>River               | 514915_01       | 5130101 | Knox       | NS  | NS           |       |                     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph        | Hwys/Rd/Brdgs<br>Infrastructure, Land<br>Clearance, Surface Mining,<br>Unknown    |
| Roaring<br>Paunch Creek | 7.8 to 15.6         | S Fk<br>Cumberland<br>River       | 514993          | 5130104 | McCreary   |     | NS           | NS    | NS                  |                       |                 | pН   | Acid Mine Drainage  |
| Rock Creek              | 16.6 to 21.9        | South Fork<br>Cumberland<br>River | 515024_03       | 5130104 | McCreary   |     |              |       |                     | PS                    |                 | Methyl mercury                                 | Unknown   |

|                                   |                     |                           |                 |         |            |     |              | Desig | gnated              | Uses                  |                 |  |  |
|-----------------------------------|---------------------|---------------------------|-----------------|---------|------------|-----|--------------|-------|---------------------|-----------------------|-----------------|--|--|
|                                   |                     |                           |                 |         |            |     | ıatic<br>ife |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                 | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County     | BIO | ōм           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments                                  | Sources  |
| Roundstone<br>Creek               | 16.9 to 23.7        | Rockcastle<br>River       | 515136_03       | 5130102 | Rockcastle | PS  |              |       |                     |                       |                 | Nutrient/Eutroph.                            | Livestock-Grazing/Feed. Operations   |
| Ryans Creek                       | 0.0 to 5.3          | Jellico Crk               | 515156_00       | 5130101 | McCreary   | NS  |              |       |                     |                       |                 | TSS  | Heap-leach Ext Mining  |
| Sam Branch                        | 0.0 to 0.5          | Fishing Crk               | 502871_00       | 5130103 | Pulaski    | PS  |              |       |                     |                       |                 | Sediment/Siltation                           | Riparian Habitat Loss,<br>Agriculture  |
| Sims Fork                         | 0.0 to 5.2          | Left Fork<br>Straight Crk | 515430_00       | 5130101 | Bell       | NS  |              |       |                     |                       |                 | Sediment/Siltation,<br>Unknown               | Heap-leach Ext Mining,<br>Unknown  |
| Skegg Creek                       | 0.0 to 3.2          | Rockcastle<br>River       | 515451_01       | 5130102 | Rockcastle | PS  |              |       |                     |                       |                 | Sediment/Silt.,<br>Nutrient/ Eutroph.        | Non-Irrig Crops, Post-<br>Devel Erosion/<br>Sediment., Surface<br>Mining, Natr'l Sources   |
| South Fork<br>Rockcastle<br>River | 20.8 to 21.5        | Rockcastle<br>River       | 515548_02       | 5130102 | Laurel     | NS  |              |       |                     |                       |                 | Sediment/Siltation                           | Loss Riparian Habitat,<br>Crop Product.  |
| South Fork<br>Rockcastle<br>River | 21.5 to 25.5        | Rockcastle<br>River       | 515548_03       | 5130102 | Laurel     | PS  |              |       |                     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.     | Channelization, Loss<br>Riparian Habitat,<br>Strmbank Mod/Destab.,<br>Livestock (Grazing/Feed.<br>Op's), Crop Prod                                 |
| Stinking Creek                    | 0.0 to 2.1          | Cumberland<br>River       | 515716_00       | 5130101 | Knox       | NS  |              | NS    | NS                  |                       |                 | Oil and Grease,<br>Sediment/Siltation,<br>pH | Acid Mine Drainage,<br>Channelization, Aband.<br>Mine Lands Impacts, Non-<br>Irrig Crops,<br>Petroleum/Natr'l Gas Prod<br>(Permit), Surface Mining |

|                              |                     |                                |                    |         |          | Designated Uses |              |                   |     |                       |                 |                                       |  |
|------------------------------|---------------------|--------------------------------|--------------------|---------|----------|-----------------|--------------|-------------------|-----|-----------------------|-----------------|---------------------------------------|--|
|                              |                     |                                |                    |         |          | _               | ıatic<br>ife | Con<br>Rec<br>tio |     | Con-<br>sump-<br>tion | Drink.<br>Water |                                       |  |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody         | Waterbody<br>ID    | HUC 8   | County   | BIO             | MO           | PCR               | SCR | Fish<br>Tissue        | DWS             | Impairments                           | Sources  |
| Stoney Fork                  | 0.0 to 2.4          | Straight Crk                   | 515733_00          | 5130101 | Bell     | NS              |              |                   |     |                       |                 | Sediment/Siltation,<br>Turbidity      | Aband. Mine Lands,<br>Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable.,<br>Sub/Surface Mining |
| Stony Fork                   | 0.0 to 5.2          | Bennetts<br>Fork Yellow<br>Crk | 504506_00          | 5130101 | Bell     | NS              |              |                   |     |                       |                 | Sediment/Siltation, Turbidity         | Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable.  |
| Straight Creek               | 0.0 to 1.7          | Cumberland<br>River            | 515746_01          | 5130101 | Bell     |                 | PS           |                   |     |                       |                 | Sediment/Silt.                        | Heap-leach Ext Mining,<br>Unknown  |
| UT to Jennys<br>Branch       | 0.0 to 1.1          | Jennys<br>Branch               | 512993-<br>3.4_00  | 5130101 | McCreary | NS              |              |                   |     |                       |                 | Sediment/Silt.,<br>Nutrient/ Eutrop.  | Septic Tanks/Decentral.<br>Systems Post-Devel<br>Erosion/Sediment.   |
| UT to Little<br>Laurel River | 0.0 to 1.4          | Little Laurel<br>River         | 513497-<br>15.8_00 | 5130101 | Laurel   | NS              |              |                   |     |                       |                 | Sediment/Siltation                    | Riparian Habitat Loss  |
| White Oak<br>Creek           | 0.0 to 4.2          | Rock Crk                       | 516318_01          | 5130104 | McCreary | NS              | NS           |                   |     |                       |                 | Iron                                  | Coal Mining  |
| White Oak<br>Creek           | 0.0 to 1.0          | Sinking Crk                    | 516320_01          | 5130102 | Laurel   | NS              |              |                   |     |                       |                 | Sediment/Siltation,<br>TSS, Turbidity | Pasture Grazing, Non-Irrig<br>Crop Prod, Post-Devel.<br>Erosion /Sediment.                                     |
| Whitley<br>Branch            | 0.0 to 1.1          | Little Laurel<br>River         | 516339_01          | 5130101 | Laurel   |                 | NS           | PS                |     |                       |                 | Pathogens,<br>Org.Enrich.<br>(Sewage) | Municipal Pt. Source<br>Dischrge   |
| Whitley<br>Branch            | 1.1 to 2.5          | Little Laurel<br>River         | 516339_02          | 5130101 | Laurel   |                 |              | NS                |     |                       |                 | Pathogens                             | SSO/Collect Sys Failure  |
| Wolf Creek                   | 0.0 to 1.8          | Clear Fork                     | 516433_00          | 5130101 | Whitley  | NS              |              |                   |     |                       |                 | Sediment/Siltation                    | Non-Irrig Crop Prod,<br>Surface Mining   |

|                    |                     |                        |                 |         |        |          |              | Desig | nated              | Uses                  |                 |   |   |
|--------------------|---------------------|------------------------|-----------------|---------|--------|----------|--------------|-------|--------------------|-----------------------|-----------------|---|---|
|                    |                     |                        |                 |         |        | Aqu<br>L | iatic<br>ife |       | tact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County | BIO      | õм           | PCR   | SCR                | Fish<br>Tissue        | DWS             | Impairments                                     | Sources   |
|                    | •                   |                        |                 |         |        |          |              |       | •                  |                       | •               |   | ,   |
| Wood Creek<br>Lake | 672 acres           | N/A                    | 516467_00       | 5130102 | Laurel |          |              |       |                    |                       | PS              | Org.Enrich.<br>(Sewage)                         | On-site Treatment Sys.<br>(Septic/ Decentralized Sys)             |
| Yellow Creek       | 0.0 to 0.8          | Cumberland<br>River    | 507211_01       | 5130101 | Bell   | PS       |              |       |                    |                       |                 | Sediment/Silt.,<br>TDS, Org.Enrich.<br>(Sewage) | Unknown, Habitat Mod-<br>not Hydro, Urban Runoff<br>/Storm Sewers |
| Yellow Creek       | 0.8 to 8.9          | Cumberland<br>River    | 507211_02       | 5130101 | Bell   | PS       | PS           |       |                    |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)  | Urban Stormwater, Urban<br>Runoff/Storm Sewers                    |

|                           |                     |                        |                 |         |            | Designated Uses |              |                   |      |                       |                 |                                  |   |
|---------------------------|---------------------|------------------------|-----------------|---------|------------|-----------------|--------------|-------------------|------|-----------------------|-----------------|----------------------------------|---|
|                           |                     |                        |                 |         |            | _               | ıatic<br>ife | Con<br>Rec<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |                                  |   |
| Waterbody<br>Name         | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO             | МQ           | PCR               | SCR  | Fish<br>Tissue        | DWS             | Impairments                      | Sources   |
| Green River B             | Rogin               |                        | 1               |         |            |                 |              |                   |      |                       |                 |                                  |   |
| Green River I             | Pasiii              | Rough                  |                 |         |            |                 |              |                   |      |                       |                 |                                  |   |
| Adams Fork                | 0.0 to 4.6          | River                  | 485774_01       | 5110004 | Ohio       | PS              |              |                   |      |                       |                 | Unknown                          | Unknown   |
| Bacon Creek               | 0.0 to 17.2         | Nolin River            | 486197_01       | 5110001 | Hart       |                 |              | NS                |      |                       |                 | Pathogens                        | Septic Tanks/Decentral. Systems Agriculture   |
| Bacon Creek               | 17.2 to 26.3        | Nolin River            | 486197_02       | 5110001 | Hart       | PS              |              | NS                |      |                       |                 | Sediment/Siltation,<br>Pathogens | Riparian Habitat Loss, Non-<br>Irrig Crop Prod, Septic<br>Tanks/Decentral. Systems<br>Agriculture   |
| Bacon Creek               | 26.3 to 31.2        | Nolin River            | 486197_03       | 5110001 | Hart       |                 |              | NS                |      |                       |                 | Pathogens                        | Septic Tanks/Decentral. Systems Agriculture   |
| Barren River              | 110.0 to<br>124.3   | Green River            | 517526_05       | 5110002 | Allen      |                 |              | NS                |      |                       |                 | Pathogens                        | Unknown   |
| Barren River<br>Reservoir | 10000<br>acres      | N/A                    | 489429_00       | 5110002 | Allen      |                 |              |                   |      | PS                    |                 | Methyl mercury                   | Atmospheric Depositions-<br>Toxics, Unknown   |
| Bat East Creek            | 0.0 to 3.3          | Pond Crk               | 486462_01       | 5110003 | Muhlenberg | PS              | PS           |                   |      |                       |                 | Sediment/Siltation,<br>TDS       | Channelization, Irrig/Non-<br>Irrig Crop Prod, Loss<br>Riparian Habitat, Petroleum<br>/Nat. Gas Prod, Surface<br>Mining, Habitat Mod-not<br>Hydro |
| Bat East Creek            | 3.3 to 7.1          | Pond Crk               | 486462_02       | 5110003 | Muhlenberg | PS              | PS           |                   |      |                       |                 | TDS, Unknown                     | Petroleum/ Natr'l Gas Prod,<br>Surface Mining,<br>Agriculture   |
| Bear Creek                | 14.5 to 22.3        | Green River            | 486554_02       | 5110001 | Edmonson   | NS              |              |                   |      |                       |                 | Unknown                          | Unknown   |
| Bear Creek                | 22.3 to 31.7        | Green River            | 486554_03       | 5110001 | Grayson    | PS              |              |                   |      |                       |                 | Unknown                          | Riparian Habitat Loss,<br>Strmbank Mod/Destable.  |

|                     |                     |                         |                 |         |           |     |              | Desig             | gnated | Uses                  |                 |   |   |
|---------------------|---------------------|-------------------------|-----------------|---------|-----------|-----|--------------|-------------------|--------|-----------------------|-----------------|---|---|
|                     |                     |                         |                 |         |           | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody  | Waterbody<br>ID | HUC 8   | County    | BIO | $\tilde{O}M$ | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Big Creek           | 3.0 to 8.2          | Russell Crk             | 487159_00       | 5110001 | Adair     | PS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens                                  | Unknown, Habitat Mod-not<br>Hydro   |
| Big Pitman<br>Creek | 0.0 to 13.6         | Green River             | 487227_01       | 5110001 | Green     | 15  |              | PS                |        |                       |                 | Pathogens   | Unknown   |
| Big Pitman<br>Creek | 26.9 to 32.0        | Green River             | 487227_02       | 5110001 | Green     | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                          | Dredge Mining, Dredging,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod |
| Big Reedy<br>Creek  | 7.5 to 13.6         | Green River             | 487231_00       | 5110001 | Butler    | PS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens                                  | Unknown, Crop Prod ,<br>Habitat Mod-not Hydro   |
| Billy Creek         | 0.0 to 5.9          | Valley Crk              | 487317_00       | 5110001 | Hardin    | PS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph,<br>Unknown | Indus. Pt. Source Dischrge,<br>Strmbank Mod/Destable,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod, Urban<br>Stormwater    |
| Brush Creek         | 0.0 to 6.2          | Green River             | 488076_00       | 5110001 | Casey     | PS  |              |                   |        |                       |                 | Sediment/Siltation  | Pasture Grazing, Non-Irrig<br>Crop Prod   |
| Brush Fork          | 0.0 to 3.8          | Long Falls<br>Crk       | 488089_00       | 5110005 | McClean   | NS  | NS           | NS                | NS     |                       |                 | Sediment/Siltation,<br>Sulfates, pH                               | Channelization, Irrig Crop<br>Prod, Riparian Habitat<br>Loss, Non-Irrig Crop Prod,<br>Surface Mining                        |
| Buck Creek          | 1.3 to 7.4          | Buck Fork<br>Pond River | 488210_00       | 5110006 | Christian | PS  |              |                   |        |                       |                 | Sediment/Siltation  | Habitat Mod-not Hydro   |

|                                  |                     |                           |                 |         |            |     |              | Desig | gnated              | Uses                  |                 |   |   |
|----------------------------------|---------------------|---------------------------|-----------------|---------|------------|-----|--------------|-------|---------------------|-----------------------|-----------------|---|---|
|                                  |                     |                           |                 |         |            | -   | ıatic<br>ife |       | itact<br>rea-<br>on | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County     | BIO | ОM           | PCR   | SCR                 | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Buck Creek                       | 0.0 to 8.0          | Green River               | 488213_00       | 5110005 | McClean    | PS  |              | NS    |                     |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.          | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod, Confined<br>Animal Feed. Op.'s<br>(CAFOS) |
| Buck Fork                        | 14.0 to<br>20.0     | Pond River                | 488223_00       | 5110006 | Christian  | PS  |              | NS    |                     |                       |                 | Sediment/Siltation,<br>Pathogens                                | Unknown, Habitat Mod-not<br>Hydro   |
| Buckhorn<br>Lake                 | 1230 acres          | N/A                       | 511027_00       | 5100202 | Perry      |     |              |       | NS                  |                       |                 | Sediment/Siltation,<br>TSS                                      | Heap-leach Ext Mining,<br>Surface Mining, Nat<br>Sources, Agriculture                                       |
| Burnett Fork                     | 0.0 to 1.3          | North Fork<br>Panther Crk | 488447_00       | 5110005 | Daviess    | PS  | PS           |       |                     |                       |                 | Sediment/Siltation,<br>Nitrogen (Total),<br>Phosphorus (Total)  | Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable.          |
| Butler Fork                      | 2.3 to 4.0          | Russell Crk               | 488519_00       | 5110001 | Adair      | NS  |              | NS    |                     |                       |                 | Sediment/Siltation,<br>Pathogens                                | Unknown, Habitat Mod-not<br>Hydro   |
| Calhoun Creek                    | 0.0 to 2.8          | Green River               | 488609_00       | 5110001 | Casey      | PS  |              |       |                     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                        | Pasture Grazing   |
| Campbellsville<br>City Reservoir | 63 acres            | N/A                       | CLN007_00       | 5110001 | Taylor     |     |              |       | PS                  |                       |                 | Sediment/Siltation  | Upstream Source, Natr'l<br>Sources  |
| Cane Run                         | 0.0 to 3.6          | South Fork<br>Panther Crk | 488791_00       | 5110005 | Daviess    | PS  | PS           |       |                     |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Phosphorus (Total) | Channelization, Irrig Crop<br>Prod, Non-Irrig Crop Prod,<br>Unknown   |
| Caney Creek                      | 1.4 to 5.3          | Pond River                | 488828_01       | 5110003 | Muhlenberg |     |              | NS    |                     |                       |                 | Pathogens   | Unknown   |

|                              |                     |   |                 |         |            |           |              | Desig             | gnated | Uses                  |                 |  |  |
|------------------------------|---------------------|---|-----------------|---------|------------|-----------|--------------|-------------------|--------|-----------------------|-----------------|--|--|
|                              |                     |   |                 |         |            | Aqu<br>Li | iatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody                  | Waterbody<br>ID | HUC 8   | County     | BIO       | ОM           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
|                              |                     |   |                 |         |            |           |              |                   |        |                       |                 |  |  |
| Caney Creek                  | 0.0 to 3.5          | Pond Crk                                | 488838_01       | 5110003 | Muhlenberg | PS        | PS           |                   |        |                       |                 | Sediment/Siltation,<br>TDS               | Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Petroleum/<br>Natr'l Gas Prod, Post-<br>Devel. Erosion/Sediment.,<br>Urban Runoff |
| Caney Creek                  | 3.5 to 7.5          | Pond Crk                                | 488838_02       | 5110003 | Muhlenberg | NS        |              |                   |        |                       |                 | Sediment/Siltation                       | Agriculture, Habitat Mod-<br>not Hydro   |
| Caneyville<br>City Reservoir | 75 acres            | N/A                                     | 488877_00       | 5110004 | Grayson    |           |              |                   | PS     |                       | PS              | Sediment/Siltation,<br>Nutrient/Eutroph. | Natr'l Sources   |
| Casey Creek                  | 3.7 to 4.7          | Green River                             | 485672_01       | 5110001 | Casey      |           |              | PS                |        |                       |                 | Pathogens                                | Unknown  |
| Cash Creek                   | 0.0 to 5.8          | Green River                             | 489056_01       | 5110005 | Henderson  | PS        |              |                   |        |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss, Non-<br>Irrig Crop Prod   |
| Claylick Creek               | 4.1 to 5.3          | South Fork<br>Little<br>Barren<br>River | 489582_00       | 5110001 | Metcalfe   | PS        |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Hwys/Rd/Brdgs<br>Infrastructure, Riparian<br>Habitat Loss, Pasture<br>Grazing  |
| Claylick Creek               | 2.0 to 3.1          | Green River                             | 489590_00       | 5110001 | Warren     | PS        |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens         | Channelization, Unknown,<br>Habitat Mod-not Hydro  |
| Cox's Run                    | 0.0 to 3.2          | Nolin River                             | 490231_00       | 5110001 | Hardin     | PS        |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Post-Devel.<br>Erosion /Sediment.,<br>Strmbank Mod/Destable.,<br>Livestock Grazing/Feed.<br>Op's, Crop Prod            |

|                      |                     |                           |                 |         |              |     |              | Desig             | gnated | Uses                  |                 |  |  |
|----------------------|---------------------|---------------------------|-----------------|---------|--------------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|--|
|                      |                     |                           |                 |         |              | -   | iatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name    | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County       | BIO | Ом           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                                      | Sources  |
|                      | T                   | T                         | T               | T       | T            |     |              |                   | I      | l                     |                 |  |  |
| Craborchard<br>Creek | 0.0 to 4.6          | Drakes Crk                | 490247_01       | 5110006 | Hopkins      | NS  | NS           | NS                |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Unknown | Petroleum/ Natr'l Gas Prod,<br>Agriculture, Habitat Mod-<br>not Hydro        |
| Crooked Creek        | 0.0 to 2.9          | Panther Crk               | 490376_00       | 5110005 | Daviess      |     |              | NS                |        |                       |                 | Pathogens  | Unknown  |
| Cypress Creek        | 23.1 to 25.4        | Pond River                | 490526_02       | 5110006 | Muhlenberg   | PS  |              | PS                | PS     |                       |                 | Pathogens, pH                                    | Acid Mine Drainage,<br>Surface Mining, Unknown,<br>Coal Mining (Subsurface)  |
| Cypress Creek        | 25.4 to<br>33.3     | Pond River                | 490526_03       | 5110002 | Muhlenberg   | PS  |              | PS                | PS     |                       |                 | TDS, pH  | Acid Mine Drainage   |
| Daniels Creek        | 0.0 to 5.7          | Rock Lick<br>Crk          | 490575_00       | 5110004 | Breckinridge | PS  |              |                   |        |                       |                 | Unknown  | Unknown, Habitat Mod-not<br>Hydro  |
| Deer Creek           | 0.0 to 8.2          | Green River               | 490771_01       | 5110005 | Webster      | NS  | NS           |                   |        |                       |                 | Nutrient/Eutroph.                                | Crop Prod  |
| Deer Creek           | 8.2 to 17.5         | Green River               | 490771_02       | 5110005 | Webster      | NS  |              |                   |        |                       |                 | Unknown  | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Crop Prod               |
| Deserter Creek       | 0.0 to 3.1          | South Fork<br>Panther Crk | 490828_00       | 5110005 | Daviess      | PS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens                 | Channelization, Unknown,<br>Agriculture, Habitat Mod-<br>not Hydro           |
| Dorsey Run           | 1.9 to 3.7          | Sinks Nolin<br>River      | 491020_00       | 5110001 | Hardin       | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.         | Riparian Habitat Loss,<br>Pasture Grazing, Post-<br>Devel. Erosion/Sediment. |
| Drakes Creek         | 0.0 to 23.4         | Barren<br>River           | 491096_00       | 5110002 | Warren       |     |              |                   |        | PS                    |                 | PCBs   | Indus. Pt. Source Dischrge   |
| Dry Creek            | 0.0 to 3.7          | Casey Crk                 | 491173_00       | 5110001 | Casey        | PS  |              |                   |        |                       |                 | Sediment/Siltation                               | Pasture Grazing, Non-Irrig<br>Crop Prod                                      |
| East Branch          | 0.0 to 2.0          | West Fork<br>Pond River   | 491428_00       | 5110006 | Christian    | PS  |              |                   |        |                       |                 | Sediment/Siltation                               | Crop Prod , Habitat Mod-<br>not Hydro  |

|                   |                     |                        |                   |         |            |     |              | Desig             | gnated | Uses                  |                 |  |   |
|-------------------|---------------------|------------------------|-------------------|---------|------------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|---|
|                   |                     |                        |                   |         |            | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8   | County     | BIO | WQ           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                              | Sources   |
| East Fork Deer    |                     |                        |                   |         |            |     |              |                   |        |                       |                 |  |   |
| Creek             | 0.0 to 6.8          | Deer Crk               | 491455_00         | 5110005 | Webster    | NS  |              |                   |        |                       |                 | Sediment/Siltation                       | Non-Irrig Crop Prod   |
| Elk Creek         | 0.0 to 5.4          | Pond River             | 491656_01         | 5110006 | Hopkins    | NS  |              |                   |        |                       |                 | Sediment/Siltation                       | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod  |
| Elk Creek         | 7.5 to 10.6         | Pond River             | 491656_02         | 5110006 | Hopkins    |     |              | NS                |        |                       |                 | Pathogens                                | SSO/Collect Sys Failure   |
| Elk Pond<br>Creek | 0.0 to 4.5          | Pond River             | 491671_00         | 5110006 | Muhlenberg | NS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens         | Unknown, Habitat Mod-not<br>Hydro   |
| Flat Creek        | 0.0 to 10.6         | Pond River             | 492181_00         | 5110006 | Hopkins    | NS  | NS           | NS                | NS     |                       |                 | Sediment/Siltation,<br>Sulfates, TDS, pH | Acid Mine Drainage, Hwy<br>/Rd/Brdg Runoff, Illegal<br>Storm Sewer Hkup,<br>Indus/Com. Strmwtr<br>Dischrge Permit, Pet/Natr'l<br>Gas Prod, Post-Devel<br>Erosion/Sediment, Land<br>Clearance, Surface Mining,<br>Urban Stormwater |
| Ford Ditch        | 0.0 to 2.6          | Rhodes Crk             | 501759-<br>2.2_00 | 5110005 | Daviess    | PS  | PS           |                   |        |                       |                 | Sulfates, TDS,<br>Phosphorus (Total)     | Channelization, Dredging<br>Irrig/Non-Irrig Crop Prod,<br>Petroleum/ Natr'l Gas Prod,<br>Surface Mining   |
| Gilles Ditch      | 0.0 to 4.9          | Rhodes Crk             | 501760-<br>3.5_00 | 5110005 | Daviess    | NS  |              |                   |        |                       |                 | Unknown                                  | Riparian Habitat Loss,<br>Strmbank Mod/Destable.  |
| Glens Fork        | 0.0 to 8.0          | Russell Crk            | 492907_00         | 5110001 | Adair      | PS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens         | Range. Grazing, Unknown,<br>Habitat Mod-not<br>Hydromods  |

|                          |                     |                        |                 |         |            |     |              | Desig             | gnated | Uses                  |                 |  |   |
|--------------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|---|
|                          |                     |                        |                 |         |            |     | iatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | ОM           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                              | Sources   |
| Г                        | 1                   |                        | I               | Ī       |            | ı   | I            |                   |        |                       |                 |  |   |
| Grassy Creek             | 0.8 to 2.9          | Rough<br>River         | 493149_00       | 5110004 | Ohio       | NS  |              |                   |        |                       |                 | Sediment/Siltation                       | Channelization, Dredging<br>Riparian Habitat Loss,<br>Surface Mining  |
| Green River              | 207.8 to 246.4      | Ohio River             | 493284_07       | 5110001 | Hart       |     |              |                   |        | PS                    |                 | Methyl mercury                           | Unknown   |
| Green River<br>Reservoir | 8210 acres          | N/A                    | 493295_00       | 5110001 | Taylor     |     |              |                   |        | PS                    |                 | Methyl mercury,<br>PCBs                  | Indus. Pt. Source Dischrge  |
| Groves Creek             | 0.0 to 6.2          | Green River            | 493444_00       | 5110005 | Webster    | NS  |              |                   |        |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss, Non-<br>Irrig Crop Prod  |
| Havana Creek             | 0.0 to 1.9          | Deer Crk               | 493874_00       | 5110006 | Webster    | PS  |              |                   |        |                       |                 | Sediment/Siltation                       | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod  |
| Indian Camp<br>Creek     | 0.0 to 3.0          | Green River            | 494914_01       | 5110003 | Butler     | PS  |              |                   |        |                       |                 | Sediment/Siltation                       | Crop Prod , Habitat Mod-<br>not Hydro   |
| Indian Camp<br>Creek     | 3.9 to 10.2         | Green River            | 494914_02       | 5110003 | Butler     | PS  |              |                   |        |                       |                 | Sediment/Siltation                       | Crop Prod , Habitat Mod-<br>not Hydro   |
| Isaacs Creek             | 0.0 to 7.4          | Pond River             | 495035_00       | 5110006 | Muhlenberg | NS  |              | NS                | NS     |                       |                 | Sediment/Siltation, pH                   | Acid Mine Drainage,<br>Impacts fr. Aband. Mine<br>Lands   |
| Jarrels Creek            | 0.0 to 1.6          | Pond River             | 495175_00       | 5110006 | Muhlenberg | NS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens         | Dredging , Unknown,<br>Habitat Mod-not Hydro  |
| Jarret Fork              | 0.0 to 1.0          | Caney Crk              | 495176_00       | 5110004 | Grayson    | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Animal Feed. Op.'s,<br>Impacts fr. Hydrostructure<br>Flow Reg/Mod, Upstream<br>Impound., Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod |

|                        |                     |                           |                 |         |            |     |              | Desig             | gnated | Uses                  |                 |   |  |
|------------------------|---------------------|---------------------------|-----------------|---------|------------|-----|--------------|-------------------|--------|-----------------------|-----------------|---|--|
|                        |                     |                           |                 |         |            |     | iatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County     | BIO | ОM           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                                       | Sources  |
|                        | 1                   | ı                         |                 | 1       |            | 1   | ı            |                   | ı      |                       |                 |   | <u> </u>   |
| Jenny Hollow<br>Branch | 0.0 to 2.4          | Horse<br>Branch           | 495212_00       | 5110004 | Ohio       | NS  |              |                   |        |                       |                 | Sediment/Siltation                                | Channelization, Dredging<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Livestock-Grazing/Feed.<br>Op's |
| Joes Branch            | 0.0 to 3.5          | North Fork<br>Panther Crk | 495307_00       | 5110005 | Daviess    | PS  | PS           |                   |        |                       |                 | Unknown   | Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Pasture<br>Grazing,, Unknown            |
| Joes Run               | 0.0 to 2.4          | North Fork<br>Panther Crk | 495312_00       | 5110005 | Daviess    | PS  | PS           |                   |        |                       |                 | Unknown   | Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Pasture<br>Grazing, Unknown             |
| Knoblick<br>Creek      | 0.0 to 2.1          | Panther Crk               | 495848_00       | 5110005 | Daviess    |     |              | NS                |        |                       |                 | Pathogens   | Unknown  |
| Knoblick<br>Creek      | 0.0 to 9.0          | Deer Crk                  | 495850_00       | 5110005 | Webster    | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>TDS, Nutrient<br>/Eutroph. | Riparian Habitat Loss,<br>Pasture Grazing, Non-Irrig<br>Crop Prod, Range. Grazing                                |
| Lake Luzerne           | 55 acres            | N/A                       | 497358_00       | 5110003 | Muhlenberg |     |              |                   |        |                       | PS              | Nutrient/Eutroph.                                 | Unknown  |
| Lewis Creek            | 0.0 to 11.8         | Green River               | 496327_00       | 5110003 | Ohio       | PS  |              |                   |        |                       |                 | Sediment/Siltation                                | Surface Mining, Habitat<br>Mod-not Hydro   |
| Lick Creek             | 0.0 to 3.7          | Green River               | 496482_01       | 5110005 | Henderson  | NS  |              |                   |        |                       |                 | Sediment/Siltation                                | Non-Irrig Crop Prod  |
| Lick Creek             | 5.0 to 13.8         | Green River               | 496482_02       | 5110005 | Henderson  | NS  |              |                   |        |                       |                 | Sediment/Siltation                                | Channelization   |
| Lindy Creek            | 0.0 to 0.9          | Lynn Camp<br>Crk          | 496578_00       | 5110001 | Hart       | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.          | Dredging, Pasture Grazing  |
| Little Barren<br>River | 0.0 to 8.8          | Green River               | 496604_01       | 5110001 | Green      |     |              | PS                |        |                       |                 | Pathogens   | Unknown  |

|                              |                     |                        |                 |         |              |     |              | Desig             | gnated | Uses                  |                 |  |   |
|------------------------------|---------------------|------------------------|-----------------|---------|--------------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|---|
|                              |                     |                        |                 |         |              | -   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County       | BIO | ŌΜ           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| T                            | T                   |                        | Т               | 1       | Т            | 1   | ī            |                   | T      | 1                     | 1               |  |   |
| Little<br>Beaverdam<br>Creek | 10.7 to<br>11.4     | Green River            | 496615_02       | 5110002 | Warren       | PS  |              |                   |        |                       |                 | Sediment/Siltation                                 | Riparian Habitat Loss,<br>Silviculture  |
| Little Cypress<br>Creek      | 0.0 to 9.2          | Pond River             | 496701_00       | 5110006 | Muhlenberg   | PS  | PS           |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS               | Channelization, Golf Courses, Hwy/Rd/Brdg Runoff, Irrig/Non-Irrig Crop Prod, Petroleum/ Natr'l Gas Prod, Surface Mining, Urban Stormwater |
| Little Muddy<br>Creek        | 4.9 to 6.4          | Green River            | 513506_01       | 5110002 | Butler       | NS  |              |                   |        |                       |                 | Sediment/Siltation                                 | Crop Prod , Habitat Mod-<br>not Hydro   |
| Little Muddy<br>Creek        | 6.4 to 12.9         | Green River            | 513506_02       | 5110002 | Butler       | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.           | Riparian Habitat Loss, Non-<br>Irrig Crop Prod  |
| Long Falls<br>Creek          | 0.0 to 7.5          | Green River            | 497098_01       | 5110005 | McClean      | PS  | PS           | NS                |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Pathogens | Channelization, Irrig/Non-<br>Irrig Crop Prod, Petroleum/<br>Natr'l Gas Prod, Surface<br>Mining, Unknown                                  |
| Long Falls<br>Creek          | 7.5 to 11.8         | Green River            | 497098_02       | 5110005 | McClean      | PS  |              | NS                | NS     |                       |                 | Sediment/Siltation,<br>TDS, Pathogens,<br>pH       | Acid Mine Drainage,<br>Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod   |
| Long Lick<br>Creek           | 4.5 to 6.9          | Rough<br>River         | 497125_00       | 5110004 | Breckinridge | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.           | Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's, Crop Prod  |
| McGrady<br>Creek             | 0.0 to 2.0          | Caney Crk              | 497869_00       | 5110004 | Ohio         | PS  |              |                   |        |                       |                 | Sediment/Siltation                                 | Habitat Mod-not Hydro   |
| Mill Creek                   | 0.0 to 3.8          | Smith Crk              | 498260_00       | 5110004 | Ohio         |     |              | NS                |        |                       |                 | Pathogens  | Unknown   |

|                             |                     |                           |                 |         |         |     |              | Desig       | gnated | Uses                  |                 |  |   |
|-----------------------------|---------------------|---------------------------|-----------------|---------|---------|-----|--------------|-------------|--------|-----------------------|-----------------|--|---|
|                             |                     |                           |                 |         |         |     | ıatic<br>ife | Con<br>Reci | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID | HUC 8   | County  | BIO | ОМ           | PCR         | SCR    | Fish<br>Tissue        | DWS             | Impairments                              | Sources   |
| 16 15:                      |                     | G D:                      | 400011 01       | 5110000 | D 1     | ı   |              |             | l      | NG                    |                 | D.C.D.                                   | 11 5 6 5 1  |
| Mud River                   | 0.0 to 9.0          | Green River               | 499011_01       | 5110003 | Butler  |     |              |             |        | NS                    |                 | PCBs                                     | Indus. Pt. Source Dischrge  |
| Mud River                   | 9.0 to 30.5         | Green River               | 499011_02       | 5110003 | Butler  |     | PS           |             |        | NS                    |                 | Methyl mercury,<br>PCBs, Other           | Indus. Pt. Source Dischrge,<br>Unknown  |
| Mud River                   | 30.5 to<br>38.9     | Green River               | 499011_03       | 5110003 | Logan   |     |              |             |        | NS                    |                 | PCBs                                     | Indus. Pt. Source Dischrge  |
| Mud River                   | 38.9 to 67.8        | Green River               | 499011_04       | 5110003 | Logan   |     |              |             |        | NS                    |                 | PCBs                                     | Indus. Pt. Source Dischrge  |
| Muddy Creek                 | 8.3 to 12.1         | Green River               | 499036_02       | 5110004 | Butler  | NS  |              |             |        |                       |                 | Unknown                                  | Channelization, Unknown   |
| Muddy Creek                 | 12.1 to<br>14.9     | Green River               | 499036_03       | 5110003 | Logan   | PS  |              |             |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Riparian Habitat Loss, Non-<br>Irrig Crop Prod, Crop Prod                         |
| Muddy Creek                 | 0.0 to 6.1          | Caney Crk                 | 499037_01       | 5110004 | Ohio    | PS  |              |             |        |                       |                 | Sediment/Siltation                       | Habitat Mod-not Hydro   |
| Muddy Creek                 | 1.9 to 3.9          | Rough<br>River            | 499038_01       | 5110004 | Ohio    | NS  |              |             |        |                       |                 | Nutrient/Eutroph.                        | Channelization, Agriculture   |
| Muddy Creek                 | 5.9 to 9.1          | Rough<br>River            | 499038_02       | 5110004 | Ohio    | PS  |              |             |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Channelization, Non-Irrig<br>Crop Prod, Confined<br>Animal Feed. Op.'s<br>(CAFOS) |
| Narge Creek                 | 2.2 to 3.9          | Pond River                | 499173_00       | 5110006 | Hopkins | NS  |              |             |        |                       |                 | Unknown                                  | Channelization, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Crop Prod    |
| Nolin River                 | 44.0 to 93.2        | Green River               | 499512_01       | 5110001 | Hardin  |     |              | NS          |        |                       |                 | Pathogens                                | Agriculture   |
| North Branch                | 0.0 to 12.4         | South Fork<br>Panther Crk | 499538_00       | 5110005 | Hancock | NS  |              |             |        |                       |                 | Unknown                                  | Crop Prod , Habitat Mod-<br>not Hydro   |
| North Fork<br>Barnett Creek | 0.0 to 2.8          | Barnett Crk               | 499541_00       | 5110004 | Ohio    | PS  |              |             |        |                       |                 | Sediment/Siltation                       | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod                  |

|                             |                     |                        |                 |         |         | Designated Uses |              |                   |      |                       |                 |   |   |
|-----------------------------|---------------------|------------------------|-----------------|---------|---------|-----------------|--------------|-------------------|------|-----------------------|-----------------|---|---|
|                             |                     |                        |                 |         |         | _               | ıatic<br>ife | Con<br>Rec<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO             | õм           | PCR               | SCR  | Fish<br>Tissue        | DWS             | Impairments                               | Sources   |
|                             | T                   | ı                      | ı               | I       |         | ı               |              | ı                 | I    |                       |                 |   |   |
| North Fork<br>Panther Creek | 0.0 to 4.2          | Panther Crk            | 499562_01       | 5110005 | Daviess | PS              | PS           |                   |      |                       |                 | Unknown                                   | Channelization, Irrig Crop<br>Prod, Pasture Grazing,<br>Non-Irrig Crop Prod                           |
| North Fork<br>Panther Creek | 4.2 to 6            | Panther Crk            | 499562_02       | 5110005 | Daviess | PS              |              | NS                |      |                       |                 | Pathogens,<br>Unknown                     | Channelization, Unknown   |
| North Fork<br>Panther Creek | 6.1 to 9.7          | Panther Crk            | 499562_03       | 5110005 | Daviess | NS              |              |                   |      |                       |                 | Unknown                                   | Channelization, Unknown   |
| North Fork<br>Panther Creek | 9.7 to 12.7         | Panther Crk            | 499562_04       | 5110005 | Daviess | PS              | PS           |                   |      |                       |                 | Phosphorus<br>(Total)                     | Channelization, Irrig Crop<br>Prod, Non-Irrig Crop Prod   |
| Old Panther<br>Creek        | 0.4 to 5.7          | Panther Crk            | 499866_01       | 5110005 | Daviess | NS              |              |                   |      |                       |                 | Unknown                                   | Unknown   |
| Old Panther<br>Creek        | 5.7 to 8.8          | Panther Crk            | 499866_02       | 5110005 | Daviess | NS              |              |                   |      |                       |                 | Sediment/Siltation                        | Habitat Mod-not Hydro   |
| Otter Creek                 | 0.0 to 6.2          | Pond River             | 500023_00       | 5110006 | Hopkins | NS              |              |                   |      |                       |                 | Sediment/Siltation                        | Channelization, Non-Irrig<br>Crop Prod, SSO/Collect Sys<br>Failure, Urban Stormwater                  |
| Panther Creek               | 0.0 to 2.7          | Green River            | 500157_01       | 5110005 | Daviess | NS              |              |                   |      |                       |                 | Sediment/Siltation, Turbidity             | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod, Urban<br>Stormwater                 |
| Panther Creek               | 2.7 to 5.6          | Green River            | 500157_02       | 5110005 | Daviess |                 |              | NS                |      |                       |                 | Pathogens                                 | Agriculture   |
| Panther Creek               | 17.1 to<br>19.5     | Green River            | 500157_03       | 5110005 | Daviess | NS              | NS           |                   |      |                       |                 | Sediment/Siltation,<br>Phosphorus (Total) | Channelization, Irrig/Non-<br>Irrig Crop Prod, Pasture<br>Grazing, Strmbank<br>Mod/Destable., Unknown |
| Pettys Fork                 | 0.0 to 6.0          | Russell Crk            | 500492_00       | 5110001 | Adair   | PS              |              | NS                |      |                       |                 | Sediment/Siltation,<br>Pathogens          | Range. Grazing, Unknown,<br>Habitat Mod-not Hydro   |

|                   |                     |                        |                 |         |            |     |              | Desig             | gnated | Uses                  |                 |   |  |
|-------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------------|--------|-----------------------|-----------------|---|--|
|                   |                     |                        |                 |         |            |     | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | ОM           | PCR               | SCR    | Fish<br>Tissue        | SMQ             | Impairments   | Sources  |
|                   | Τ                   | <u> </u>               | <u> </u>        |         | <u> </u>   |     |              |                   |        | I                     |                 |   |  |
| Pigeon Creek      | 0.0 to 2.9          | Muddy Crk              | 500588_00       | 5110004 | Ohio       | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>TDS                            | Acid Mine Drainage, Non-<br>Irrig Crop Prod  |
| Pleasant Run      | 0.0 to 2.1          | Drakes Crk             | 500906_01       | 5110006 | Hopkins    |     | NS           | NS                | NS     |                       |                 | Sediment/Siltation                                    | Habitat Mod-not Hydro  |
| Plum Creek        | 0.0 to 2.5          | Pond Crk               | 500964_01       | 5110003 | Muhlenberg | NS  |              |                   |        |                       |                 | Chloride, TDS   | Inappropriate Waste<br>Disposal  |
| Plum Creek        | 2.5 to 4.3          | Pond Crk               | 500964_02       | 5110006 | Muhlenberg | NS  |              | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens                      | Unknown, Habitat Mod-not<br>Hydro  |
| Pond Creek        | 0.0 to 4.7          | Green River            | 501042_01       | 5110003 | Muhlenberg |     |              | PS                |        |                       |                 | Pathogens   | Unknown  |
| Pond Creek        | 4.9 to 7.5          | Green River            | 501042_02       | 5110003 | Muhlenberg | NS  | NS           |                   |        |                       |                 | Chloride,<br>Sediment/<br>Siltation, Sulfates,<br>TDS | Channel, Petroleum/Nat<br>Gas Prod, Post-Devel.<br>Erosion/Sediment.,<br>Strmbank Mod/Destable.,<br>Surface Mining, Inapprop<br>Waste Disposal             |
| Pond Creek        | 7.5 to 11.7         | Green River            | 501042_03       | 5110003 | Muhlenberg | NS  | NS           | NS                | NS     |                       |                 | Chloride,<br>Sediment/Siltation,<br>Sulfates, TDS, pH | Acid Mine Drainage,<br>Channelization,<br>Petroleum/Nat Gas,<br>Strmbank Mod/Destab,<br>Surface Mining, Habitat<br>Mod-not Hydro,<br>Inappr.Waste Disposal |
| Pond Creek        | 11.7 to<br>14.3     | Green River            | 501042_04       | 5110003 | Muhlenberg |     | NS           | NS                | NS     |                       |                 | Sediment/Siltation,<br>TDS, pH                        | Acid Mine Drainage,<br>Habitat Mod-not Hydro,<br>Coal Mining   |

|                        |                     |                        |                   |         |            | Designated Uses |              |                   |      |                       |                 |                                      |  |
|------------------------|---------------------|------------------------|-------------------|---------|------------|-----------------|--------------|-------------------|------|-----------------------|-----------------|--------------------------------------|--|
|                        |                     |                        |                   |         |            | -               | ıatic<br>ife | Con<br>Rec<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |                                      |  |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8   | County     | BIO             | ОM           | PCR               | SCR  | Fish<br>Tissue        | DWS             | Impairments                          | Sources  |
| Pond Creek             | 14.3 to 18.1        | Green River            | 501042_05         | 5110003 | Muhlenberg | PS              | PS           | NS                | NS   |                       |                 | рН                                   | Acid Mine Drainage,<br>Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Pasture<br>Grazing, Post-Devel.<br>Erosion/ Sediment |
| Pond Creek             | 18.1 to 21.4        | Green River            | 501042_06         | 5110003 | Muhlenberg | NS              |              | NS                | NS   |                       |                 | pH, Unknown                          | Acid Mine Drainage,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Surface Mining, Habitat<br>Mod-not Hydro                                 |
| Pond Drain             | 0.0 to 2.0          | Cypress Crk            | 490526-<br>5.8_00 | 5110006 | McClean    | PS              |              |                   |      |                       |                 | Sediment/Siltation, TDS              | Riparian Habitat Loss, Non-<br>Irrig Crop Prod   |
| Pond River             | 1.0 to 20.8         | Green River            | 501053_02         | 5110006 | Hopkins    | PS              | PS           |                   |      |                       |                 | Sediment/Siltation,<br>TDS           | Heap-leach Ext Mining,<br>Surface Mining, Habitat<br>Mod-not Hydro   |
| Pond River             | 20.8 to 31.1        | Green River            | 501053_03         | 5110006 | Muhlenberg | PS              | PS           |                   |      |                       |                 | Sediment/Siltation                   | Surface Mining, Habitat<br>Mod-not Hydro, Coal<br>Mining (Subsurface)  |
| Pond River             | 69.1 to 79.7        | Green River            | 501053_04         | 5110006 | Muhlenberg | PS              |              |                   |      |                       |                 | Sediment/Siltation                   | Habitat Mod-not Hydro  |
| Poplar Grove<br>Branch | 0.0 to 3.0          | Big Brush<br>Crk       | 501108_00         | 5110001 | Taylor     |                 |              | NS                |      |                       |                 | Pathogens                            | Unknown  |
| Render Creek           | 0.0 to 3.3          | Lewis Crk              | 501725_00         | 5110003 | Ohio       | NS              | NS           | NS                | NS   |                       |                 | Sediment/Siltation,<br>Sulfates, TDS | Channelization, Riparian<br>Habitat Loss, Petroleum/<br>Natr'l Gas Prod, Post-<br>Devel. Erosion/Sediment.   |

|                            |                     |                        |                 |         |            |     |              | Desig             | nated | Uses                  |                 |   |   |
|----------------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------------|-------|-----------------------|-----------------|---|---|
|                            |                     |                        |                 |         |            | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name          | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | WQ           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Rhodes Creek               | 0.0 to 2.2          | Panther Crk            | 501759_01       | 5110005 | Daviess    | NS  | NS           |                   |       |                       |                 | Phosphorus<br>(Total)   | Channelization, Irrig Crop<br>Prod, Riparian Habitat<br>Loss, Non-Irrig Crop Prod                             |
| Rhodes Creek               | 2.2 to 7.5          | Green River            | 501759_02       | 5110005 | Daviess    | NS  | NS           |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Phosphorus (Total) | Channelization, Irrig/Non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable., Crop Prod |
| Rhodes Creek               | 0.0 to 1.9          | Green River            | 501760_00       | 5110005 | Daviess    | PS  |              |                   |       |                       |                 | Sediment/Siltation  | Non-Irrig Crop Prod,<br>Urban Stormwater  |
| Richland<br>Slough         | 0.0 to 6.2          | Green River            | 501825_00       | 5110005 | Henderson  | NS  |              |                   |       |                       |                 | Sediment/Siltation  | Non-Irrig Crop Prod,<br>Agriculture   |
| Rough River<br>Reservoir   | 5100 acres          | N/A                    | 502953_00       | 5110004 | Hardin     |     |              |                   |       | PS                    |                 | Methyl mercury  | Unknown   |
| Russell Creek              | 40.0 to<br>41.5     | Green River            | 502521_05       | 5110001 | Adair      |     |              | NS                |       |                       |                 | Pathogens   | Unknown   |
| Salem Lake                 | 99 acres            | N/A                    | CLN010_00       | 5110001 | Larue      |     |              |                   | PS    |                       |                 | Sediment/Siltation  | Grazing-Riparian Zones,<br>Agriculture, Habitat Mod-<br>not Hydro   |
| Salt Lick<br>Creek         | 0.0 to 1.3          | Gasper<br>River        | 502826_00       | 5110002 | Warren     | NS  |              |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                        | Riparian Habitat Loss,<br>Agriculture   |
| Sand Lick<br>Creek         | 0.0 to 3.0          | Pond Crk               | 502963_00       | 5110003 | Muhlenberg | PS  | PS           |                   |       |                       |                 | Unknown   | Riparian Habitat Loss,<br>Pasture Grazing, Unknown  |
| South Fork<br>Beaver Creek | 1.2 to 5.9          | Beaver Crk             | 503906_00       | 5110002 | Barren     | PS  |              |                   |       |                       |                 | Unknown   | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Riparian<br>Habitat Loss, Unknown   |

|                             |                     |                        |                 |         |           |     |              | Desig             | gnated | Uses                  |                 |  |  |
|-----------------------------|---------------------|------------------------|-----------------|---------|-----------|-----|--------------|-------------------|--------|-----------------------|-----------------|--|--|
|                             |                     |                        |                 |         |           | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO | ōм           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
|                             | T                   | T                      | T               | 1       | T         |     |              |                   | 1      | Т                     | 1               |  |  |
| South Fork<br>Panther Creek | 0.0 to 2.4          | Panther Crk            | 503939_01       | 5110005 | Daviess   | PS  | PS           | NS                |        |                       |                 | Copper,<br>Sediment/Siltation,<br>Pathogens,<br>Nutrient/Eutroph.,<br>Phosphorus (Total) | Irrig/Non-Irrig Crop Prod,<br>Riparian Habitat Loss,<br>Silviculture, Strmbank<br>Mod/Destable., Unknown               |
| South Fork<br>Panther Creek | 2.4 to 9.6          | Panther Crk            | 503939_02       | 5110005 | Daviess   | NS  |              |                   |        |                       |                 | Unknown  | Channelization, Wet<br>Weather Dischrge. (Pt.<br>Source/Combination<br>Stormwater, SSO/CSO),<br>Unknown                |
| South Fork<br>Panther Creek | 9.6 to 13.5         | Panther Crk            | 503939_03       | 5110005 | Daviess   | PS  | PS           | NS                |        |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Phosphorus (Total)                                  | Channelization, Irrig Crop<br>Prod, Pasture Grazing,<br>Non-Irrig Crop Prod,<br>Agriculture, Habitat Mod-<br>not Hydro |
| South Fork                  | 13.5 to             |                        |                 |         |           |     |              |                   |        |                       |                 | •  | •  |
| Panther Creek               | 17.7                | Panther Crk            | 503939_04       | 5110005 | Daviess   |     |              | NS                |        |                       |                 | Pathogens  | Unknown  |
| Spa Lake                    | 240 acres           | N/A                    | CLN005_00       | 5110003 | Logan     |     |              |                   | PS     |                       |                 | Sediment/Siltation   | Natr'l Sources, Agriculture  |
| Sputzman<br>Creek           | 1.0 to 4.1          | Green River            | 504196_00       | 5110005 | Henderson | PS  | PS           |                   |        |                       |                 | Nutrient/Eutroph.  | Impacts fr. Hydrostructure<br>Flow Reg/Mod, Livestock-<br>Grazing/Feed. Op's, Crop<br>Prod                             |
| Sunfish Creek               | 6.6 to 9.7          | Bear Crk               | 504792_00       | 5110001 | Grayson   | PS  |              |                   |        |                       |                 | Sediment/Siltation   | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Agriculture   |

|                             |                     |                           |                    |         |            | Designated Uses |              |                   |      |                       |                 |  |   |
|-----------------------------|---------------------|---------------------------|--------------------|---------|------------|-----------------|--------------|-------------------|------|-----------------------|-----------------|--|---|
|                             |                     |                           |                    |         |            | _               | iatic<br>ife | Con<br>Rec<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID    | HUC 8   | County     | BIO             | ОM           | PCR               | SCR  | Fish<br>Tissue        | DWS             | Impairments                              | Sources   |
| Sweepstakes<br>Branch       | 1.0 to 3.8          | South Fork<br>Panther Crk | 504845_00          | 5110005 | Daviess    | PS              | PS           |                   |      |                       |                 | Nutrient/Eutroph.                        | Channelization, Irrig/non-<br>Irrig Crop Prod, Riparian<br>Habitat Loss, Strmbank<br>Mod/Destable.      |
| Sycamore<br>Creek           | 0.0 to 1.5          | Bear Crk                  | 504864_00          | 5110001 | Edmonson   | NS              |              |                   |      |                       |                 | Unknown                                  | Habitat Mod-not Hydro   |
| Taylor Fork                 | 0.0 to 4.0          | Bear Crk                  | 505019_00          | 5110001 | Grayson    | NS              |              |                   |      |                       |                 | Sediment/Siltation                       | Pasture Grazing, Urban<br>Stormwater  |
| Three Lick<br>Fork          | 0.0 to 3.3          | Muddy Crk                 | 505247_00          | 5110004 | Ohio       | NS              |              |                   |      |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph. | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod, Surface Mining                        |
| Town Branch                 | 0.0 to 6.7          | Mud River                 | 505385_00          | 5110003 | Logan      |                 |              |                   |      | NS                    |                 | PCBs                                     | Indus. Pt. Source Dischrge  |
| UT to Butler<br>Branch      | 0.0 to 1.7          | Butler<br>Branch          | 488506-<br>1.3_00  | 5110001 | Adair      | PS              |              |                   |      |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Pasture Grazing   |
| UT to Cool<br>Springs Creek | 0.0 to 1.6          | Cool<br>Springs Crk       | 490021-<br>2.6_00  | 5110001 | Adair      | NS              |              |                   |      |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Agriculture   |
| UT to Cypress<br>Creek      | 0.0 to 1.6          | Cypress Crk               | 490526-<br>28.4_00 | 5110006 | Muhlenberg | PS              | PS           |                   |      |                       |                 | Sediment/Siltation                       | Irrig Crop Prod, Riparian<br>Habitat Loss, Pasture<br>Grazing, Non-Irrig Crop<br>Prod, Urban Stormwater |
| UT to Elk<br>Creek          | 0.0 to 1            | Elk Crk                   | 491656-<br>8.8_01  | 5110006 | Hopkins    |                 |              | NS                |      |                       |                 | Pathogens                                | SSO/Collect Sys Failure   |
| UT to Flat<br>Creek         | 0.0 to 3.1          | Flat Crk                  | 492181-<br>1.9_01  | 5110006 | Hopkins    | NS              |              |                   |      |                       |                 | Unknown                                  | Surface Mining  |
| UT to Flat<br>Creek         | 3.1 to 4.1          | Flat Crk                  | 492181-<br>1.9_02  | 5110006 | Hopkins    |                 |              | NS                |      |                       |                 | Pathogens                                | SSO/Collect Sys Failure   |

|                              |                     |                        |                        |         |            |     |            | Desig             | gnated | Uses                  |                 |  |  |
|------------------------------|---------------------|------------------------|------------------------|---------|------------|-----|------------|-------------------|--------|-----------------------|-----------------|--|--|
|                              |                     |                        |                        |         |            |     | atic<br>fe | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name            | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID        | HUC 8   | County     | BIO | бм         | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
|                              | T                   | T                      | ī                      | T       |            | 1   |            |                   | 1      | ı                     |                 |  |  |
| UT to Pond<br>Creek          | 0.0 to 2.3          | Pond Crk               | 493284-<br>47.3-8.8_00 | 5110003 | Muhlenberg | NS  |            |                   |        |                       |                 | Unknown  | Surface Mining   |
| UT to West<br>Fork Lewis     |                     | West Fork              | 506436-                |         |            |     |            |                   |        |                       |                 |  |  |
| Creek                        | 0.0 to 2.2          | Lewis Crk              | 1.4_00                 | 5110003 | Ohio       | NS  |            |                   |        |                       |                 | Unknown  | Habitat Mod-not Hydro  |
| UT to<br>Wiggington<br>Creek | 0.9 to 1.9          | Wiggington<br>Crk      | 506716-<br>3.5_00      | 5110002 | Logan      | NS  |            |                   |        |                       |                 | Unknown  | Riparian Habitat Loss,<br>Strmbank Mod/Destable,<br>Unknown, Crop Prod,<br>Habitat Mod-not Hydro   |
| Valley Creek                 | 0.0 to 3.5          | Nolin River            | 505940_01              | 5110001 | Hardin     | PS  | PS         | NS                |        |                       |                 | Pathogens,<br>Unknown                                | Unknown  |
| Valley Creek                 | 8.0 to 10.3         | Nolin River            | 505940_02              | 5110001 | Hardin     | NS  |            |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Unknown | Hwy/Rd/Brdg Runoff,<br>Indus.Pt. Source Dischrge,<br>Riparian Habitat Loss,<br>Strmbank Mod/Destabal.,<br>Livestock- Grazing /Feed.<br>Op's, Crop Prod |
| Valley Creek                 | 10.3 to<br>11.8     | Nolin River            | 505940_03              | 5110001 | Hardin     |     |            | NS                |        |                       |                 | Pathogens  | Unknown  |
| West Fork<br>Drakes Creek    | 0.0 to 9.9          | Drakes Crk             | 506431_01              | 5110002 | Warren     |     |            | 110               |        | PS                    |                 | PCBs   | Indus. Pt. Source Dischrge   |
| West Fork<br>Drakes Creek    | 9.9 to 23.4         | Drakes Crk             | 506431_02              | 5110002 | Simpson    |     |            |                   |        | PS                    |                 | PCBs   | Indus. Pt. Source Dischrge   |
| West Fork<br>Pond River      | 1.6 to 8.9          | Pond River             | 506444_01              | 5110006 | Christian  | PS  |            |                   |        |                       |                 | Unknown  | Habitat Mod-not Hydro  |
| West Fork<br>Pond River      | 19.6 to 26          | Pond River             | 506444_03              | 5110006 | Christian  | NS  |            |                   |        |                       |                 | Unknown  | Livestock-Grazing/Feed.<br>Op's, Habitat Mod-not<br>Hydro  |

|                      |                     |                        |                   |         |              | Designated Uses |              |                    |      |                       |                 |   |  |
|----------------------|---------------------|------------------------|-------------------|---------|--------------|-----------------|--------------|--------------------|------|-----------------------|-----------------|---|--|
|                      |                     |                        |                   |         |              |                 | ıatic<br>ife | Con<br>Reci<br>tio | rea- | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name    | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8   | County       | BIO             | ОM           | PCR                | SCR  | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Wolf Branch<br>Ditch | 0.0 to 4.1          | Rhodes Crk             | 501759-<br>2.6_00 | 5110005 | Daviess      | PS              | PS           |                    |      |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Phosphorus (Total) | Channelization, Irrig Crop<br>Prod, Riparian Habitat<br>Loss, Non-Irrig Crop Prod  |
| Wolf Lick<br>Creek   | 3.3 to 13.7         | Mud River              | 507017_00         | 5110003 | Logan        | PS              |              |                    |      |                       |                 | Sediment/Siltation  | Habitat Mod-not Hydro  |
| Ohio River Tri       | butaries            |                        |                   |         |              |                 |              |                    |      |                       |                 |   |  |
| Bayou Creek          | 0.0 to 17.3         | Ohio River             | 510435_00         | 5140203 | Livingston   | NS              |              |                    |      |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                  | Riparian Habitat Loss,<br>Unknown  |
| Bear Run             | 1.5 to 1.9          | Clover Crk             | 486575_00         | 5140201 | Breckinridge | NS              |              |                    |      |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                        | Riparian Habitat Loss,<br>Pasture Grazing,<br>Silviculture   |
| Blackford<br>Creek   | 3.6 to 8.0          | Ohio River             | 487412_02         | 5140201 | Hancock      | PS              |              |                    |      |                       |                 | Unknown   | Channelization, Unknown  |
| Canoe Creek          | 0.0 to 3.9          | Wilson Crk             | 488897_01         | 5140202 | Henderson    |                 | NS           | NS                 |      |                       |                 | Chromium (total),<br>Copper,<br>Pathogens, Zinc                 | Unknown  |
| Casey Creek          | 0.6 to 9.5          | Highland<br>Crk        | 489044_00         | 5140202 | Union        | NS              |              |                    |      |                       |                 | TDS   | Channelization, Wetland<br>Loss, Dredging ,<br>Hydrostructure Impacts,<br>Flow Reg/Mod, Irrig Crop<br>Prod, Riparian Habitat<br>Loss, Pet/Natr'l Gas Prod,<br>Strmbank Mod/Destab. |

|                                       |                     |                        |                     |         |              |     |              | Desig       | nated | Uses                  |                 |                               |  |
|---------------------------------------|---------------------|------------------------|---------------------|---------|--------------|-----|--------------|-------------|-------|-----------------------|-----------------|-------------------------------|--|
|                                       |                     |                        |                     |         |              | -   | ıatic<br>ife | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                               |  |
| Waterbody<br>Name                     | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID     | HUC 8   | County       | BIO | Ом           | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments                   | Sources  |
| Clover Creek                          | 7.8 to 9.2          | Ohio River             | 489703_00           | 5140201 | Breckinridge | PS  |              |             |       |                       |                 | Sediment/Siltation            | Impacts fr. Hydrostructure<br>Flow Reg/Mod, Livestock-<br>Grazing /Feed. Op's, Crop<br>Prod                                      |
| Crooked Creek                         | 0.0 to 11.7         | Ohio River             | 511649_01           | 5140203 | Crittenden   | PS  |              |             |       |                       |                 | Nutrient/Eutroph.             | Unknown  |
| Crooked Creek                         | 22.7 to<br>23.7     | Ohio River             | 511649_03           | 5140203 | Crittenden   |     |              | NS          |       |                       |                 | Pathogens                     | SSO  |
| Deer Creek                            | 0.0 to 7.9          | Ohio River             | 490770_01           | 5140203 | Livingston   | NS  |              |             |       |                       |                 | Unknown                       | Agriculture  |
| Goose Pond<br>Ditch/Wardens<br>Slough | 0.0 to 14           | Ohio River             | 452377-<br>114.5_00 | 5140203 | Union        | NS  |              |             |       |                       |                 | Unknown                       | Riparian Habitat Loss,<br>Strmbank Mod/Destable.,<br>Crop Prod   |
| Highland<br>Creek                     | 0.0 to 7.1          | Ohio River             | 494210_00           | 5140202 | Union        | PS  | PS           | NS          |       |                       |                 | Pathogens,<br>Unknown         | Hwys/Rd/Brdgs Infrastructure (New Construction), Riparian Habitat Loss, Strmbank Mod/Destable., Agriculture Municipal Pt. Source |
| Rush Creek                            | 0.0 to 1.3          | Crooked<br>Crk         | 511649-<br>17.5_00  | 5140203 | Crittenden   | PS  |              |             |       |                       |                 | Org.Enrich.<br>(Sewage)       | Dischrge, Urban<br>Stormwater  |
| Scenic Lake                           | 18 acres            | N/A                    | 503039_00           | 5140202 | Henderson    | 15  | PS           |             |       |                       |                 | Nutrient/Eutroph.             | Contaminated Sediments,<br>Internal Nutrient Recycling   |
| Sugg Creek                            | 0.0 to 1.4          | Cypress Crk            | 504712_00           | 5140203 | Union        | NS  |              |             |       |                       |                 | Sediment/Siltation, Turbidity | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod   |

|                      |                     |                        |                 |         |           |     |              | Desig             | gnated | Uses                  |                 |   |  |
|----------------------|---------------------|------------------------|-----------------|---------|-----------|-----|--------------|-------------------|--------|-----------------------|-----------------|---|--|
|                      |                     |                        |                 |         |           | -   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name    | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County    | BIO | ОМ           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Tradewater R         | River Basin         |                        | ]               |         |           |     |              |                   |        |                       |                 |   |  |
| Bishop Ditch         | 3.0 to 5.7          | Caney Fork             | KY0022_00       | 5140205 | Webster   | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Turbidity,<br>Nutrient/Eutroph.      | Animal Feed. Op.'s, Heap-<br>leach Ext Mining, Non-Irrig<br>Crop Prod              |
| Buffalo Creek        | 0.0 to 6.7          | Tradewater<br>River    | 488316_00       | 5140205 | Hopkins   | PS  |              |                   |        |                       |                 | Sediment/Siltation, TDS,                                    | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod, Unknown          |
| Bull Creek           | 0.0 to 1.0          | Slover Crk             | 488350_00       | 5140205 | Webster   | PS  |              |                   |        |                       |                 | Sediment/Siltation  | Channelization, Non-Irrig<br>Crop Prod, Habitat Mod-not<br>Hydro                   |
| Caney Creek          | 0.0 to 3.3          | Donaldson<br>Crk       | 488830_00       | 5140205 | Caldwell  | NS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Riparian Habitat Loss, Non-<br>Irrig Crop Prod, Unknown                            |
| Caney Creek          | 0.0 to 8.8          | Tradewater<br>River    | 488837_00       | 5140205 | Hopkins   | NS  |              | NS                | NS     |                       |                 | Sediment/Siltation,<br>pH                                   | Acid Mine Drainage,<br>Channelization, Riparian<br>Habitat Loss, Surface<br>Mining |
| Caney Fork           | 3.5 to 7.9          | Craborchard<br>Crk     | 488863_00       | 5140205 | Webster   | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,                   | Impacts fr. Hydrostructure<br>Flow Reg/Mod, Non-Irrig<br>Crop Prod                 |
| Castleberry<br>Creek | 0.0 to 2.2          | Tradewater<br>River    | 489704_00       | 5140205 | Christian | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>TDS, Turbidity,<br>Nutrient/Eutroph. | Riparian Habitat Loss,<br>Pasture Grazing  |
| Clear Creek          | 0.0 to 2.7          | Tradewater<br>River    | 489610_01       | 5140205 | Hopkins   |     | NS           |                   |        |                       |                 | Org.Enrich.<br>(Sewage)                                     | Unknown  |

|                      |                     |                        |                 |         |         |     |              | Desig             | gnated | Uses                  |                 |   |   |
|----------------------|---------------------|------------------------|-----------------|---------|---------|-----|--------------|-------------------|--------|-----------------------|-----------------|---|---|
|                      |                     |                        |                 |         |         | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name    | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO | ОM           | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments                                       | Sources   |
|                      |                     |                        |                 |         |         |     |              |                   |        |                       |                 |   |   |
| Clear Creek          | 19.1 to 25.5        | Tradewater<br>River    | 489610_02       | 5140205 | Hopkins | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)    | Channelization, Surface<br>Mining, Unknown, Non-<br>Native Organisms (Intro.) |
| Clear Creek          | 25.5 to 26.5        | Tradewater<br>River    | 489610_03       | 5140205 | Hopkins |     |              | NS                |        |                       |                 | Pathogens   | SSO/Collect Sys Failure   |
| Copper Creek         | 0.0 to 1.1          | Richland<br>Crk        | 490078_00       | 5140205 | Hopkins |     | NS           | NS                | NS     |                       |                 | Iron, TDS, Zinc,<br>pH                            | Unknown   |
| Copperas<br>Creek    | 0.0 to 3.1          | Caney Crk              | 490083_00       | 5140205 | Hopkins |     | NS           | NS                | NS     |                       |                 | Cadmium, Iron,<br>Nickel, TDS, Zinc,<br>pH        | Unknown   |
| Craborchard<br>Creek | 1.4 to 8.8          | Tradewater<br>River    | 490248_01       | 5140205 | Webster |     |              | NS                |        |                       |                 | Pathogens   | Unknown   |
| Craborchard<br>Creek | 13.2 to<br>15.3     | Tradewater<br>River    | 490248_02       | 5140205 | Webster | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.          | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod              |
| Cypress Creek        | 0.0 to 2.3          | Tradewater<br>River    | 490527_00       | 5140205 | Union   |     |              | NS                |        |                       |                 | Pathogens   | Unknown   |
| Hurricane<br>Creek   | 0.7 to 2.2          | Tradewater<br>River    | 494821_00       | 5140205 | Hopkins |     | NS           | NS                | NS     |                       |                 | Iron, TDS, Zinc,<br>pH                            | Unknown   |
| Lake Peewee          | 360 acres           | N/A                    | 500353_00       | 5140205 | Hopkins |     |              |                   |        |                       | PS              | Nutrient/Eutroph.                                 | Agriculture   |
| Lambs Creek          | 0.0 to 3.5          | Clear Crk              | 495942_00       | 5140205 | Hopkins | PS  |              |                   |        |                       |                 | Sediment/Siltation,<br>TDS, Nutrient<br>/Eutroph. | Channelization, Riparian<br>Habitat Loss, Surface<br>Mining, Unknown          |
| Lick Creek           | 0.0 to 12.1         | Clear Crk              | 496487_00       | 5140205 | Hopkins | NS  |              |                   |        |                       |                 | Sediment/Siltation                                | Surface Mining  |

|                             |                     |                        |                       |         |            |     |              | Desig             | nated | Uses                  |                 |  |  |
|-----------------------------|---------------------|------------------------|-----------------------|---------|------------|-----|--------------|-------------------|-------|-----------------------|-----------------|--|--|
|                             |                     |                        |                       |         |            | _   | ıatic<br>ife | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID       | HUC 8   | County     | BIO | WQ           | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Lynn Fork                   | 0.0 to 2.4          | Craborchard<br>Crk     | 497379_00             | 5140205 | Webster    | PS  |              |                   |       |                       |                 | Sediment/Siltation                                     | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod                 |
| Pigeonroost<br>Creek        | 0.9 to 3.9          | Tradewater<br>River    | 500604_00             | 5140205 | Crittenden | PS  |              |                   |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.               | Agriculture  |
| Pond Creek                  | 0.0 to 5.5          | Clear Crk              | 501043_00             | 5140205 | Hopkins    | PS  |              |                   |       |                       |                 | Sediment/Siltation,<br>Turbidity                       | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod, Surface Mining |
| Richland<br>Creek           | 0.0 to 4.4          | Clear Crk              | 501821_00             | 5140205 | Hopkins    | NS  |              |                   |       |                       |                 | Sediment/Siltation                                     | Channelization, Riparian<br>Habitat Loss, Pasture<br>Grazing                     |
| Tradewater<br>River         | 0.0 to 16.7         | Ohio River             | 505460_01             | 5140205 | Union      |     |              | NS                |       |                       |                 | Pathogens  | Agriculture  |
| Tradewater<br>River         | 63.1 to<br>93.9     | Ohio River             | 505460_03             | 5140205 | Hopkins    | PS  |              |                   |       |                       |                 | Sediment/Siltation                                     | Surface Mining   |
| Tyson Branch                | 0.0 to 2.5          | Tradewater<br>River    | 505754_00             | 5140205 | Caldwell   | NS  |              |                   |       |                       |                 | Unknown  | Habitat Mod-not Hydro  |
| UT to Clear<br>Creek        | 0.0 to 2.2          | Clear Crk              | 489610-<br>25.2_01    | 5140205 | Hopkins    |     |              | NS                |       |                       |                 | Pathogens  | Package Plant/Other Small<br>Dischrge, SSO/Collect Sys<br>Failure                |
| UT to UT to<br>Slover Creek | 0.2 to 1.2          | UT to<br>Slover Crk    | 503714-3.4-<br>0.2_00 | 5140205 | Webster    | NS  |              |                   |       |                       |                 | Sediment/Siltation, TDS                                | Channelization, Surface<br>Mining, Agriculture                                   |
| Ward Creek                  | 4.9 to 10.1         | Flynn Fork             | 506219_00             | 5140205 | Caldwell   | NS  |              |                   | -     |                       |                 | Unknown  | Habitat Mod-not Hydro  |
| Weirs Creek                 | 0.0 to 5.0          | Clear Crk              | 506359_00             | 5140205 | Hopkins    | NS  |              |                   |       |                       |                 | Sediment/Siltation,<br>Turbidity,<br>Nutrient/Eutroph. | Channelization, Riparian<br>Habitat Loss, Non-Irrig<br>Crop Prod                 |

|                   |                     |                        |                 |         |            |     |              | Desig       | nated | Uses                  |                 |             |   |
|-------------------|---------------------|------------------------|-----------------|---------|------------|-----|--------------|-------------|-------|-----------------------|-----------------|-------------|---|
|                   |                     |                        |                 |         |            | _   | ıatic<br>ife | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |             |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County     | BIO | МО           | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments | Sources   |
|                   |                     |                        |                 |         |            |     |              |             |       |                       |                 |             |   |
| Wolf Creek        | 0.0 to 1.2          | Tradewater<br>River    | 506998_00       | 5140205 | Crittenden | NS  |              |             |       |                       |                 | Unknown     | Riparian Habitat Loss, Non-<br>Irrig Crop Prod, Unknown |

|                   |                     |                          |                 |         |          |           |                 | Desig       | nated | Uses                  |                 |   |  |
|-------------------|---------------------|--------------------------|-----------------|---------|----------|-----------|-----------------|-------------|-------|-----------------------|-----------------|---|--|
|                   |                     |                          |                 |         |          | Aqu<br>Li |                 | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County   | BIO       | $\tilde{o}_{M}$ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Big Sandy Riv     | er Basin            |                          | ]               |         |          |           |                 |             |       |                       |                 |   |  |
| Arkansas<br>Creek | 0.0 to 3.6          | Beaver Crk               | 486027_01       | 5070203 | Floyd    | NS        |                 |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Org.Enrich.<br>(Sewage), Phos<br>(Total) | Septic Tanks/Decentral. Systems Post-Devel. Erosion/Sediment., Surface Mining, Habitat Mod-not Hydro, Urb. Stormwater            |
| Arnold Fork       | 0.0 to 2.6          | Right Fork<br>Beaver Crk | 486053_01       | 5070203 | Knott    | NS        |                 |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS  | Petroleum/Nat. Gas Prod,<br>Post-Devel<br>Erosion/Sediment,<br>Subsurface Mining, Hab<br>Mod-not Hydro, Unspec<br>Urb Stormwater |
| Barnetts Creek    | 0.0 to 1.6          | Paint Crk                | 486411_01       | 5070203 | Johnson  | PS        |                 |             |       |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining   |
| Bear Creek        | 0.0 to 1.9          | Big Sandy<br>River       | 486557_01       | 5070204 | Lawrence | PS        | PS              | NS          |       |                       |                 | Sediment/Siltation,<br>Pathogens,<br>Org.Enrich.<br>(Sewage)                      | Animal Feed. Op.'s, Septic<br>Tanks/Decentral. Systems<br>Habitat Mod-not Hydro  |
| Beaver Creek      | 0.0 to 7.1          | Levisa Fork              | 486610_01       | 5070203 | Floyd    | PS        |                 | NS          |       |                       |                 | Sediment/Siltation,<br>Pathogens  | Onsite Treatment Systems,<br>Surface Mining  |
| Big Creek         | 0.0 to 1.9          | Tug Fork                 | 487161_01       | 5070201 | Pike     |           |                 | NS          |       |                       |                 | Pathogens   | Septic Tanks/Decentral. Systems  |
| Big Creek         | 7.3 to 10.7         | Tug Fork                 | 487161_02       | 5070201 | Pike     | PS        |                 |             |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)                               | Riparian Habitat Loss,<br>Septic Tanks/Decentral.<br>Systems Surface Mining  |

|                    |                           |   |   |   | Aqu<br>Li |   | Con<br>Reci   | rea-  | Con-<br>sump-<br>tion                         | Drink.<br>Water                               |   |  |
|--------------------|---------------------------|---|---|---|-----------|---|---|---|---|---|---|--|
| mpaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID   | HUC 8   | County  | BIO       | й   | PCR   | SCR   | Fish<br>Tissue                                | DWS   | Impairments   | Sources  |
| 10.7 to<br>15.1    | Tug Fork  Little Paint    | 487161_03   | 5070201   | Pike  | PS        |   | DC.   | ng  |   |   | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)  Sediment/Siltation,<br>pH, Org.Enrich.   | Hwy/Rd/Brdg Runoff (Non-Constr), Riparian Habitat Loss, Septic Tanks/Decentral. Systems Post-Devel. Erosion/Sediment., Surface Mining Subsurface Mining, Surface Mining, Agriculture, Inappropriate Waste Disposal, Silviculture   |
| 5.8 to 8.4         | Little Paint<br>Crk       | 487221_02   | 5070203   | Magoffin  | PS        |   | 15  | 15  |   |   | Sediment/Siltation  | Riparian Habitat Loss, Pasture Grazing   |
| ).0 to 27.1        | Ohio River Right Fork     | 487249_01   | 5070204   | Boyd  | PS        |   |   |   |   |   | Sediment/Siltation,  Sediment/Siltation,  | Resource Extraction  Petroleum/ Natr'l Gas Prod, Post-Devel. Erosion/Sediment., Subsurface Mining, Habitat Mod-not Hydro, Urban Stormwater   |
| 1.0                | 0.7 to<br>5.1<br>4 to 3.9 | 0.7 to 0.1 Tug Fork  Little Paint Crk  Little Paint Crk  O to 27.1 Ohio River  Right Fork | 0.7 to 5.1 Tug Fork 487161_03  Little Paint Crk 487221_01  Little Paint Crk 487221_02  O to 27.1 Ohio River 487249_01  Right Fork | 0.7 to 5.1 Tug Fork 487161_03 5070201  Little Paint Crk 487221_01 5070203  Little Paint Crk 487221_02 5070203  O to 27.1 Ohio River 487249_01 5070204 | D         | 0.7 to 5.1 Tug Fork 487161_03 5070201 Pike PS  Little Paint Crk 487221_01 5070203 Magoffin PS  Little Paint Crk 487221_02 5070203 Magoffin PS  0 to 27.1 Ohio River 487249_01 5070204 Boyd PS  Right Fork | 0.7 to 5.1 Tug Fork 487161_03 5070201 Pike PS Little Paint Crk 487221_01 5070203 Magoffin PS Little Paint Crk 487221_02 5070203 Magoffin PS Right Fork Right Fork | 0.7 to 5.1 Tug Fork 487161_03 5070201 Pike PS | 0.7 to 5.1 Tug Fork 487161_03 5070201 Pike PS | 0.7 to 5.1 Tug Fork 487161_03 5070201 Pike PS | 0.7 to 1.1 Tug Fork 487161_03 5070201 Pike PS  4 to 3.9 Crk 487221_01 5070203 Magoffin PS PS PS  Little Paint Crk 487221_02 5070203 Magoffin PS  8 to 8.4 Crk 487221_02 5070203 Magoffin PS  0 to 27.1 Ohio River 487249_01 5070204 Boyd PS  Right Fork | Sediment/Siltation, TDS, Org. Enrich. (Sewage)   Sediment/Siltation, TDS, Org. Enrich. (Sewage)   Sediment/Siltation, PH, Org. Enrich. (Sewage)   Sediment/Siltation, PH, Org. Enrich. (Sewage)   Sediment/Siltation, PH, Org. Enrich. (Sewage)   Sediment/Siltation   O to 27.1   Ohio River   487249_01   5070204   Boyd   PS   Sediment/Siltation.   Sedime |

|                          |                     |                        |                        |         |               |           |    | Desig       | nated | Uses                  |                 |   |  |
|--------------------------|---------------------|------------------------|------------------------|---------|---------------|-----------|----|-------------|-------|-----------------------|-----------------|---|--|
|                          |                     |                        |                        |         |               | Aqu<br>Li |    | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID        | HUC 8   | County        | BIO       | бм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Blaine Creek             | 8.1 to 17.4         | Big Sandy<br>River     | 487428_01              | 5070204 | Lawrence      | NS        | NS |             |       |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.                    | Riparian Habitat Loss, Pasture Grazing, Septic Tanks/Decentral. Systems Post-Devel. Erosion/Sediment., Strmbank Mod/Destable.                |
| Blaine Creek             | 35.0 to<br>40.8     | Big Sandy<br>River     | 487428_02              | 5070204 | Lawrence      |           |    | NS          |       |                       |                 | Pathogens   | Septic Tanks/Decentral. Sys  |
| Blaine Creek             | 41.6 to<br>43.0     | Big Sandy<br>River     | 487428_03              | 5070204 | Lawrence      | PS        |    |             |       |                       |                 | Sediment/Siltation Sediment/Siltation, pH, Org.Enrich.      | Heap-leach Ext Mining Subsurface Mining, Surface Mining, Agriculture, Inappropriate Waste Disposal,  |
| Blaine Creek Brushy Fork | 48.4<br>0.0 to 10.0 | River  John's Crk      | 487428_04<br>488137_01 | 5070204 | Lawrence Pike | NS<br>NS  |    | NS          | NS    |                       |                 | (Sewage)  Sediment/Siltation, TDS, Nutrient/Eutroph.        | Silviculture  Riparian Habitat Loss, Pasture Grazing, Surface Mining, Unknown  |
| Buck Branch              | 0.0 to 2.8          | Blaine Crk             | 488192_01              | 5070203 | Floyd         | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates,<br>Org.Enrich.<br>(Sewage) | Heap-leach Ext Mining,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Habitat<br>Mod-not Hydro, Urban<br>Stormwater |
| Buffalo Creek            | 0.0 to 1.8          | Levisa Fork            | 488317_01              | 5070203 | Floyd         | NS        |    |             |       |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining   |

|                                 |                          |                                  |                        |                    |                 |           |   | Desig      | nated | Uses                  |                 |   |   |
|---------------------------------|--------------------------|----------------------------------|------------------------|--------------------|-----------------|-----------|---|------------|-------|-----------------------|-----------------|---|---|
|                                 |                          |                                  |                        |                    |                 | Aqu<br>Li |   | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name               | Impaired<br>Segment      | Receiving<br>Waterbody           | Waterbody<br>ID        | HUC 8              | County          | BIO       | й | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Caleb Fork                      | 0.0 to 1.2               | Left Fork<br>Beaver Crk          | 488598_01              | 5070203            | Floyd           | NS        |   |            |       |                       |                 | Ammonia (Unionized),<br>Sediment/Siltation,<br>Sulfates, TDS,<br>Org.Enrich.<br>(Sewage),<br>Phosphorus (Total) | Septic Tanks/Decentral. Systems Petroleum/ Natr'l Gas Prod, Post-Devel. Erosion/Sediment., Subsurface Mining, Habitat Mod-not Hydro, Urban Stormwater   |
| Clear Creek                     | 0.0 to 4.9               | Left Fork<br>Beaver Crk          | 489611_01              | 5070203            | Floyd           | NS        |   |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS  | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro,<br>Urban Stormwater  |
| Coldwater<br>Fork<br>Dewey Lake | 2.1 to 8.8<br>1100 acres | Middle Fork<br>Rockcastle<br>N/A | 489804_01<br>490849_00 | 5070201<br>5070203 | Martin<br>Floyd | PS        |   |            | PS    |                       |                 | Sediment/Siltation,<br>Sulfates, TDS  | Channelization, Dredging Hwy/Rd/Brdg Runoff, Impacts Aband. Mine Lands, Riparian Habitat Loss, Other Spill Impacts, Surface Mining, Sediment Resuspension (Contaminated), Urban Stormwater Surface Mining |

|                   |                     |                          |                 |         |          |           |    | Desig             | gnated | Uses                  |                 |  |  |
|-------------------|---------------------|--------------------------|-----------------|---------|----------|-----------|----|-------------------|--------|-----------------------|-----------------|--|--|
|                   |                     |                          |                 |         |          | Aqu<br>Li |    | Con<br>Rec<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County   | BIO       | ОM | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources  |
| Dry Creek         | 0.0 to 4.0          | Right Fork<br>Beaver Crk | 491166_01       | 5070203 | Knott    | PS        |    |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                             | Pasture Grazing, Petroleum/<br>Natr'l Gas Prod, Post-<br>Devel. Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro                    |
| Elkhorn Creek     | 0.0 to 10.6         | Russel Fork              | 509461_00       | 5070202 | Pike     | PS        | PS | NS                |        |                       |                 | Sediment/Siltation,<br>TDS, Pathogens                            | Septic Tanks/Decentral. Systems Surface Mining   |
| Frasure Branch    | 0.0 to 5.2          | Left Fork<br>Beaver Crk  | 492466_01       | 5070203 | Floyd    | PS        |    |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Org.Enrich.<br>(Sewage) | Septic Tanks/Decentral. Systems Petroleum/ Natr'l Gas Prod, Post-Devel. Erosion/Sediment, Subsurface Mining, Habitat Mod-not Hydro, Urban Stormwater |
| Georges Creek     | 0.0 to 0.9          | Levisa Fork              | 492787_01       | 5070203 | Lawrence | PS        |    |                   |        |                       |                 | Sediment/Siltation   | Subsurface Mining,<br>Surface Mining   |
| Goose Creek       | 0.0 to 2.2          | Right Fork<br>Beaver Crk | 493011_01       | 5070203 | Floyd    | NS        |    |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, Unknown                         | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro                                      |
| Greasy Creek      | 0.0 to 4.8          | Levisa Fork              | 493231_01       | 5070203 | Johnson  | PS        |    |                   |        |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)                   | Municipal Pt. Source<br>Dischrge, Subsurface<br>Mining, Surface Mining   |
| Hood Creek        | 0.0 to 3.6          | Blaine Crk               | 494493_01       | 5070204 | Lawrence | PS        |    |                   |        |                       |                 | Sediment/Siltation,<br>Unknown                                   | Heap-leach Ext Mining,<br>Landfills, Silviculture,<br>Urban Stormwater   |

|                   |                     |                         |                 |         |        |           |              | Desig       | nated | Uses                  |                 |   |   |
|-------------------|---------------------|-------------------------|-----------------|---------|--------|-----------|--------------|-------------|-------|-----------------------|-----------------|---|---|
|                   |                     |                         |                 |         |        | Aqu<br>Li |              | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody  | Waterbody<br>ID | HUC 8   | County | BIO       | $\tilde{Q}W$ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Ice Dam Creek     | 0.0 to 0.4          | Big Sandy<br>River      | 494876_01       | 5070204 | Boyd   | NS        |              |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, Nitrogen<br>(Total), Unknown         | Indus. Pt. Source Dischrge,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Habitat<br>Mod-not Hydro, Urban<br>Stormwater |
| Ice Dam Creek     | 0.4 to 2.4          | Big Sandy<br>River      | 494876_02       | 5070204 | Boyd   | NS        |              |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Nitrogen (Total),<br>Unknown | Indus. Pt. Source Dischrge,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Habitat<br>Mod-not Hydro, Urban<br>Stormwater |
| Indian Creek      | 0.0 to 3.5          | Long Fork               | 494929_01       | 5070202 | Pike   | PS        |              |             |       |                       |                 | Sediment/Siltation, TDS   | Channelization, Hwy/Rd/Brdg Runoff, Riparian Habitat Loss, Post-Devel. Erosion/Sediment., Strmbank Mod/Destab., Surface Mining                    |
| Island Creek      | 0.0 to 1.7          | Levisa Fork             | 495043_01       | 5070203 | Pike   | PS        |              |             |       |                       |                 | Sediment/Siltation,<br>TDS  | Surface Mining  |
| Jacks Branch      | 0.0 to 4.4          | Left Fork<br>Beaver Crk | 495089_01       | 5070203 | Floyd  | NS        |              |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, Unknown                              | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro                                   |

|                   |                     |                          |                 |         |         |           |                 | Desig       | nated | Uses                  |                 |   |   |
|-------------------|---------------------|--------------------------|-----------------|---------|---------|-----------|-----------------|-------------|-------|-----------------------|-----------------|---|---|
|                   |                     |                          |                 |         |         | Aqu<br>Li |                 | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County  | BIO       | $\tilde{o}_{M}$ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Jennys Creek      | 5.3 to 10.8         | Paint Crk                | 495218_01       | 5070203 | Johnson | NS        |                 |             |       |                       |                 | Sediment/Siltation  | Land Clearance<br>(Devel./Redevelop.),<br>Subsurface Mining,<br>Surface Mining                                  |
| Johns Branch      | 0.0 to 1.6          | Right Fork<br>Beaver Crk | 495341_01       | 5070203 | Floyd   | NS        |                 |             |       |                       |                 | Sediment/Siltation,<br>Sulfates                           | Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro                                |
| Johns Creek       | 0.0 to 5.8          | Levisa Fork              | 495347_01       | 5070203 | Floyd   | NS        |                 |             |       |                       |                 | Sediment/Siltation,<br>TDS                                | Impacts fr. Hydrostructure<br>Flow Reg/Mod, Subsurface<br>Mining, Surface Mining,<br>Upstream Impound.          |
| Johns Creek       | 24.0 to 30.7        | Levisa Fork              | 495347_02       | 5070203 | Pike    | PS        | PS              | NS          |       |                       |                 | Sediment/Siltation,<br>Pathogens                          | Septic Tanks/Decentral. Systems Surface Mining  |
| Johns Creek       | 34.4 to<br>42.5     | Levisa Fork              | 495347_03       | 5070203 | Pike    | NS        |                 |             |       |                       |                 | Sediment/Siltation,<br>TDS                                | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment., Surface<br>Mining                                   |
| Jones Fork        | 0.0 to 9.4          | Right Fork<br>Beaver Crk | 495499_01       | 5070203 | Knott   | PS        |                 |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                      | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro |
| Knox Creek        | 0.0 to 7.6          | Tug Fork                 | 495859_01       | 5070201 | Pike    | PS        |                 | PS          |       |                       |                 | Sediment/Siltation,<br>Water<br>Temperature,<br>Pathogens | Dredging , Septic<br>Tanks/Decentral. Systems<br>Unknown, Habitat Mod-not<br>Hydro                              |

|  |                     |                                |                 |         |          |           |    | Desig      | nated | Uses                  |                 |   |   |
|--|---------------------|--------------------------------|-----------------|---------|----------|-----------|----|------------|-------|-----------------------|-----------------|---|---|
|  |                     |                                |                 |         |          | Aqu<br>Li |    | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                        | Impaired<br>Segment | Receiving<br>Waterbody         | Waterbody<br>ID | HUC 8   | County   | BIO       | ÕМ | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Left Fork<br>Beaver Creek                | 0.0 to 11.4         | Beaver Crk                     | 496194_01       | 5070203 | Knott    | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                | Rip Habitat Loss, Pet/<br>Natr'l Gas Prod, Post-<br>Devel. Erosion/Sed,<br>Subsurface Mining, Surface<br>Mining, Crop Prod, Urban<br>Stormwater |
| Left Fork<br>Beaver Creek                | 13.6 to 18.7        | Beaver Crk                     | 496194_02       | 5070203 | Knott    | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage) | Riparian Habitat Loss,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Surface<br>Mining                                |
| Left Fork<br>Blaine Creek                | 0.0 to 2.1          | Blaine Crk                     | 496199_00       | 5070204 | Lawrence | NS        |    | NS         | NS    |                       |                 | Sediment/Siltation,<br>pH, Org.Enrich.<br>(Sewage)  | Subsurface Mining, Surface Mining, Agriculture, Inappropriate Waste Disposal, Silviculture  |
| Left Fork<br>Middle Creek<br>Levisa Fork | 0.0 to 8.4          | Middle<br>Creek<br>Levisa Fork | 496241_01       | 5070203 | Floyd    |           | NS | NS         | NS    |                       |                 | Sulfates, TDS, pH,<br>Unknown                       | Surface Mining  |
| Levisa Fork                              | 5.8 to 15.3         | Big Sandy<br>River             | 496312_02       | 5070203 | Lawrence | PS        | NS |            |       | PS                    |                 | Sediment/Siltation,<br>TDS, Methyl<br>mercury, PCBs | Surface Mining, Unknown   |
| Levisa Fork                              | 65.2 to 99.9        | Big Sandy<br>River             | 496312_04       | 5070203 | Johnson  |           |    | NS         |       |                       |                 | Pathogens   | Septic Tanks/Decentral.<br>Systems Urban<br>Runoff/Storm Sewers   |

|                             |                     |                        |                 |         |          |           |              | Desig      | gnated | Uses                  |                 |  |   |
|-----------------------------|---------------------|------------------------|-----------------|---------|----------|-----------|--------------|------------|--------|-----------------------|-----------------|--|---|
|                             |                     |                        |                 |         |          | Aqu<br>Li |              | Con<br>Rec | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name           | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County   | BIO       | $\tilde{Q}W$ | PCR        | SCR    | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Levisa Fork                 | 116.0 to 124.4      | Big Sandy<br>River     | 496312_05       | 5070202 | Pike     |           | NS           | PS         |        |                       |                 | Sediment/Siltation,<br>Pathogens                     | Septic Tanks/Decentral. Systems Surface Mining, Sewage Dischrge./Unsewered Areas                                      |
| Little Paint<br>Creek       | 3.2 to 6.4          | Paint Crk              | 496821_01       | 5070203 | Johnson  | PS        |              |            |        |                       |                 | Sediment/Siltation                                   | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment.  |
| Little Paint<br>Creek       | 6.4 to 11.6         | Paint Crk              | 496821_02       | 5070203 | Johnson  | PS        |              | NS         | NS     |                       |                 | Sediment/Siltation,<br>pH, Org.Enrich.<br>(Sewage)   | Subsurface Mining, Surface Mining, Agriculture, Inappropriate Waste Disposal, Silviculture                            |
| Long Branch                 | 0.0 to 2.0          | Johns Creek            | 497083_01       | 5070203 | Floyd    | NS        |              |            |        |                       |                 | Sediment/Siltation,<br>Water<br>Temperature, TDS     | Channelization, Riparian<br>Habitat Loss, Surface<br>Mining   |
| Lower Laurel<br>Fork        | 0.0 to 7.9          | Blaine Crk             | 497292_01       | 5070204 | Lawrence | PS        |              |            |        |                       |                 | Sediment/Siltation,<br>Nutrient/Eutroph.,<br>Unknown | Heap-leach Ext Mining,<br>Landfills, Unknown,<br>Silviculture, Urban<br>Stormwater                                    |
| Marrowbone<br>Creek         | 1.4 to 11.3         | Russel Fork            | 497561_01       | 5070202 | Pike     | PS        |              |            |        |                       |                 | Sediment/Siltation,<br>TDS                           | Channelization, Hwy/Rd/Brdg Runoff (Non-Constr), Riparian Habitat Loss, Post-Devel. Erosion/Sediment., Surface Mining |
| Middle Creek<br>Levisa Fork | 0.0 to 4.5          | Levisa Fork            | 498108_01       | 5070203 | Floyd    | PS        |              |            |        |                       |                 | Sediment/Siltation,<br>Unknown                       | Subsurface Mining,<br>Surface Mining, Unknown   |

|                                    |                     |                         |                 |         |          |           |   | Desig       | nated | Uses                  |                 |   |  |
|------------------------------------|---------------------|-------------------------|-----------------|---------|----------|-----------|---|-------------|-------|-----------------------|-----------------|---|--|
|                                    |                     |                         |                 |         |          | Aqu<br>Li |   | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name                  | Impaired<br>Segment | Receiving<br>Waterbody  | Waterbody<br>ID | HUC 8   | County   | BIO       | й | PCR         | SCR   | Fish<br>Tissue        | SMQ             | Impairments   | Sources  |
| Middle Fork<br>Rockcastle<br>Creek | 0.0 to 16.8         | Rockcastle<br>Crk       | 498137_01       | 5070201 | Martin   | PS        |   |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS  | Channelization, Dredging<br>Hwy/Rd/Brdg Runoff-Not<br>Construction, Riparian<br>Habitat Loss, Silviculture,<br>Surface Mining, Urban<br>Stormwater   |
| Miller Creek                       | 0.0 to 6.4          | Levisa Fork             | 498337_01       | 5070203 | Johnson  | NS        |   |             |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)   | Riparian Habitat Loss,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Surface<br>Mining                                     |
| Mud Creek                          | 0.0 to 2.7          | Levisa Fork             | 498983_00       | 5070203 | Floyd    | NS        |   |             |       |                       |                 | Sediment/Siltation,<br>Turbidity  | Riparian Habitat Loss,<br>Strmbank Mod/Destable.   |
| Nats Creek                         | 0.0 to 3.1          | Levisa Fork             | 499185_01       | 5070203 | Lawrence | PS        |   |             |       |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining   |
| Open Fork<br>Paint Creek           | 6.4 to 11.3         | Paint Crk               | 499953_01       | 5070203 | Morgan   | PS        |   | NS          | NS    |                       |                 | Sediment/Siltation,<br>pH, Org.Enrich.<br>(Sewage)  | Subsurface Mining, Surface Mining, Agriculture, Inappropriate Waste Disposal, Silviculture   |
| Otter Creek                        | 0.0 to 0.5          | Left Fork<br>Beaver Crk | 500021_01       | 5070203 | Floyd    | NS        |   |             |       |                       |                 | Ammonia (Union),<br>Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage), Nitrogen<br>(Total),<br>Phosphorus (Total) | Septic Tanks/Decentral. Systems Petroleum/ Natr'l Gas Prod, Post-Devel Erosion/Sediment., Subsurface Mining, Habitat Mod-not Hydro, Urban Stormwater |

|                          |                     |                        |                 |         |         |     |               | Desig             | gnated | Uses                  |                 |   |  |
|--------------------------|---------------------|------------------------|-----------------|---------|---------|-----|---------------|-------------------|--------|-----------------------|-----------------|---|--|
|                          |                     |                        |                 |         |         |     | ıatic<br>ife  | Con<br>Rec<br>tio |        | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name        | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO | $\bar{o}_{M}$ | PCR               | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Paddle Creek             | 0.0 to 1.4          | Ice Dam Crk            | 500100_01       | 5070204 | Boyd    | NS  |               |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Org.Enrich.<br>(Sewage)            | Indus. Pt. Source Dischrge,<br>Post-Devel.<br>Erosion/Sediment., Habitat<br>Mod-not Hydro, Urban<br>Stormwater   |
| Paint Creek              | 0.0 to 7.9          | Levisa Fork            | 500114_01       | 5070203 | Johnson | NS  | NS            | NS                |        |                       |                 | Sediment/Siltation,<br>Water Temp,<br>Pathogens,<br>Org.Enrich.<br>(Sewage) | Septic Tanks/Decentral. Systems Post-Devel. Erosion/Sediment., Upstream Impound.                                 |
| Paintsville<br>Reservoir | 1139 acres          | N/A                    | 509958_00       | 5070203 | Johnson |     |               |                   |        | PS                    |                 | Methyl mercury  | Unknown  |
| Panther Fork             | 0.0 to 3.7          | Wolf Crk               | 500162_01       | 5070201 | Martin  | PS  |               |                   |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS  | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Surface<br>Mining  |
| Peter Creek              | 0.0 to 5.8          | Tug Fork               | 500467_01       | 5070201 | Pike    | NS  |               |                   |        |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining   |
| Pigeonroost<br>Fork      | 0.0 to 1.3          | Wolf Crk               | 500606_01       | 5070201 | Martin  | NS  |               |                   |        |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining   |
| Pond Creek               | 3.4 to 9.7          | Tug Fork               | 501044_01       | 5070201 | Pike    | PS  |               |                   |        |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)                         | Riparian Habitat Loss,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Surface<br>Mining |

|                            |                     |                          |                 |         |        |           |    | Desig      | nated | Uses                  |                 |  |   |
|----------------------------|---------------------|--------------------------|-----------------|---------|--------|-----------|----|------------|-------|-----------------------|-----------------|--|---|
|                            |                     |                          |                 |         |        | Aqu<br>Li |    | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody<br>Name          | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County | BIO       | õм | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Puncheon<br>Branch         | 0.0 to 3.6          | Right Fork<br>Beaver Crk | 501437_01       | 5070203 | Knott  | PS        |    |            |       |                       |                 | TDS, Org.Enrich.<br>(Sewage)   | Septic Tanks/Decentral. Systems Petroleum/ Natr'l Gas Prod, Subsurface Mining, Habitat Mod-not Hydro, Urban Stormwater  |
| Raccoon Creek              | 5.6 to 7.4          | John's Crk               | 501505_01       | 5070203 | Pike   | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>TDS   | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment., Surface<br>Mining   |
| Right Fork<br>Beaver Creek | 0.0 to 17.4         | Beaver Crk               | 501863_01       | 5070203 | Floyd  | PS        | PS | NS         | NS    |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Pathogens, pH,<br>Org.Enrich.<br>(Sewage) | Acid Mine Drainage,<br>Channelization, Riparian<br>Habitat Loss, Pasture<br>Grazing, Petroleum/ Natr'l<br>Gas Prod, Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Surface Mining, Inapp<br>Waste Disposal,<br>Silviculture |
| Right Fork<br>Beaver Creek | 30.3 to 33.4        | Beaver Crk               | 501863_02       | 5070203 | Knott  | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage)                                | Riparian Habitat Loss,<br>Septic Tanks/Decentral.<br>Systems Post-Devel.<br>Erosion/Sediment., Surface<br>Mining  |

|                     |                     |                          |                 |         |          |           |    | Desig       | nated | Uses                  |                 |                                      |  |
|---------------------|---------------------|--------------------------|-----------------|---------|----------|-----------|----|-------------|-------|-----------------------|-----------------|--------------------------------------|--|
|                     |                     |                          |                 |         |          | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |                                      |  |
| Waterbody<br>Name   | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County   | BIO       | й  | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments                          | Sources  |
| Rock Fork           | 0.0 to 7.0          | Right Fork<br>Beaver Crk | 502115_01       | 5070203 | Floyd    | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro,<br>Urban Stormwater |
| Rockcastle<br>Creek | 0.0 to 3.7          | Tug Fork                 | 502158_01       | 5070201 | Lawrence | PS        | PS |             |       |                       |                 | Sediment/Siltation,<br>TDS           | Post-Devel.<br>Erosion/Sediment., Surface<br>Mining  |
| Rockcastle<br>Creek | 3.7 to 13.3         | Tug Fork                 | 502158_02       | 5070201 | Martin   | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS | Channelization, Dredging Hwy/Rd/Brdg Runoff, Surface Mining, Sediment Resuspension (Contaminated), Urban Stormwater                  |
| Rockcastle<br>Creek | 13.3 to<br>15.3     | Tug Fork                 | 502158 03       | 5070201 | Martin   | NS        |    |             |       |                       |                 | Sediment/Siltation                   | Subsurface Mining,<br>Surface Mining   |
| Rockhouse<br>Fork   | 0.0 to 6.3          | Rockcastle<br>Crk        | 502205_01       | 5070201 | Martin   | PS        |    |             |       |                       |                 | Sediment/Siltation, TDS              | Riparian Habitat Loss,<br>Post-Devel.<br>Erosion/Sediment., Surface<br>Mining  |
| Russell Fk          | 0.0 to 4.2          | Levisa Fork              | 502524_01       | 5070202 | Pike     |           |    | NS          |       |                       |                 | Pathogens                            | Septic Tanks/Decentral. Sys  |
| Salisbury<br>Branch | 0.0 to 1.8          | Right Fork<br>Beaver Crk | 502805_01       | 5070203 | Knott    | PS        |    |             |       |                       |                 | Sulfates, TDS,<br>Nutrient/Eutroph.  | Petroleum/ Natr'l Gas Prod,<br>Subsurface Mining,<br>Habitat Mod-not Hydro,<br>Urban Stormwater                                      |

|                                    |                     |                                      |                 |         |        |           |    | Desig      | nated | Uses                  |                 |   |   |
|------------------------------------|---------------------|--------------------------------------|-----------------|---------|--------|-----------|----|------------|-------|-----------------------|-----------------|---|---|
|                                    |                     |                                      |                 |         |        | Aqu<br>Li |    | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                  | Impaired<br>Segment | Receiving<br>Waterbody               | Waterbody<br>ID | HUC 8   | County | BIO       | Õм | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Salt Lick<br>Creek                 | 0.0 to 6.8          | Right Fork<br>Beaver Crk             | 502845_01       | 5070203 | Floyd  | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, Unknown            | Petroleum/ Natr'l Gas Prod,<br>Post-Devel.<br>Erosion/Sediment.,<br>Subsurface Mining,<br>Habitat Mod-not Hydro                               |
| Shelby Creek                       | 0.0 to 6.1          | Levisa Fork                          | 503319_01       | 5070202 | Pike   | PS        | PS |            |       |                       |                 | Sediment/Siltation,<br>TDS                          | Surface Mining  |
| Shelby Creek                       | 6.1 to 13.3         | Levisa Fork                          | 503319_02       | 5070202 | Pike   | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Org.Enrich.<br>(Sewage)      | Riparian Habitat Loss,<br>Septage Disposal  |
| Simpson<br>Branch                  | 0.0 to 1.8          | Left Fork<br>Beaver Crk              | 503532_01       | 5070203 | Floyd  | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage) | Septic Tanks/Decentral. Systems Petroleum/ Natr'l Gas Prod, Post-Devel. Erosion/ Sediment., Subsurface Mining, Habitat Mods, Urban Stormwater |
| Sizemore<br>Branch<br>Spewing Camp | 0.0 to 2.0          | Left Fork<br>Beaver Crk<br>Left Fork | 503590_01       | 5070203 | Floyd  | NS        |    |            |       |                       |                 | Sulfates, TDS Sulfates, TSS, pH,                    | Petroleum/ Natr'l Gas Prod,<br>Subsurface Mining,<br>Habitat Mod-not Hydro,<br>Urban Stormwater   |
| Branch                             | 0.0 to 3.1          | Beaver Crk                           | 504061_01       | 5070203 | Floyd  |           | NS | NS         | NS    |                       |                 | Unknown   | Surface Mining  |

|                    |                     |                          |                 |         |         |           |   | Desig      | gnated | Uses                  |                 |   |   |
|--------------------|---------------------|--------------------------|-----------------|---------|---------|-----------|---|------------|--------|-----------------------|-----------------|---|---|
|                    |                     |                          |                 |         |         | Aqu<br>Li |   | Con<br>Rec | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County  | BIO       | й | PCR        | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| Steele Creek       | 0.0 to 2.4          | Right Fork<br>Beaver Crk | 504308_01       | 5070203 | Floyd   | NS        |   |            |        |                       |                 | Sediment/Siltation,<br>Sulfates, TDS,<br>Org.Enrich.<br>(Sewage)                    | Septic Tanks/Decentral. Systems Post-Devel. Erosion/Sediment., Subsurface Mining, Surface Mining, Habitat Mod-not Hydro, Urban Stormwater                                     |
| Stephens<br>Branch | 0.0 to 2.6          | Right Fork<br>Beaver Crk | 504331_01       | 5070203 | Floyd   | NS        |   |            |        |                       |                 | Ammonia (Unionized),<br>Sediment/Siltation,<br>Sulfates,<br>Org.Enrich.<br>(Sewage) | Indus. Pt. Source Dischrge, Pasture Grazing, Septic Tanks/Decentral. Systems Surface Mining, Habitat Mod-not Hydro, Urban Stormwater  |
| Toms Creek         | 0.0 to 8.0          | Levisa Fork              | 505352_01       | 5070203 | Johnson | PS        |   |            |        |                       |                 | Sediment/Siltation  | Subsurface Mining,<br>Surface Mining  |
| Tug Fork           | 10.2 to<br>41.6     | Big Sandy<br>River       | 505554_02       | 5070201 | Martin  |           |   | NS         |        |                       |                 | Pathogens   | Septic Tanks/Decentral.<br>Sys)   |
| Tug Fork           | 71.9 to<br>77.7     | Big Sandy<br>River       | 505554_03       | 5070201 | Martin  |           |   |            |        | PS                    |                 | PCBs  | Unknown   |
| Tug Fork           | 78.3 to 84.4        | Big Sandy<br>River       | 505554_04       | 5070201 | Pike    |           |   | NS         |        |                       |                 | Pathogens   | Septic Tanks/Decentral.<br>Sys)   |
| Turkey Creek       | 0.0 to 5.9          | Right Fork<br>Beaver Crk | 505598_01       | 5070203 | Floyd   | NS        |   |            |        |                       |                 | Sediment/Siltation,<br>Sulfates, Unknown  | Pasture Grazing, Petroleum/<br>Natr'l Gas Prod, Post-<br>Devel Erosion/Sediment.,<br>Land Clearance, Subsurface<br>Mining, Surface Mining,<br>Habitat Mod-other than<br>Hydro |

|                         |                     |                          |                 |         |        |           |    | Desig       | nated | Uses                  |                 |   |  |
|-------------------------|---------------------|--------------------------|-----------------|---------|--------|-----------|----|-------------|-------|-----------------------|-----------------|---|--|
|                         |                     |                          |                 |         |        | Aqu<br>Li |    | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody   | Waterbody<br>ID | HUC 8   | County | BIO       | бм | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Upper Pidgeon<br>Branch | 0.0 to 2.1          | Elkhorn Crk              | 505895_01       | 5070202 | Pike   | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>TDS, Nitrogen<br>(Total)             | Surface Mining, Unknown  |
| Wilson Creek            | 0.0 to 2.9          | Right Fork<br>Beaver Crk | 506897_01       | 5070203 | Floyd  | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates,<br>Org.Enrich.<br>(Sewage) | Man. Pasture Grazing, Septic Tanks/Decentral. Systems Post-Devel Erosion/Sediment., Subsurface Mining, Surface Mining, Habitat Mod- other than Hydro, Urban Stormwater |
| Wolf Creek              | 0.0 to 6.5          | Tug Fork                 | 507001_01       | 5070201 | Martin | PS        | PS | NS          |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                        | Dredging , Highwy /Rd/Brdg Runoff, Surface Mining, Sediment Resuspension (Contaminated), Urban Stormwater  |
| Wolf Creek              | 6.5 to 17.6         | Tug Fork                 | 507001_02       | 5070201 | Martin | NS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                        | Dredging, Hwy /Rd/Brdg<br>Runoff (Nonconstr),<br>Surface Mining, Sediment<br>Resuspension<br>(Contaminated), Urban<br>Stormwater                                       |
| Wolf Creek              | 17.6 to 20.5        | Tug Fork                 | 507001_03       | 5070201 | Martin | PS        |    |             |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                        | Hwy/Rd/Brdg Runoff<br>(Non-Construction),<br>Surface Mining  |

|                                    |                     |                                    |                 |         |          |           |   | Desig       | nated | Uses                  |                 |   |  |
|------------------------------------|---------------------|------------------------------------|-----------------|---------|----------|-----------|---|-------------|-------|-----------------------|-----------------|---|--|
|                                    |                     |                                    |                 |         |          | Aqu<br>Li |   | Con<br>Rect | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name                  | Impaired<br>Segment | Receiving<br>Waterbody             | Waterbody<br>ID | HUC 8   | County   | BIO       | й | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Wolfpen<br>Branch                  | 0.0 to 1.7          | Grassy<br>Creek                    | 507038_01       | 5070202 | Pike     | NS        |   |             |       |                       |                 | Sediment/Siltation,<br>Water<br>Temperature, TDS        | Channelization, Riparian<br>Habitat Loss, Silviculture,<br>Surface Mining    |
| Little Sandy R                     | River Basin         |                                    |                 |         |          |           |   |             |       |                       |                 |   |  |
| Allcorn Creek                      | 1.4 to 3.9          | Little Sandy<br>River              | 485841_01       | 5090104 | Greenup  | NS        |   |             |       |                       |                 | Sediment/Siltation,<br>Water Temperature                | Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's                    |
| Barrett Creek                      | 0.0 to 7.2          | Little Sandy<br>River              | 486936_01       | 5090104 | Carter   | PS        |   |             |       |                       |                 | Sediment/Siltation                                      | Hwy/Rd/Brdg Runoff<br>(Non-Constr), Land<br>Clearance<br>(Devel./Redevelop.) |
| Cane Creek                         | 0.0 to 4.1          | Little Sandy<br>River              | 488773_01       | 5090104 | Greenup  | PS        |   |             |       |                       |                 | Unknown   | Unknown  |
| Dry Fk                             | 1.2 to 4.5          | Little Fk<br>Little Sandy<br>River | 491206 01       | 5090104 | Lawrence | PS        |   |             |       |                       |                 | Sediment/Siltation                                      | Silviculture   |
| East Fork<br>Little Sandy<br>River | 24.9 to<br>26.4     | Little Sandy<br>River              | 491469_02       | 5090104 | Boyd     |           |   | NS          |       |                       |                 | Pathogens   | Riparian Habitat Loss  |
| East Fork<br>Little Sandy<br>River | 27.1 to 30          | Little Sandy<br>River              | 491469_03       | 5090104 | Boyd     | PS        |   |             |       |                       |                 | Sediment/Siltation                                      | Riparian Habitat Loss,<br>Surface Mining                                     |
| Ellingtons Bear<br>Cr              | 0.0 to 1.5          | East Fork<br>Little Sandy<br>River | 491699_01       | 5090104 | Boyd     | PS        |   |             |       |                       |                 | Sediment/Siltation,<br>Water Temp,<br>Nutrient/Eutroph. | Riparian Habitat Loss,<br>Unknown  |
| Everman Cr                         | 0.0 to 5.7          | Little Sandy<br>River              | 491855_01       | 5090104 | Carter   | PS        |   |             |       |                       |                 | Sediment/Siltation                                      | Unknown  |

|                                      |                     |                                    |                   |         |         |           |    | Desig      | nated | Uses                  |                 |  |  |
|--------------------------------------|---------------------|------------------------------------|-------------------|---------|---------|-----------|----|------------|-------|-----------------------|-----------------|--|--|
|                                      |                     |                                    |                   |         |         | Aqu<br>Li |    | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name                    | Impaired<br>Segment | Receiving<br>Waterbody             | Waterbody<br>ID   | HUC 8   | County  | BIO       | ОM | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
| Garner Cr                            | 0.0 to 1.8          | East Fork<br>Little Sandy<br>River | 492710_01         | 5090104 | Boyd    | PS        |    |            |       |                       |                 | Sediment/Siltation                       | Pasture Grazing,<br>Silviculture   |
| Grayson Lake                         | 1512 acres          | N/A                                | 493224_00         | 5090104 | Carter  |           |    |            |       | PS                    |                 | Methyl mercury                           | Unknown  |
| Left Fork<br>Redwine Creek           | 0.0 to 1.2          | Redwine<br>Creek                   | 496857-<br>7.9_01 | 5090104 | Elliott | PS        |    |            |       |                       |                 | Unknown                                  | Unknown, Livestock-<br>Grazing/Feed. Op's  |
| Lick Fork                            | 0.0 to 5.2          | Newcombe<br>Crk                    | 496506_01         | 5090104 | Elliott | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS     | Pasture Grazing, Petroleum/Nat. Gas Prod, Post-Devel Erosion /Sediment., Subsurface Mining, Habitat Mods, Urban Stormwater |
| Little Fork<br>Little Sandy<br>River | 4.8 to 6            | Little Sandy<br>River              | 496737_02         | 5090104 | Carter  | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Water Temperature | Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's  |
| Little Fork<br>Little Sandy<br>River | 12.0 to 23.8        | Little Sandy<br>River              | 496737_04         | 5090104 | Carter  | PS        |    |            |       |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Surface Mining, Livestock-<br>Grazing/Feed. Op's   |
| Little Fork<br>Little Sandy<br>River | 23.8 to 27.7        | Little Sandy<br>River              | 496737_05         | 5090104 | Elliott | NS        |    |            |       |                       |                 | Sediment/Siltation                       | Channelization, Pasture<br>Grazing, Non-Irrig Crop<br>Prod, Silviculture   |
| Little Fork<br>Little Sandy<br>River | 27.7 to 30.5        | Little Sandy<br>River              | 496737_06         | 5090104 | Elliott | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Water Temperature | Riparian Habitat Loss,<br>Livestock-Grazing/Feed.<br>Op's  |
| Little Sandy<br>River                | 0.0 to 0.2          | Ohio River                         | 496857_01         | 5090104 | Greenup |           |    | NS         |       |                       |                 | Pathogens                                | Municipal Pt. Source<br>Dischrge   |
| Little Sandy                         | 71.8 to             | Ohio River                         | 496857_07         | 5090104 | Elliott | PS        | PS |            |       |                       |                 | Sediment/Siltation                       | Habitat Mod-not Hydro  |

|                                      |                     |                        |                 |         |         |           |    | Desig      | nated | Uses                  |                 |   |   |
|--------------------------------------|---------------------|------------------------|-----------------|---------|---------|-----------|----|------------|-------|-----------------------|-----------------|---|---|
|                                      |                     |                        |                 |         |         | Aqu<br>Li |    | Con<br>Rec | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                    | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8   | County  | BIO       | õм | PCR        | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources   |
| River                                | 74.7                |                        |                 |         |         |           |    |            |       |                       |                 |   |   |
| Lower Stinson<br>Creek               | 0.0 to 1.1          | Little Sandy<br>River  | 397300_01       | 5090104 | Carter  | PS        |    |            |       |                       |                 | Sediment/Siltation  | Non-Irrig Crop Prod   |
| Middle Fork<br>Little Sandy<br>River | 5.7 to 7.5          | Little Sandy<br>River  | 498129_02       | 5090104 | Elliott | PS        |    |            |       |                       |                 | Unknown   | Other Recreational<br>Pollution Sources,<br>Unknown   |
| Newcombe<br>Creek                    | 0.0 to 11.9         | Little Sandy<br>River  | 499428_01       | 5090104 | Elliott | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, Unknown                        | Hwys/Rd/Brdgs, Abandon. Mine Lands, Pasture Grazing, Mine Tailings, Petroleum /Nat. Gas Product., Post-Devel Erosion/Sediment, Silviculture, Subsurface Mining, Crop Prod, Habitat Mods, Urban Stormwater |
| Oldtown Creek                        | 0.0 to 1.9          | Little Sandy<br>River  | 496026_01       | 5090104 | Greenup | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Water Temp.,<br>Turbidity,<br>Oil/Grease | Riparian Habitat Loss,<br>Unknown, Livestock-<br>Grazing/Feed. Op's   |
| Right Fork<br>Newcombe<br>Creek      | 0.0 to 4.2          | Newcombe<br>Crk        | 501913 01       | 5090104 | Elliott | PS        |    |            |       |                       |                 | Sediment/Siltation,<br>Sulfates, TDS                            | Pasture Grazing, Petroleum/Nat. Gas Prod, Sub/Surface Mining, Crop Prod , Habitat Mods  |

|  |                     |                                    |                   |         |         |           |    | Desig             | nated | Uses                  |                 |   |  |
|--|---------------------|------------------------------------|-------------------|---------|---------|-----------|----|-------------------|-------|-----------------------|-----------------|---|--|
|  |                     |                                    |                   |         |         | Aqu<br>Li |    | Con<br>Rec<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody<br>Name                        | Impaired<br>Segment | Receiving<br>Waterbody             | Waterbody<br>ID   | HUC 8   | County  | BIO       | ōм | PCR               | SCR   | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| Rocky Branch                             | 0.0 to 3.2          | Newcombe<br>Crk                    | 502230_01         | 5090104 | Elliott | PS        |    |                   |       |                       |                 | Sediment/Siltation,<br>TDS                          | Hwys/Rd/Brdgs Infrastructure, Petroleum/Nat. Gas Product. (Permit), Post- Devel Erosion/ Sediment., Surface Mining, Habitat Mods, Urban Stormwater |
| Straight Creek                           | 0.0 to 3.8          | Little Fork<br>Sandy River         | 504550_01         | 5090104 | Carter  | PS        |    |                   |       |                       |                 | Sediment/Siltation                                  | Non-Irrig Crop Prod,<br>Silviculture   |
| Tunnel Branch                            | 0.0 to 1.7          | Little Sandy<br>River              | 505568_01         | 5090104 | Greenup | NS        |    |                   |       |                       |                 | Sediment/Siltation,<br>Water Temperature            | Loss Riparian Habitat,<br>Post-Devel<br>Erosion/Sediment.  |
| UT to East<br>Fork Little<br>Sandy River | 0 to 0.3            | East Fork<br>Little Sandy<br>River | 491469-<br>8.1_01 | 5090104 | Greenup | NS        |    |                   |       |                       |                 | Sediment/Siltation,<br>TDS, Org.Enrich.<br>(Sewage) | Channelization, Septic<br>Tanks/Decentral. Sys)  |
| Wells Creek                              | 0.0 to 3.5          | Little Sandy<br>River              | 506380_01         | 5090104 | Elliott | PS        |    |                   |       |                       |                 | Sediment/Siltation                                  | Impacts fr. Aband. Mine<br>Lands, Pasture Grazing,<br>Non-Irrig Crop Prod,<br>Silviculture   |
| Williams<br>Creek                        | 0.0 to 2.9          | E. Fk Little<br>Sandy River        | 506818_01         | 5090104 | Boyd    | PS        |    |                   |       |                       |                 | Unknown   | Strmbank Mod/Destable.,<br>Unknown   |
| Ohio River Tr                            | ibutaries           |                                    | ]                 |         |         |           |    |                   |       |                       |                 |   |  |
| Newberry<br>Branch                       | 0.0 to 2.8          | Ohio River                         | 499417_01         | 5090103 | Greenup | NS        |    |                   |       |                       |                 | Sediment/Siltation,<br>TDS,<br>Nutrient/Eutroph.    | Channelization,<br>Hwy/Rd/Brdg Runoff<br>(Non-Constr), Non-Irrig<br>Crop Prod  |

|                        |                     |                        |                   |         |         |            |             | Desig       | nated | Uses                  |                 |  |  |
|------------------------|---------------------|------------------------|-------------------|---------|---------|------------|-------------|-------------|-------|-----------------------|-----------------|--|--|
|                        |                     |                        |                   |         |         | Aqu<br>Lij |             | Con<br>Reci | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |  |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8   | County  | BIO        | $\tilde{W}$ | PCR         | SCR   | Fish<br>Tissue        | DWS             | Impairments                              | Sources  |
|                        |                     |                        |                   |         |         |            |             |             |       |                       |                 |  |  |
| UT to Chinns<br>Branch | 0.0 to 1.1          | Chinns<br>Branch       | 489481-<br>0.8_01 | 5090103 | Greenup | NS         |             |             |       |                       |                 | Sediment/Siltation,<br>Water Temperature | Channelization, Riparian<br>Habitat Loss, Post-Devel.<br>Erosion/Sediment. |
| -                      |                     |                        | 1                 |         |         |            |             |             |       |                       |                 |  |  |
| Tygarts Creek          | Basin               | I                      |                   | 1       | T       |            |             | I           |       | I                     |                 |  | 1  |
| Backs Branch           | 0.0 to 0.9          | Tygarts Crk            | 486191_01         | 5090103 | Greenup | PS         |             |             |       |                       |                 | Sediment/Siltation                       | Riparian Habitat Loss,<br>Pasture Grazing                                  |
| Jacobs Fork            | 3.6 to 5.7          | Tygarts Crk            | 495138_01         | 5090103 | Carter  | PS         |             |             |       |                       |                 | Sediment/Siltation                       | Channelization, Dredge<br>Mining, Dredging, Pasture<br>Grazing             |
| Schultz Creek          | 4.7 to 10.8         | Tygarts Crk            | 503068_02         | 5090103 | Greenup | PS         |             |             |       |                       |                 | Unknown                                  | Dredging, Unknown  |
| Smith Creek            | 2.0 to 4.3          | Buffalo Crk            | 503783_01         | 5090103 | Carter  | PS         |             |             |       |                       |                 | Sediment/Siltation,<br>Water Temperature | Unknown, Livestock-<br>Grazing/Feed. Op's                                  |
| Trough Camp            | 1.5 to 6.1          | Tygarts Crk            | 505516_01         | 5090103 | Carter  | PS         |             |             |       |                       |                 | Sediment/Siltation                       | Channelization, Post-Devel.<br>Erosion/Sediment.                           |
| Tygarts Creek          | 0.0 to 45.7         | Ohio River             | 516008_01         | 5090103 | Greenup |            |             | PS          |       |                       |                 | Pathogens                                | Agriculture, Land Disposal<br>Hwys/Rd/Brdgs                                |
| White Oak<br>Creek     | 0.0 to 1.1          | Tygarts Crk            | 506615_01         | 5090103 | Greenup | NS         |             |             |       |                       |                 | Unknown                                  | Infrastructure (New<br>Constr), Habitat Mod-not<br>Hydro                   |

#### Appendix B. Table of Category 5A Listings for the Ohio River Mainstem

Category 5A is the list of impaired waterbody/pollutant combinations that require TMDLs (i.e., the 303(d) List). This Appendix contains the narrative information found in Chapter 13 from the Ohio River mainstem.

This Appendix lists a Hydrologic Unit Code 8 (HUC8) number for each impaired segment, or multiple HUC8 numbers if the segment crosses HUC8 boundaries.

As stated, ORSANCO assesses the Ohio River mainstem for Contact Recreation and Aquatic Life, and KDOW assesses the Ohio for Fish Consumption.

| Key     |   |
|---------|---|
| 1 X C y | • |

| IXCy.  |  |                           |  |  |  |  |  |  |  |
|--|--|---------------------------|--|--|--|--|--|--|--|
|  | Drinking Water Source: Usually a lake or     |                           |  |  |  |  |  |  |  |
|  | reservoir, designated as a drinking supply   |                           |  |  |  |  |  |  |  |
| DWS  | for towns and cities.                        |                           |  |  |  |  |  |  |  |
|  |  |                           |  |  |  |  |  |  |  |
|  |  |                           |  |  |  |  |  |  |  |
| IMPAIRMENTS &  |  |                           |  |  |  |  |  |  |  |
| SOURCES  |  |                           |  |  |  |  |  |  |  |
| Two categories used and  | designated by the Environmental Protection   | Agency to evaluate and    |  |  |  |  |  |  |  |
| assess surface waters acro   | ss the nation. Each impairment and source l  | nas a numerical and       |  |  |  |  |  |  |  |
| narrative explanation, use   | d by the Assessment Database (ADB), an ele   | ectronic database used by |  |  |  |  |  |  |  |
| Kentucky to report assessment data to the EPA.   |  |                           |  |  |  |  |  |  |  |
|  |  |                           |  |  |  |  |  |  |  |
| The Environmental Protection Agency's world wide web site has the impairment and source        |  |                           |  |  |  |  |  |  |  |
| tables with all available explanation. Refer to the web address below, or contact the Kentucky |  |                           |  |  |  |  |  |  |  |
| Division of Water for additional assistance. http://www.epa.gov/waters/adb/docs.htm Refer to   |  |                           |  |  |  |  |  |  |  |
| the Section 'ADB Domain  | Value Lists', and the 'Impairments' and 'Sou | rces' documents.          |  |  |  |  |  |  |  |

|                   |                     |                     |           |    | Designate                  | d Uses                        |                             |                                  |   |   |
|-------------------|---------------------|---------------------|-----------|----|----------------------------|-------------------------------|-----------------------------|----------------------------------|---|---|
|                   |                     |                     | Aqu<br>Li |    | Contact<br>Recrea-<br>tion | Fish<br>Con-<br>sump-<br>tion | Drinking<br>Water<br>Supply |                                  |   |   |
| Waterbody<br>Name | Impaired<br>Segment | HUC_8               | BIO       | WQ | PCR                        | Fish<br>Tissue                | DWR                         | County                           | Impairments   | Sources   |
| Ohio River        | 317.0 to<br>357.0   | 5090103             | FS        | FS | FS                         | PS                            | FS                          | Boyd/Greenup/Lewis               | Dioxin, Polychlorinated Biphenyls                     | Unknown   |
| Ohio River        | 357.0 to<br>362.0   | 5090103/<br>5090201 | FS        | FS | PS                         | PS                            | FS                          | Lewis                            | Dioxin, Polychlorinated Biphenyls, Pathogens          | Unknown   |
| Ohio River        | 362.0 to<br>383.0   | 5090201             | FS        | FS | FS                         | PS                            | FS                          | Lewis                            | Dioxin,<br>Polychlorinated<br>Biphenyls               | Unknown   |
| Ohio River        | 383.0 to<br>388.0   | 5090201             | FS        | FS | PS                         | PS                            | FS                          | Lewis                            | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 388.0 to 393.0      | 5090201             | FS        | FS | FS                         | PS                            | FS                          | Lewis                            | Dioxin, Polychlorinated Biphenyls                     | Unknown   |
| Ohio River        | 393. 0 to 397.0     | 5090201             | FS        | FS | PS                         | PS                            | FS                          | Lewis                            | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 397.0 to 461.0      | 5090201             | FS        | FS | FS                         | PS                            | FS                          | Lewis/Mason/Bracken/<br>Campbell | Dioxin, Polychlorinated Biphenyls                     | Unknown   |
| Ohio River        | 461.0 to<br>477.0   | 5090203             | FS        | FS | NS                         | PS                            | FS                          | Campbell/Kenton                  | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 477.0 to<br>484.0   | 5090203             | FS        | FS | PS                         | PS                            | FS                          | Kenton/Boone                     | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |

|                   |                     |                     |           |    | Designate                  | d Uses                        |                             |                            |   |   |
|-------------------|---------------------|---------------------|-----------|----|----------------------------|-------------------------------|-----------------------------|----------------------------|---|---|
|                   |                     |                     | Aqu<br>Li |    | Contact<br>Recrea-<br>tion | Fish<br>Con-<br>sump-<br>tion | Drinking<br>Water<br>Supply |                            |   |   |
| Waterbody<br>Name | Impaired<br>Segment | HUC_8               | BIO       | wQ | PCR                        | Fish<br>Tissue                | DWR                         | County                     | Impairments   | Sources   |
| Ohio River        | 484.0 to<br>488.0   | 5090203             | FS        | FS | NS                         | PS                            | FS                          | Boone                      | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 488.0 to<br>491.0   | 5090203             | FS        | FS | FS                         | PS                            | FS                          | Boone                      | Dioxin,<br>Polychlorinated<br>Biphenyls               | Unknown   |
| Ohio River        | 491.0 to 501.0      | 5090203             | FS        | FS | NS                         | PS                            | FS                          | Boone                      | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 501.0 to 521.0      | 5090203             | FS        | FS | FS                         | PS                            | FS                          | Boone/Gallatin             | Dioxin,<br>Polychlorinated<br>Biphenyls               | Unknown   |
| Ohio River        | 521.0 to 541.0      | 5090203             | FS        | FS | PS                         | PS                            | FS                          | Gallatin/Carroll           | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 541.0 to 593.0      | 5090203/5140<br>101 | FS        | FS | FS                         | PS                            | FS                          | Carroll/Trimble/Oldha<br>m | Dioxin,<br>Polychlorinated<br>Biphenyls               | Unknown   |
| Ohio River        | 593.0 to 608.0      | 5140101             | FS        | FS | PS                         | PS                            | FS                          | Jefferson                  | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 608.0 to 621.0      | 5140101             | FS        | FS | NS                         | PS                            | FS                          | Jefferson                  | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 621.0 to 629.0      | 5140101             | FS        | FS | FS                         | PS                            | FS                          | Jefferson                  | Dioxin,<br>Polychlorinated                            | Unknown   |

|                   |                     |                             |           |    | Designate                  | d Uses                        |                             |   |   |   |
|-------------------|---------------------|-----------------------------|-----------|----|----------------------------|-------------------------------|-----------------------------|---|---|---|
|                   |                     |                             | Aqu<br>Li |    | Contact<br>Recrea-<br>tion | Fish<br>Con-<br>sump-<br>tion | Drinking<br>Water<br>Supply |   |   |   |
| Waterbody<br>Name | Impaired<br>Segment | HUC_8                       | BIO       | wQ | PCR                        | Fish<br>Tissue                | DWR                         | County                                  | Impairments   | Sources   |
|                   |                     |                             |           |    |                            |                               |                             |   | Biphenyls   |   |
| Ohio River        | 629.0 to 709.0      | 5140101/5140<br>104/5140201 | FS        | FS | NS                         | PS                            | FS                          | Jefferson/Hardin/Mead<br>e/Breckinridge | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 709.0 to 719.0      | 5140201                     | FS        | FS | PS                         | PS                            | FS                          | P<br>B                                  |   | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 719.0 to 785.0      | 5140201/5140<br>202         | FS        | FS | NS                         | PS                            | FS                          | Hancock/Daviess/<br>Henderson           | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 785.0 to 789.0      | 5140202                     | FS        | FS | PS                         | PS                            | FS                          | Henderson                               | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 789.0 to 844.0      | 5140202                     | FS        | FS | NS                         | PS                            | FS                          | Henderson/Union                         | Dioxin, Polychlorinated Biphenyls, Pathogens          | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 844.0 to<br>849.0   | 5140202/5140<br>203         | FS        | FS | PS                         | PS                            | FS                          | Union                                   | Dioxin,<br>Polychlorinated<br>Biphenyls,<br>Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 849.0 to<br>862.0   | 5140203                     | FS        | FS | FS                         | PS                            | FS                          | Union                                   | Dioxin,<br>Polychlorinated<br>Biphenyls               | Unknown   |
| Ohio River        | 862.0 to<br>873.0   | 5140203                     | FS        | FS | PS                         | PS                            | FS                          | Union                                   | Dioxin,<br>Polychlorinated<br>Biphenyls,              | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |

|                   |                     |                     |             |    | Designate                  | d Uses                        |                             |                                  |  |   |
|-------------------|---------------------|---------------------|-------------|----|----------------------------|-------------------------------|-----------------------------|----------------------------------|--|---|
|                   |                     |                     | Aqu:<br>Lit |    | Contact<br>Recrea-<br>tion | Fish<br>Con-<br>sump-<br>tion | Drinking<br>Water<br>Supply |                                  |  |   |
| Waterbody<br>Name | Impaired<br>Segment | HUC_8               | BIO         | wQ | PCR                        | Fish<br>Tissue                | DWR                         | County                           | Impairments                                  | Sources   |
|                   |                     |                     |             |    |                            |                               |                             |                                  | Pathogens                                    |   |
| Ohio River        | 873.0 to<br>894.0   | 5140203             | FS          | FS | FS                         | PS                            | FS                          | Crittenden                       | Dioxin,<br>Polychlorinated<br>Biphenyls      | Unknown   |
| Ohio River        | 894.0 to<br>910.0   | 5140203             | FS          | FS | PS                         | PS                            | FS                          | Livingston                       | Dioxin, Polychlorinated Biphenyls, Pathogens | Septic Systems, Urban Stormwater<br>Runoff, Animal Waste, CSO's |
| Ohio River        | 910.0 to<br>981.0   | 5140203/5140<br>206 | FS          | FS | FS                         | PS                            | FS                          | Livingston/McCracken/<br>Ballard | Dioxin, Polychlorinated Biphenyls            | Unknown   |

#### Appendix C. Table of Category 5B Listings for the 5 BMUs

Category 5B contains waterbodies assessed as being impaired based on Discharge Monitoring Reports. No TMDL is required for these waterbody/pollutant combinations, and they are not part of the 303(d) list.

| Key:   |   |                         |
|--|---|-------------------------|
| DWS  | Drinking Water Source: Usually a lake or reservoir, designated as a drinking supply for towns and cities.   |                         |
|  |   |                         |
| IMPAIRMENTS & SOURCES                              |   |                         |
| Two categories used and assess surface waters acro | designated by the Environmental Protection oss the nation. Each impairment and source led by the Assessment Database (ADB), an element data to the EPA. | nas a numerical and     |
|  |   |                         |
| tables with all available e                        | ction Agency's world wide web site has the i<br>xplanation. Refer to the web address below,<br>litional assistance. http://www.epa.gov/water            | or contact the Kentucky |

the Section 'ADB Domain Value Lists', and the 'Impairments' and 'Sources' documents.

|                |                     |                        |                 |       |        |             |    | Desig | gnated | Uses           |                 |             |         |
|----------------|---------------------|------------------------|-----------------|-------|--------|-------------|----|-------|--------|----------------|-----------------|-------------|---------|
|                |                     |                        |                 |       |        |             |    | Con   | tact   | Con-           |                 |             |         |
|                |                     |                        |                 |       |        | Aqua<br>Lij |    | Reci  |        | sump-<br>tion  | Drink.<br>Water |             |         |
| Waterbody Name | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID | HUC 8 | County | BIO         | WQ | PCR   | SCR    | Fish<br>Tissue | SMQ             | Impairments | Sources |

#### Kentucky River Basin Management Unit

| Kentucky River I      | Basin        |                                 |           |         |          |    |    |    |  |  |  |
|-----------------------|--------------|---------------------------------|-----------|---------|----------|----|----|----|--|--|--|
| Carr Fork             | 15.6 to 26.4 | North Fork<br>Kentucky<br>River | 511203_03 | 5100201 | Knott    |    | PS |    |  | Siltation  | Resource Extraction                              |
| Harts Fork            | 3.2 to 4.2   | Hays Fork                       | 493843_00 | 5100205 | Madison  |    | PS |    |  | Ammonia (Un-ionized),<br>TSS, pH, Org. Enrich.<br>(Sewage) Biol. | Industrial Point Source<br>Discharge             |
| Hays Fork             | 1.2 to 4.7   | Silver<br>Creek                 | 512614_00 | 5100205 | Madison  |    | FS |    |  | Ammonia, Chlorine,<br>Organic Enrich (Sewage),<br>TSS            | Municipal Point Source<br>Discharge              |
| Lanes Run             | 0.0 to 0.5   | North<br>Elkhorn<br>Creek       | 495977_01 | 5100205 | Scott    |    |    | NS |  | Pathogens  | Municipal Point Source<br>Discharge              |
| Lee Branch            | 0.0 to 1.0   | South<br>Elkhorn<br>Creek       | 496153_01 | 5100205 | Woodford |    |    | PS |  | Pathogens  | Municipal Point Source<br>Discharge              |
| Moseby Branch         | 0.0 to 2.2   | Eagle Crk                       | 498657_00 | 5100205 | Owen     | NS |    |    |  | Unknown  | Strmbank Mod's/Destable.,<br>Unk, Natr'l Sources |
| Shallow Ford<br>Creek | 5.9 to 6.9   | Tate Creek                      | 517031_00 | 5100205 | Madison  |    | NS |    |  | Ammonia (Un-ionized),<br>Chlorine                                | Package Plant/Other Small<br>Flow Discharges     |
| Steammill Branch      | 0.6 to 1.6   | Clarks<br>Creek                 | 504297_00 | 5100205 | Grant    |    | PS |    |  | Ammonia (Un-ionized)   | Municipal Point Source<br>Discharge              |
| Town Creek            | 2.5 to 3.5   | Drennon<br>Creek                | 505393_00 | 5100205 | Henry    |    | NS |    |  | Ammonia (Un-ionized),<br>Chlorine                                | Municipal Point Source<br>Discharge              |

|                                |                     |                           |                   |         |  |           |      | Desig              | gnated | Uses                  |                 |  |  |
|--------------------------------|---------------------|---------------------------|-------------------|---------|--|-----------|------|--------------------|--------|-----------------------|-----------------|--|--|
|                                | ,                   | ,                         |                   |         |  | Aqu<br>Li |      | Con<br>Reci<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |  | ,  |
| Waterbody Name                 | Impaired<br>Segment | Receiving<br>Waterbody    | Waterbody<br>ID   | HUC 8   | County                                 | BIO       | õм   | PCR                | SCR    | Fish<br>Tissue        | DWS             | Impairments                                      | Sources  |
| UT to Dry Run                  | 1.5 to 2.5          | Dry Run                   |                   |         |  | [         |      | NS                 |        |                       |                 | Pathogens  | Package Plants                                       |
| UT to East Fork<br>Clear Creek | 2.8 to 3.8          | East Fork<br>Clear Creek  | 491453-<br>3.6_00 | 5100205 | Jessamine                              |           |      | NS                 |        |                       |                 | Pathogens  | Package Plants                                       |
|                                |                     |                           |                   |         | Salt-Licking I                         | Basin I   | Mana | gemen              | t Unit | t                     |                 |  |  |
|                                |                     |                           | 1                 |         | ······································ |           |      | <b>5</b>           |        |                       |                 |  |  |
| Indian Creek                   | 0.0 to 0.7          | Licking<br>River          | 494934 01         | 5100102 | Bourbon                                |           |      | NS                 | NS     |                       |                 | Pathogens  | Municipal Point Source<br>Discharge                  |
| meter Creek                    | 0.0 10 0.7          | Tavor                     | 17 175 1_01       | 3100102 | Bourbon                                | 1         | l    | 110                | 110    |                       |                 | Tunogens   | Discharge  |
| Ohio River Tribu               | taries              | ı                         |                   | I       |  |           | 1    |                    |        |                       |                 |  | T  |
| Elijahs Creek                  | 0.0 to 5.2          | Ohio River                | 491627_00         | 5090203 | Boone                                  | NS        |      |                    |        |                       |                 | Impairment Unknown                               | Indust./Commercial<br>Stormwater Discharge<br>Permit |
| Salt River Basin               |                     |                           |                   |         |  |           |      |                    |        |                       |                 |  |  |
| Mill Creek                     | 6.0 to 7.0          | Salt River                | 498262_01         | 5140102 | Hardin                                 |           |      |                    |        | NS                    |                 | Methylmercury                                    | Municipal Point Source<br>Discharge                  |
| Mill Creek Branch              | 0.0 to 0.7          | Mill Creek                | 498269_00         | 5140102 | Hardin                                 | PS        |      |                    |        |                       |                 | Ammonia (Un-ion.), Org.<br>Enrich (Sewage) Biol. | Package Plant/Other Small<br>Flow Discharges         |
| UT to Carmon<br>Creek          | 0.0 to 1.9          | Carmon<br>Creek           | 488944-<br>2.5_01 | 5140101 | Henry                                  |           |      | NS                 | NS     |                       |                 | Pathogens  | Municipal Point Source<br>Discharge                  |
| UT to N. Fork<br>Currys Fork   | 0.0 to 0.1          | North Fork<br>Currys Fork | 499547-<br>4.7_01 | 5140102 | Oldham                                 |           |      | NS                 |        |                       |                 | Pathogens  | Municipal Point Source<br>Discharge                  |

|   |                 | Designated                 | Uses           |                 |                     |
|---|-----------------|----------------------------|----------------|-----------------|---------------------|
|   | Aquatic<br>Life | Contact<br>Recrea-<br>tion |                | Drink.<br>Water |                     |
| Impaired   Receiving   Waterbody   Waterbody   Waterbody   Name   Segment   Waterbody   ID   HUC 8   County | BIO             | PCR<br>SCR                 | Fish<br>Tissue | DWS             | Impairments Sources |

| Tennessee-Mississippi-Cumberland Basin N | <b>Janagement Unit</b> |
|--|------------------------|
|--|------------------------|

| Lower Cumberlan                          | nd Basin   |                                |                |         |      |    |    |  |  |                                     |
|--|------------|--------------------------------|----------------|---------|------|----|----|--|--|-------------------------------------|
| Hammond Creek                            | 2.0 to 2.2 | Cumberland<br>River            | 493638_00      | 5130205 | Lyon | PS | PS |  | Ammonia (Un-ionized),<br>Chlorine, Pathogens,<br>TSS, Org. Enrich.<br>(Sewage) Biol. | Municipal Point Source<br>Discharge |
| West Fork Creek<br>(not named on<br>map) | 0.6 to 1.6 | Sink/Spring<br>near<br>Trenton | WFC-<br>001_00 | 5130206 | Todd | PS |    |  | Ammonia (Un-ionized),<br>TSS, Org. Enrich.<br>(Sewage) Biol.                         | Municipal Point Source<br>Discharge |

| Mississippi River | Basin      |                    |           |         |          |    |    |  |  |                                     |
|-------------------|------------|--------------------|-----------|---------|----------|----|----|--|--|-------------------------------------|
| Cane Creek        | 3.2 to 4.0 | Obion<br>Creek     | 488770_00 | 8010201 | Graves   | PS | PS |  | Ammonia (Un-ionized),<br>Chlorine, Pathogens, Org.<br>Enrich. (Sewage) Biol.         | Municipal Point Source Discharge    |
| Long Creek        | 0.0 to 0.8 | Hurricane<br>Creek | 497091_00 | 8010201 | Carlisle | PS | PS |  | Ammonia (Un-ionized),<br>Chlorine, Pathogens,<br>TSS, Org. Enrich.<br>(Sewage) Biol. | Municipal Point Source<br>Discharge |

|                               |                     |                              |                    |         |           |           |    | Desig              | nated | Uses                  |                 |  |   |
|-------------------------------|---------------------|------------------------------|--------------------|---------|-----------|-----------|----|--------------------|-------|-----------------------|-----------------|--|---|
|                               |                     |                              |                    |         |           | Aqu<br>Li |    | Con<br>Reci<br>tio | rea-  | Con-<br>sump-<br>tion | Drink.<br>Water |  |   |
| Waterbody Name                | Impaired<br>Segment | Receiving<br>Waterbody       | Waterbody<br>ID    | HUC 8   | County    | BIO       | Ом | PCR                | SCR   | Fish<br>Tissue        | DWS             | Impairments  | Sources   |
| Shawnee Creek<br>Slough       | 7.9 to 8.9          | Mississippi<br>River         | 503285_02          | 8010100 | Ballard   |           | PS | PS                 |       |                       |                 | Ammonia (Un-ionized),<br>Chlorine, Pathogens, Org.<br>Enrich. (Sewage) Biol.       | Municipal Point Source<br>Discharge               |
| Torian Creek                  | 0.0 to 0.8          | Mayfield<br>Creek            | 505364_00          | 8010201 | Graves    |           | PS |                    |       |                       |                 | Ammonia (Un-ionized),<br>Pathogens   | Package Plant/Other Small Flow Discharges         |
| Truman Creek                  | 2.0 to 3.0          | Mayfield<br>Creek            | 505525_00          | 8010201 | Carlisle  |           | PS | PS                 |       |                       |                 | Ammonia (Un-ionized),<br>Pathogens, Org. Enrich.<br>(Sewage) Biol.                 | Municipal Point Source<br>Discharge               |
| Ohio River Tribu              | ıtaries             |                              | ]                  |         |           |           |    |                    |       |                       |                 |  |   |
| Humphrey Creek                | 11.0 to<br>12.2     | Ohio River                   | 494758_03          | 5140206 | Ballard   | PS        | PS |                    |       |                       |                 | Pathogens, TSS, Org.<br>Enrich. (Sewage) Biol.                                     | Municipal Point Source<br>Discharge               |
| UT to Humphrey<br>Branch      | 0.0 to 1.3          | Humphrey<br>Branch           | 494756-<br>1.6_00  | 5140206 | Ballard   | PS        | PS |                    |       |                       |                 | Ammonia (Un-ionized),<br>Pathogens   | Municipal Point Source<br>Discharge               |
| UT to Massac<br>Creek         | 0.0 to 0.7          | Massac<br>Creek              | 497670-<br>6.95_00 | 5140206 | McCracken |           | PS |                    |       |                       |                 | Ammonia (Un-ionized),<br>Pathogens, TSS, Org.<br>Enrich. (Sewage) Biol.            | Package Plant/Permitted<br>Small Flow Discharges  |
| UT to Massac<br>Creek         | 0.0 to 0.4          | Massac<br>Creek              | 497670-<br>5.2_00  | 5140206 | McCracken | PS        | PS |                    |       |                       |                 | Ammonia (Un-ionized),<br>Pathogens, TSS, Organic<br>Enrich. (Sewage)<br>Biological | Package Plant/Permitted<br>Small Flow Discharges  |
| UT to W. Fork<br>Massac Creek | 0.0 to 0.8          | West Fork<br>Massac<br>Creek | 506438-<br>1.6_00  | 5140206 | McCracken | PS        | PS |                    |       |                       |                 | Pathogens, Org. Enrich.<br>(Sewage) Biol.  | Package Plant/ Permitted<br>Small Flow Discharges |
| West Fork Massac<br>Creek     | 0.0 to 0.3          | Massac<br>Creek              | 506438_01          | 5140206 | McCracken | PS        |    |                    |       |                       |                 | Ammonia (Un-ionized),<br>Org. Enrich. (Sewage)<br>Biol.                            | Package Plant/ Permitted<br>Small Flow Discharges |

|                           |                     |                              |                   |         |           |             |    | Desig       | gnated | Uses                  |                 |   |  |
|---------------------------|---------------------|------------------------------|-------------------|---------|-----------|-------------|----|-------------|--------|-----------------------|-----------------|---|--|
|                           |                     |                              |                   |         |           | Aquo<br>Lij |    | Con<br>Reci | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody Name            | Impaired<br>Segment | Receiving<br>Waterbody       | Waterbody<br>ID   | HUC 8   | County    | BIO         | ãм | PCR         | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources                                      |
| Tennessee River           | Rasin               |                              |                   |         |           |             |    |             |        |                       |                 |   |  |
| Bear Creek                | 0.6 to 1.6          | Tennessee<br>River           | 486552_00         | 6040006 | Graves    |             | PS | PS          |        |                       |                 | Ammonia (Un-ion),<br>Pathogens, Org. Enrich.<br>(Sewage)                | Municipal Point Source<br>Discharge          |
| Blizzard Pond             | 4.5 to 5.5          | West Fork<br>Clarks<br>River | 506426-<br>1.4_02 | 6040006 | McCracken |             | PS | PS          |        |                       |                 | Ammonia (Un-ionized),<br>TSS, Org. Enrich.<br>(Sewage)                  | Package Plant/Other Small<br>Flow Discharges |
| East Fork Clarks<br>River | 5.7 to 6.7          | Clarks<br>River              | 491450_02         | 6040006 | Calloway  |             |    | PS          |        |                       |                 | Pathogens   | Municipal Point Source<br>Discharge          |
| Little White Oak<br>Creek | 0.9 to 1.9          | Tennessee<br>River           | 496895_00         | 6040006 | Marshall  |             |    | PS          |        |                       |                 | Pathogens, Org. Enrich. (Sewage)  | Package Plant/Other Small<br>Flow Discharges |
| Martin Creek              | 0.0 to 0.9          | Clarks<br>River              | 497627_00         | 6040006 | Marshall  |             | PS | PS          |        |                       |                 | Ammonia (Un-ionized),<br>Pathogens, Org. Enrich.<br>(Sewage) Biol.      | Municipal Point Source<br>Discharge          |
| UT to Chestnut<br>Creek   | 0.0 to 0.7          | Chestnut<br>Creek            | 489424-<br>2.8_00 | 6040006 | Marshall  |             | PS | PS          |        |                       |                 | Ammonia (Un-ionized),<br>Pathogens, TSS, Org.<br>Enrich. (Sewage) Biol. | Municipal Point Source<br>Discharge          |
| Upper Cumberla            | nd Basin            |                              |                   |         |           |             |    |             |        |                       |                 |   |  |
| Clear Fork Branch         | 2.6 to 3.6          | Spring<br>Creek              | 489626_00         | 5130105 | Clinton   |             |    | PS          |        |                       |                 | Pathogens   | Municipal Point Source<br>Discharge          |
| Dry Branch                | 0.0 to 0.3          | Pitman<br>Creek              | 491160_00         | 5130103 | Pulaski   |             | PS |             |        |                       |                 | Ammonia (Un-ionized)  | Package Plant/Other Small<br>Flow Discharges |
| Moore Branch              | 0.0 to 0.6          | Cannon<br>Creek              | 498528_00         | 5130101 | Bell      |             | PS | PS          | NS     |                       |                 | Ammonia (Un-ion),<br>Pathogens, pH, Org.<br>Enrich. (Sewage)            | Package Plant/Other Small<br>Flow Discharges |
| UT to Bridge Fork         | 0.0 to 0.1          | Bridge Fork                  | 510913-<br>5.5_00 | 5130101 | McCreary  |             | PS |             |        |                       |                 | Org. Enrich. (Sewage)   | Municipal Point Source<br>Discharge          |

|                    |                     |                        |                   | •            |                |           |       | Desig              | nated  | Uses                  |                 |   |  |
|--------------------|---------------------|------------------------|-------------------|--------------|----------------|-----------|-------|--------------------|--------|-----------------------|-----------------|---|--|
|                    |                     |                        |                   |              |                | Aqu<br>Li |       | Con<br>Reci<br>tio | rea-   | Con-<br>sump-<br>tion | Drink.<br>Water |   |  |
| Waterbody Name     | Impaired<br>Segment | Receiving<br>Waterbody | Waterbody<br>ID   | HUC 8        | County         | BIO       | õм    | PCR                | SCR    | Fish<br>Tissue        | DWS             | Impairments   | Sources  |
| UT to Clifty Creek | 0.0 to 0.5          | Clifty Creek           | 511409-<br>6.4_00 | 5130103      | Pulaski        |           |       | PS                 | Ī      |                       |                 | Pathogens   | Municipal Point Source<br>Discharge  |
| UT to Pond Creek   | 0.0 to 0.2          | Pond Creek             | 514692-<br>6.0_00 | 5130102      | Jackson        |           | PS    |                    |        |                       |                 | Ammonia (Un-ionized)  | Package Plant/Other Small<br>Flow Discharges   |
| UT to Pond Creek   | 0.0 to 0.2          | Pond Creek             | 514692-<br>7.6_00 | 5130102      | Jackson        |           | PS    | PS                 |        |                       |                 | Ammonia (Un-ion),<br>Pathogens  | Package Plant/Other Small<br>Flow Discharges   |
|                    |                     |                        |                   | C            | een-Tradewat   | D         | . 3.5 |                    | 4 7    | т •4                  |                 |   | -  |
|                    |                     |                        |                   | J <b>nit</b> |                |           |       |                    |        |                       |                 |   |  |
| Green River Basi   | ņ                   |                        |                   |              |                |           |       |                    |        |                       |                 |   |  |
| Austin Creek       | 2.6 to 3.6          | Mud River              | 486150_02         | 5110003      | Logan          | PS        |       |                    |        |                       |                 | Impairment Unknown  | Industrial Point Source<br>Discharge   |
| Blacklick Creek    | 11.2 to 12.2        | Clear Fork<br>Creek    | 487376_01         | 5110002      | Logan          |           | NS    |                    |        |                       |                 | Ammonia (Un-ionized),<br>TSS, Org. Enrich.<br>(Sewage) Biol.              | Municipal Point Source<br>Discharge  |
| Ohio River Tribu   | towing.             |                        | 1                 |              |                |           |       |                    |        |                       |                 |   |  |
| Lead Creek         | 3.5 to 4.5          | Ohio River             | 496111_02         | 5140201      | Hancock        |           | NS    | NS                 |        |                       |                 | Pathogens, Org. Enrich.<br>(Sewage) Biological                            | Municipal Point Source<br>Discharge  |
| _                  |                     |                        |                   | C            | andri Tuasiiti | Dogi      | Moss  | a come a           | m4 I I | :4                    |                 |   |  |
|                    |                     |                        |                   | S            | andy-Tygarts   | basin     | wian  | ageme              | ni Un  | lit                   |                 |   |  |
| Big Sandy River    | Basin               |                        |                   |              | T              |           |       |                    |        |                       | 1               |   |  |
| Abbott Creek       | 0.0 to 3.2          | Levisa Fork            | 485720_01         | 5070203      | Floyd          | NS        |       | NS                 |        |                       |                 | Pathogens, Turbidity,<br>Org. Enrich. (Sewage)<br>Biol., Nitrogen (Total) | Package Plant/Other Small<br>Flow Discharges,<br>Subsurface (Hardrock)<br>Mining, Surface Mining |

#### Appendix D. Table of Category 4A Listings for the 5 BMUs

Category 4A contains waterbody/pollutant combinations with EPA-approved TMDLs. Once a TMDL is approved, the waterbody/pollutant combination is no longer 303(d) listed, and is captured in Category 4A, even though the waterbody is still impaired for that pollutant.

|                   |                     |                        |                        |       |        |           |    | Desig        | nated U        | ses                   |                 |   |         |
|-------------------|---------------------|------------------------|------------------------|-------|--------|-----------|----|--------------|----------------|-----------------------|-----------------|---|---------|
|                   |                     |                        |                        |       |        | Aqu<br>Li |    | Con<br>Recre | tact<br>eation | Con-<br>sump-<br>tion | Drink.<br>Water |   |         |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | ''KY''<br>Waterbody ID | HUC 8 | County | ВІО       | wQ | PCR          | SCR            | Fish<br>Tissue        | DWS             | TMDL Approved for the Impairment Listed | Sources |

#### **Kentucky River Basin Management Unit**

| Kentucky Ri                     | ver Basin    |                         |                   |         |           |    |    |    |    |   |  |
|---------------------------------|--------------|-------------------------|-------------------|---------|-----------|----|----|----|----|---|--|
| Cane Creek                      | 0.0 to 9.5   | N. Fk. KY<br>River      | 511190_00         | 5100201 | Breathitt |    |    | NS |    | Pathogens                                     | Unknown  |
| Carr Fork                       | 5.9 to 8.9   | N. Fk. KY<br>River      | 511230_02         | 5100201 | Perry     |    |    | NS | NS | Pathogens                                     | Unknown  |
| Carr Fork                       | 0.0 to 5.9   | N. Fk. KY<br>River      | 511230_01         | 5100201 | Perry     |    |    | NS |    | Pathogens                                     | Municipal Point Source<br>Discharge                                  |
| North Fork<br>Kentucky<br>River | 0.0 to 162.6 | Kentucky<br>River       | None              | 5100201 | Breathitt |    |    | NS |    | Pathogens                                     | Land Disposal, Municipal Pt<br>Sources, Onsite Wastewater<br>Systems |
| Sand Lick<br>Fork               | 0.0 to 5.0   | South Fork<br>Red River | 515225_00         | 5100204 | Powell    | NS |    |    |    | Salinity/TDS/Chlorides                        | Petroleum /Natural Gas<br>Activities                                 |
| South Fork<br>Red River         | 0.0 to 3.9   | Red River               | 515547_01         | 5100204 | Powell    | NS |    |    |    | Salinity/TDS/Chlorides                        | Petroleum /Natural Gas<br>Activities                                 |
| South Fork<br>Red River         | 3.9 to 10.1  | Red River               | 515547_02         | 5100204 | Powell    | NS |    |    |    | Salinity/TDS/Chlorides                        | Petroleum /Natural Gas<br>Activities                                 |
| Stump Cave<br>Branch            | 0.0 to 2.4   | South Fork<br>Red River | 515765_01         | 5100204 | Powell    |    | NS |    |    | Salinity/TDS/Chlorides                        | Permitted Silviculture Act.  |
| UT to<br>Baughman<br>Fork       | 0.0 to 1.1   | Baughman<br>Fork        | 486478-<br>2.6_01 | 5100205 | Fayette   | NS |    |    |    | Nutrient/Eutroph, Org.<br>Enrichment (Sewage) | Unknown  |

#### Salt-Licking Basin Management Unit

| <b>Licking River</b> | Basin      |         |             |         |         |  |    |  |           |                   |
|----------------------|------------|---------|-------------|---------|---------|--|----|--|-----------|-------------------|
|                      |            | Fleming | 40.500 5 00 | ~100101 |         |  |    |  |           |                   |
| Allison Creek        | 0.0 to 4.9 | Creek   | 485886_00   | 5100101 | Fleming |  | NS |  | Pathogens | Animal Feeding Op |

|                        |                     |                        |                        |         |         |           |            | Desig        | nated U | ses                   |                 |   |   |
|------------------------|---------------------|------------------------|------------------------|---------|---------|-----------|------------|--------------|---------|-----------------------|-----------------|---|---|
|                        |                     |                        |                        |         |         | Aqu<br>Li | atic<br>fe | Con<br>Recre |         | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name      | Impaired<br>Segment | Receiving<br>Waterbody | ''KY''<br>Waterbody ID | HUC 8   | County  | BIO       | WQ         | PCR          | SCR     | Fish<br>Tissue        | DWS             | TMDL Approved for the Impairment Listed | Sources   |
|                        |                     |                        |                        | 1       |         |           | 1          |              |         |                       | I               |   | Г   |
| Cassidy Creek          | 0.0 to 3.9          | Licking River          | 489064_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Op,<br>Managed Pasture Grazing         |
| Craintown<br>Branch    | 0.0 to 3.6          | Fleming<br>Creek       | 490277_00              | 5100101 | Fleming |           |            | PS           |         |                       |                 | Pathogens                               | Animal Feeding Operation                              |
| Doty Branch            | 0.0 to 2.3          | Fleming<br>Creek       | 492236-<br>12.8_01     | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation                              |
| Fleming Creek          | 0.0 to 39.4         | Licking River          | 492236_03              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation                              |
| Logan Run              | 0.0 to 2.3          | Fleming<br>Creek       | 496986_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Illegal Waste Dumps/Inap<br>Waste Disposal, Agricultu |
| Poplar Creek           | 0.0 to 2.9          | Fleming<br>Creek       | 501096_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation Pasture Grazing              |
| Sleepy Run             | 0.0 to 2.8          | Fleming<br>Creek       | 503678_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation                              |
| Town Branch            | 0.0 to 4.0          | Fleming<br>Creek       | 505381_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation<br>Unspec. Urban Stormwater  |
| UT to Fleming<br>Creek | 0.0 to 2.1          | Fleming<br>Creek       | 492236-<br>4.4_00      | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation<br>Pasture Grazing           |
| Wilson Run             | 0.0 to 5.1          | Fleming<br>Creek       | 506915_00              | 5100101 | Fleming |           |            | NS           |         |                       |                 | Pathogens                               | Animal Feeding Operation                              |

| Ohio River Tr      | ributaries   |            |           |         |       |    |  |  |  |  |
|--------------------|--------------|------------|-----------|---------|-------|----|--|--|--|--|
| Elijah's Creek     | 0.0 to 5.2   | Ohio River | 491627_00 | 5090203 | Boone | NS |  |  | Non-priority Organics<br>(De-icing Fluids) | Industrial Stormwater<br>Discharge (Permitted) |
| Gunpowder<br>Creek | 15.0 to 18.9 | Ohio River | 493502_02 | 5090203 | Boone | NS |  |  | Ethylene Glycol                            | Airports                                       |

|                   |                     |                        |                        |       |        |           |              | Desig | nated U         | ses                   |                 |   |         |
|-------------------|---------------------|------------------------|------------------------|-------|--------|-----------|--------------|-------|-----------------|-----------------------|-----------------|---|---------|
|                   |                     |                        |                        |       |        | Aqu<br>Li | ıatic<br>ife |       | itact<br>eation | Con-<br>sump-<br>tion | Drink.<br>Water |   |         |
| Waterbody<br>Name | Impaired<br>Segment | Receiving<br>Waterbody | ''KY''<br>Waterbody ID | HUC 8 | County | BIO       | wQ           | PCR   | SCR             | Fish<br>Tissue        | DWS             | TMDL Approved for the Impairment Listed | Sources |

| Salt River Bas        | sin          |              |                    |         |              |          |       |        |         |  |  |  |
|-----------------------|--------------|--------------|--------------------|---------|--------------|----------|-------|--------|---------|--|--|--|
| Chenoweth<br>Run      | 0.0 to 9.1   | Floyds Fork  | 489391_025         | 5140102 | Jefferson    | PS       | PS    |        |         |  | Nutrients/ Eutrophication Organic Enrich | Municipal (Urban High<br>Density Areas), Package<br>Plants, Livestock<br>(Grazing/Feeding<br>Operations) |
| Floyds Fork           | 0.0 to 11.6  | Salt River   | 492278_01          | 5140102 | Jefferson    | NS       | NS    |        |         |  | (Sewage)                                 | Municipal Point Source   |
| Floyds Fork           | 11.6 to 24.2 | Salt River   | 492278_02          | 5140102 | Jefferson    | NS       | NS    |        |         |  | Org.Enrich. (Sewage)                     | Illegal/Inapp Waste<br>Disposal, Mun Pt. Source<br>Dischar, Package Plants,<br>Urban Runoff/Storm Sewers |
| Floyds Fork           | 24.2 to 34.1 | Salt River   | 492278_03          | 5140103 | Jefferson    | NS       |       |        |         |  | Org.Enrich. (Sewage)                     | Grazing in Riparian, Mun Pt<br>Src Dischrge, Agriculture,<br>Urb Runoff /Storm Sewers                    |
| Floyds Fork           | 34.1 to 61.9 | Salt River   | 492278_04          | 5140102 | Shelby       | PS       | PS    |        |         |  | Org.Enrich. (Sewage)                     | Municipal (High Density<br>Areas), Wet Weather<br>Discharges (Pt/Non-Pt)                                 |
| Harrods Creek         | 0.0 to 3.2   | Ohio River   | 493826_01          | 5140101 | Oldham       |          | NS    |        |         |  | Org.Enrich. (Sewage)                     | Municipal (Urban High<br>Density Areas)  |
| Taylorsville<br>Lake  | 3050 acres   | N/A          | CLN141_00          | 5140102 | Spencer      |          | PS    |        |         |  | Nutrients/<br>Eutrophication             | Agriculture, Upstream<br>Source, Livestock Grazing,<br>Mun. Pt Source Discharges                         |
| Mussin Branch         | 0.0 to 1.7   | Moore Creek  | 499140_00          | 5140103 | Marion       | NS       | NS    | NS     |         |  | pН                                       | Unknown  |
| UT to Rolling<br>Fork | 0.0 to 0.6   | Rolling Fork | 502293-<br>94.6_00 | 5140103 | Marion       | NS       | NS    | NS     | NS      |  | рН                                       | Highways/Road/Bridges<br>Infrastructure (New<br>Construction), Unknown                                   |
|                       |              |              |                    | Gı      | reen-Tradewa | ter Basi | n Man | agemei | nt Unit |  |  |  |

| Green River Basin |            |            |           |         |            |    |  |    |                    |
|-------------------|------------|------------|-----------|---------|------------|----|--|----|--------------------|
| Beech Creek       | 0.0 to 3.4 | Pond Creek | 486697_00 | 5110003 | Muhlenberg | NS |  | pН | Acid Mine Drainage |

|                                      |                     |                             |                        |         |   |     |                 | Desig | nated U         | Jses                  |                 |   |   |
|--------------------------------------|---------------------|-----------------------------|------------------------|---------|---|-----|-----------------|-------|-----------------|-----------------------|-----------------|---|---|
|                                      |                     |                             |                        |         |   | _   | Aquatic<br>Life |       | itact<br>eation | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name                    | Impaired<br>Segment | Receiving<br>Waterbody      | ''KY''<br>Waterbody ID | HUC 8   | County  | BIO | wQ              | PCR   | SCR             | Fish<br>Tissue        | DWS             | TMDL Approved for the Impairment Listed | Sources                                       |
| D: C 1                               | 100, 47             | l n . m:                    | 407007.00              | 5110006 | <br>  <b>                                  </b> | ı   | Lva             | NG    | LNG             | İ                     | Ī               | l                                       | Live D  |
| Brier Creek                          | 0.0 to 4.7          | Pond River                  | 487897_00              | 5110006 | Muhlenberg                                      |     | NS              | NS    | NS              |                       |                 | pН                                      | Acid Mine Drainage                            |
| Butchers<br>Branch                   | 0.3 to 2.3          | Blackford<br>Creek          | 488498_02              | 5140201 | Hancock   |     | NS              | NS    | NS              |                       |                 | pН                                      | Acid Mine Drainage                            |
| Craborchard<br>Creek                 | 0.0 to 4.6          | Drakes Crk                  | 490247_01              | 5110006 | Hopkins   | NS  | NS              | NS    | NS              |                       |                 | рН                                      | Surface Mining, Unknown                       |
| Craborchard<br>Creek                 | 4.6 to 7.6          | Drakes Creek                | 490247_02              | 5110006 | Hopkins   |     | NS              | NS    | NS              |                       |                 | pН                                      | Surface Mining, Unknown                       |
| Drakes Creek                         | 0.0 to 8.5          | Pond Creek                  | 491097_01              | 5110006 | Hopkins   |     | NS              | NS    | NS              |                       |                 | pН                                      | Surface Coal Mining                           |
| Pleasant Run                         | 0.0 to 2.1          | Drakes Crk                  | 500906_01              | 5110006 | Hopkins   |     | NS              | NS    | NS              |                       |                 | рН                                      | Acid Mine Drainage                            |
| Pleasant Run                         | 2.1 to 7.9          | Drakes Creek                | 500906_02              | 5110006 | Hopkins   |     | NS              | NS    | NS              |                       |                 | рН                                      | Acid Mine Drainage                            |
| Render Creek                         | 0.0 to 3.3          | Lewis Crk                   | 501725_00              | 5110003 | Ohio  | NS  | NS              | NS    | NS              |                       |                 | pН                                      | Surface Mining, Acid Mine<br>Drainage         |
| UT to South<br>Fork Russell<br>Creek | 0.0 to 0.6          | South Fork<br>Russell Creek | 503945-<br>4.8_00      | 5110001 | Green   | NS  |                 |       |                 |                       |                 | Salinity/TDS/Chlorides                  | Petroleum/Petroleum<br>Natural Gas Activities |
|                                      |                     |                             | 1                      |         |   |     |                 |       |                 |                       |                 |   |   |
| Tradewater I                         |                     |                             |                        |         | T   |     |                 | 1     | 1               |                       | I               |   | T   |
| Cane Run                             | 0.0 to 3.4          | Caney Creek                 | 488786_00              | 5140205 | Hopkins   |     | NS              |       |                 |                       |                 | pH                                      | Acid Mine Drainage                            |
| Sugar Creek                          | 0.0 to 5.3          | Clear Creek                 | 504656_00              | 5140205 | Hopkins   | PS  | PS              | NS    | NS              |                       |                 | pН                                      | Surface Mining                                |

| Sandy-1 | Cvgarts | Basin | Management | Unit |
|---------|---------|-------|------------|------|
|         |         |       |            |      |

| Little Sand                        | River Basin  |                       |                     |         |      |    |    |  |  |                              |                         |
|------------------------------------|--------------|-----------------------|---------------------|---------|------|----|----|--|--|------------------------------|-------------------------|
| East Fork<br>Little Sandy<br>River | 19.0 to 25.0 | Little Sandy<br>River | not yet<br>assigned | 5090104 | Boyd | NS | NS |  |  | Organic<br>Enrichment/Low DO | Municipal Point Sources |

|                       |                     |                             |                        |            |                 | Designated Uses |        |        |                       |                |                 |   |   |
|-----------------------|---------------------|-----------------------------|------------------------|------------|-----------------|-----------------|--------|--------|-----------------------|----------------|-----------------|---|---|
|                       | _                   |                             |                        |            |                 |                 | 2      |        | Contact<br>Recreation |                | Drink.<br>Water |   |   |
| Waterbody<br>Name     | Impaired<br>Segment | Receiving<br>Waterbody      | ''KY''<br>Waterbody ID | HUC 8      | County          | BIO             | wQ     | PCR    | SCR                   | Fish<br>Tissue | DWS             | TMDL Approved for the Impairment Listed | Sources   |
|                       |                     |                             |                        |            |                 |                 |        |        |                       |                |                 |   |   |
| Newcombe<br>Creek     | 0.0 to 11.9         | Little Sandy<br>River       | 499428_01              | 5090104    | Elliot          | PS              |        |        |                       |                |                 | Salinity/TDS/Chlorides                  | Abandon.Mine Lands,<br>Petrol/Nat Gas Prod,<br>Silvicul, Subsurface Mining,<br>Hab. Mod's, Urban<br>Stormwater                          |
|                       |                     |                             |                        |            |                 |                 |        |        |                       |                |                 |   |   |
|                       |                     |                             | '                      | Tennessee- | -Mississippi-Cu | ımberla         | and Ba | sin Ma | nagem                 | ent Unit       |                 |   |   |
| Ohio River T          | ributaries          |                             | 1                      |            |                 |                 |        |        |                       |                |                 |   |   |
| Little Bayou<br>Creek | 0.0 to 6.5          | Ohio River                  | 496607 00              | 5140206    | McCracken       |                 |        |        |                       | NS             |                 | PCBs                                    | Industrial Point Sources  |
|                       |                     |                             |                        |            |                 |                 |        |        | ı                     |                | I.              |   |   |
| <b>Upper Cumb</b>     | erland River I      | Basin                       |                        | _          |                 | 1               | 1      | 1      | 1                     |                | 1               |   |   |
| Bailey Creek          | 0.0 to 2.5          | Clover Fork                 | 510346_00              | 5130101    | Harlan          |                 |        | NS     |                       |                |                 | Pathogens                               | SSO   |
| Cane Branch           | 0.0 to 2.0          | Middle Fork<br>Beaver Creek | 511181_00              | 5130103    | McCreary        | NS              |        | NS     | NS                    |                |                 | рН                                      | Acid Mine Drainage  |
| Catron Creek          | 0.0 to 8.5          | Martins Fork                | 489099_01              | 5130101    | Harlan          |                 |        | NS     |                       |                |                 | Pathogens                               | Loss of Rip Hab., Decentral<br>Treat/ Septic Sys, Pack<br>Plants  |
| Clover Fork           | 0.0 to 29.1         | Cumberland<br>River         | 511423_01              | 5130101    | Harlan          |                 | NS     |        |                       |                |                 | Pathogens                               | Decentralized Treatment<br>Systems/Septic Systems   |
| Clover Fork           | 29.1 to 30.3        | Cumberland<br>River         | 511423_02              | 5130101    | Harlan          |                 | NS     |        |                       |                |                 | Pathogens                               | Municipal Point Source<br>Discharge, Decentralized<br>Treatment Systems/Septic<br>Systems, Collection System<br>Failure, Package Plants |

|                         |                     |                                  |                        |         |          |     |    | Desig | nated U               | ses            |                 |   |   |
|-------------------------|---------------------|----------------------------------|------------------------|---------|----------|-----|----|-------|-----------------------|----------------|-----------------|---|---|
|                         |                     |                                  |                        |         |          | -   | 2  |       | Contact<br>Recreation |                | Drink.<br>Water |   |   |
| Waterbody<br>Name       | Impaired<br>Segment | Receiving<br>Waterbody           | ''KY''<br>Waterbody ID | HUC 8   | County   | BIO | wQ | PCR   | SCR                   | Fish<br>Tissue | DWS             | TMDL Approved for the Impairment Listed | Sources   |
|                         |                     |                                  |                        |         |          |     |    |       |                       |                |                 |   |   |
| Clover Fork             | 30.3 to 34.5        | Cumberland<br>River              | 511423_03              | 5130101 | Harlan   |     | NS |       |                       |                |                 | Pathogens                               | Municipal Point Source<br>Discharge, Decentralized<br>Treatment Systems/Septic<br>Systems, Collection System<br>Failure, Package Plants |
| Cloverlick<br>Creek     | 0.0 to 5.0          | Poor Fork<br>Cumberland<br>River | 511427_00              | 5130101 | Harlan   |     |    | NS    |                       |                |                 | Pathogens                               | Septic Tanks/Decentral. Sys.  |
| Copperas Fork           | 0.0 to 4.2          | Cooper Creek                     | 511533_00              | 5130104 | McCreary |     | NS | NS    |                       |                |                 | рН                                      | Acid Mine Drainage  |
| Cumberland<br>River     | 650.6 to<br>654.5   | Ohio River                       | 517018_07              | 5130101 | Bell     |     |    | NS    |                       |                |                 | Pathogens                               | Municipal Point Source<br>Discharge, Collection Sys<br>Failure, Decentralized<br>Treatment/Septic Sys                                   |
| Cumberland<br>River     | 684.9 to 694.2      | Ohio River                       | 517018_11              | 5130101 | Harlan   |     |    | NS    |                       |                |                 | Pathogens                               | Municipal Point Source Discharge, Collection Sys Failure, Decentralized Treatment/Septic Sys  |
| Greasy Creek            | 0.0 to 11.4         | Cumberland<br>River              | 493234_00              | 5130101 | Bell     |     |    | PS    |                       |                |                 | Pathogens                               | Unknown   |
| Left Fk<br>Straight Crk | 0.0 to 13.0         | Straight Creek                   | 513326_00              | 5130101 | Bell     |     |    | NS    |                       |                |                 | Pathogens                               | Unknown   |
| Looney Creek            | 0.0 to 3.4          | Poor Fork<br>Cumberland<br>River | 497165_01              | 5130101 | Harlan   |     |    | NS    |                       |                |                 | Pathogens                               | Municipal Point Source<br>Discharge   |
| Looney Creek            | 3.4 to 5.5          | Poor Fork<br>Cumberland<br>River | 497165_02              | 5130101 | Harlan   |     |    | PS    |                       |                |                 | Pathogens                               | Decentralized Treatment<br>Systems/Septic Systems   |
| Martins Fork            | 0.0 to 10.1         | Clover Fork                      | 497628_01              | 5130101 | Harlan   |     |    | NS    |                       |                |                 | Pathogens                               | Unknown   |
| Poor Fork               | 0.0 to 14.9         | Cumberland<br>River              | 514707_01              | 5130101 | Harlan   |     |    | NS    |                       |                |                 | Pathogens                               | Unknown   |

|                    |                     |                                   |                        |         |          | Designated Uses |    |                         |     |                       |                 |   |   |
|--------------------|---------------------|-----------------------------------|------------------------|---------|----------|-----------------|----|-------------------------|-----|-----------------------|-----------------|---|---|
|                    |                     |                                   |                        |         |          | Aqu<br>Li       |    | c Contact<br>Recreation |     | Con-<br>sump-<br>tion | Drink.<br>Water |   |   |
| Waterbody<br>Name  | Impaired<br>Segment | Receiving<br>Waterbody            | ''KY''<br>Waterbody ID | HUC 8   | County   | BIO             | wQ | PCR                     | SCR | Fish<br>Tissue        | DWS             | TMDL Approved for the Impairment Listed | Sources   |
|                    |                     |                                   |                        |         |          |                 |    |                         |     |                       |                 |   |   |
| Poor Fork          | 14.9 to 16.3        | Cumberland<br>River               | 514707_02              | 5130101 | Harlan   |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Poor Fork          | 16.3 to 25.1        | Cumberland<br>River               | 514707_03              | 5130101 | Harlan   |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Puckett Creek      | 0.0 to 10.1         | Cumberland<br>River               | 501413_01              | 5130101 | Bell     |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Richland<br>Creek  | 0.0 to 6.2          | Cumberland<br>River               | 514915_01              | 5130101 | Knox     |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Richland<br>Creek  | 6.2 to 15.7         | Cumberland<br>River               | 514915_02              | 5130101 | Knox     |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Richland<br>Creek  | 15.7 to 20.8        | Cumberland<br>River               | 514915_03              | 5130101 | Knox     |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Rock Creek         | 0.0 to 4.1          | South Fork<br>Cumberland<br>River | 515024_01              | 5130104 | McCreary | NS              |    | NS                      | NS  |                       |                 | pН                                      | Acid Mine Drainage,<br>Impacts from Abandoned<br>Mine Lands |
| Ryans Creek        | 0.0 to 5.3          | Jellico Crk                       | 515156_00              | 5130101 | McCreary | NS              |    | NS                      | NS  |                       |                 | рН                                      | Heap-leach Ext Mining                                       |
| Straight Creek     | 0.0 to 1.7          | Cumberland<br>River               | 515746_01              | 5130101 | Bell     |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |
| Straight Creek     | 1.7 to 23.5         | Cumberland<br>River               | 515746_02              | 5130101 | Bell     |                 |    |                         | NS  |                       |                 | Pathogens                               | Decentralized Treatment<br>Systems/Septic Systems           |
| Wildcat<br>Branch  | 0.0 to 2.1          | Cumberland<br>River               | 516359_00              | 5130103 | Pulaski  | NS              |    | NS                      | NS  |                       |                 | рН                                      | Acid Mine Drainage  |
| White Oak<br>Creek | 0.0 to 4.2          | Rock Crk                          | 516318_01              | 5130104 | McCreary |                 | NS | NS                      | NS  |                       |                 | рН                                      | Coal Mining   |
| Yocum Creek        | 0.0 to 6.5          | Clover Fork                       | 507228_00              | 5130101 | Harlan   |                 |    | NS                      |     |                       |                 | Pathogens                               | Unknown   |

#### **Appendix E. Assessment Methodology**

This section is reproduced from Section 3.2 of Volume I of the IR in order to make Volume II a stand-alone document.

General Assessment Methods. Beginning with the 2005 electronic 305(b) report submittal, the commonwealth began assigning assessed uses, and any associated nonassessed uses, of stream segments and lakes to the appropriate category of the five reporting categories recommended by EPA (2003). Of those categories, two categories have been divided to better define assessment results, categories 2B and 5B were added by DOW to better track assessed segments. Those categories used by the commonwealth are listed in Table 3.2-1. Many waterbody segments had only monitored data for one use assessment, typically aquatic life use.

Table 3.2-1. Reporting categories assigned to surface waters during the assessment process.

| Category | Definition   |
|----------|--|
| 1        | All designated uses for water body fully supporting.   |
| 2        | Assessed designated use(s) is/are fully supporting, but not all designated uses assessed.  |
| 2B       | Segment currently supporting use(s), but 303(d) listed & awaiting EPA approved delisting, or approved/established TMDL.  |
| 3        | Designated use(s) has/have not been assessed (insufficient or no data available).  |
| 4A       | Segment with an EPA approved or established TMDL for all listed uses not attaining full support.   |
| 4B       | Nonsupport segment with an approved alternative pollution control plan (e.g. BMP) stringent enough to meet full support level of all uses within a specified time. |
| 4C       | Segment is not meeting full support of assessed use(s), but this is not attributable to a pollutant or combination of pollutants.                                  |
| 5        | TMDL is required.  |
| 5B       | Segment is not supporting use based on evaluated data; does not require a TMDL.  |

When considering waters for assessment, DOW solicits data from a variety of entities. This includes other government agencies, including state agencies (e.g. Kentucky Department of Fish & Wildlife Resources, Kentucky State Nature

Preserves Commission) and federal agencies including the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, U.S. Geological Survey and Tennessee Valley Authority. Also, data from universities and volunteer monitoring groups are considered. Prior to 2004 DOW considered volunteer monitoring data for screening purposes only. Although with proper quality assurance/quality control (QA/QC) documentation these data are considered to make assessment decisions, no data were submitted by volunteer groups under an approved QA/QC for assessment consideration in this IR. Meetings with volunteer groups continue, and good progress is being made toward utilizing their data for future assessments.

Generally, data older than five years were not considered for assessment; however, assessment decisions were made on a case-by-case basis — not all data older than five years were excluded from consideration. Data older than five years were considered if they were the only data available for a waterbody.

A number of impairments or causes (term used prior to 2006 EPA IR guidance) in EPA's 2006 IR guidance were considered pollution rather than pollutants. The type of impairment is important since a waterbody found not supporting a use and shown to be impaired by pollution, without identified pollutants, does not require a TMDL but rather an alternative plan to restore the use to full support.

A pollutant is a measurable variable that has deleterious effects on the waterbody, e.g. sedimentation/siltation, total phosphorus, ammonia, methylmercury, dissolved oxygen, pH, etc. Pollutants typically are identified for nonsupporting segments, directly linking the pollutants to the designated use.

Those impairments considered pollution are found in Table 3.2-2. Impairment considered to be pollution may not directly cause impairment or water quality degradation. "Habitat assessment" is the most commonly reported pollution impairment for streams not supporting aquatic life use. Another example is "alteration in stream-side or littoral vegetative covers." The loss of this vegetative buffer results not only in loss of shading and increased water temperature but also increased sedimentation/siltation and nutrients (pollutants) that degrades water quality, in-stream habitat and biological communities.

# Table 3.2-2. List of those impairments or causes considered pollution by the DOW (ADB numerical codes listed).

- (84) Alteration in stream-side or littoral vegetative covers
- (85) Alterations in wetland habitats
- (105) Benthic-macroinvertebrate bioassessment (streams)
- (150) Chlorophyll a
- (161) Combination benthic/fishes bioassessments (streams)
- (162) Combined biota/habitat bioassessments (streams)
- (181) Debris/floatable/trash
- (205) Dissolved oxygen saturation
- (218) Eurasian water milfoil, Myriophyllum spicatum
- (227) Excess algal growth
- (228) Fish-passage barrier
- (229) Fish kills
- (230) Fishes bioassessment (streams)
- (243) Habitat assessment (streams)
- (266) Lake bioassessment
- (270) Low flow alterations
- (312) Non-native aquatic plants
- (313) Non-native fish, shellfish, or zooplankton
- (316) Odor threshold number
- (319) Other flow regime alterations
- (331) Particle distribution (embeddedness)
- (336) Periphyton (Aufwuchs) indicator bioassessments (stream)
- (368) Secchi disk transparency
- (387) Suspended algae
- (402) Total organic carbon
- (412) Trophic State Index
- (422) Zebra mussels, Dreissena polymorpha
- (445) Abnormal fish deformities, erosions, lesions, tumors
- (446) Habitat assessment (lakes)
- (450) High flow regime
- (459) Taste and odor
- (460) Aquatic plants native
- (465) Fish advisory no restriction
- (471) Bottom deposits
- (477) Bacterial slimes
- (478) Aquatic plants (macrophytes)
- (479) Aquatic algae

Streams with habitat assessment as the identified pollution usually make their way onto the 303(d) list since there are also associated pollutants such as sedimentation/siltation. In the uncommon circumstance where habitat assessment is the only reported impairment, pollutants have not been observed or measured that contribute to the biological indicator community not supporting, so "impairment unknown" will be listed. For management purposes and because of the likelihood that a not-yet identified pollutant is present, waterbodies listed with "impairment unknown" are placed on the category 5 303(d) list. In these instances, more intensive investigation is needed to determine individual pollutants. It is also recognized that to restore aquatic life use, pollution (e.g. riparian vegetative zone) will be addressed as part of the process of reducing the pollutants.

Another group of impairments considered pollution includes non-native aquatic plants, non-native fish, shellfish, or zooplankton and zebra mussel. While these conditions are undesirable and can have a negative impact on the native plant or animal communities in a waterbody, the non-native species have been introduced accidentally or intentionally via commerce or recreation (ship ballasts, boating (carrying zebra mussels or exotic plants from one area to another), aquarists, sportspersons (non-native trout), etc.). To write a TMDL to eliminate these species would often be more damaging to the environment (e.g. biocides or mechanical removal) then leaving them in-place; they are so widespread and prevalent where they occur it is not feasible to remove or eradicate them. For example, if the non-native carp, *Cyprinus carpio*, found in many perennial streams and reservoirs in the state was considered a pollutant rather than pollution, a TMDL would be required to address this in thousands of stream miles and reservoir acres. These examples are instances where the occurrence of impairments considered pollution (non-natives) alone will not result in a category 5 listing, rather a category 2 if all biological community metrics indicate the aquatic life use is supporting.

There are several other impairments that may be indicators of nonsupport of aquatic life use and are considered pollution and not pollutants: 1) benthic macroinvertebrate bioassessment (streams); 2) chlorophyll a; 3) combination benthic/fishes bioassessment; 4) combined biota/habitat bioassessments (streams); 5) dissolved oxygen saturation; 6) excess algal growth; 7) fishes bioassessment (streams); 8)

lake bioassessment; 9) periphyton (aufwuchs) indicator bioassessments (stream); 10) Secchi disk transparency; 11) suspended algae; 12) trophic state index; and 13) fish advisory – no restriction. Through physicochemical data taken at time of biosurveys and in-stream habitat and land use observations, the most significant pollutants contributing to the degraded biological community are usually recognized.

The total number of assessed stream miles was determined by adding the miles assessed by targeted monitoring and the miles represented by the site-specific random survey (not extrapolated data).

# 3.2.1 Aquatic Life and Primary Contact Recreation Use Support

The water quality and biological data provided by the programs described in the preceding pages were used to assess use support in rivers and streams. Table 3.2.1-1 shows the designated uses of Kentucky waters, and the indicators employed to make those support/nonsupport determinations. Given the comprehensive suite of parameters sampled by DOW for many stream assessments, both biological and physicochemical, a determination can typically be made as to the cause(s) and source(s) of pollutant/pollution affecting the resource; however, this is often best professional judgment and further study will lead to better resolution of causes and sources. Data were categorized as "monitored" or "evaluated." Monitored data were derived from sitespecific surveys and generally no more than five years old; typically, data older than five years were considered "evaluated" (assessment code 150), but this did not change the assessment category a water body and/or segment had been assigned to unless there were more recent "monitored" data. In some instances where conditions were believed to have remained mostly unchanged, monitored data collected prior to 1995 were still considered valid and waters described by these data were categorized as monitored. Additionally, data from the random survey network were used. Approximately 17,500 stream miles had been monitored in the commonwealth by targeted efforts through March 2005. Like the targeted stations, each random survey station was used to assess a limited reach of stream around the sample point. Few evaluated waters remain in the assessment database. All efforts in the watershed initiative were to gather defensible, monitored data. However, there were some monitoring data more than five years old, strong

anecdotal information, and extrapolation of discharge data that resulted in evaluated assessments.

Water Quality Data. Chemical data collected by DOW and others were assessed according to EPA guidance (U.S. EPA 1997). Water quality data were compared to criteria contained in Kentucky Water Quality Regulations (401 KAR 5:031). The segment fully supported WAH use when criteria for dissolved oxygen, un-ionized ammonia, temperature and pH were not met in 10 percent or less of the samples collected (April 2001 - March 2005 for the ambient stations and 12 months for the targeted rotating watershed cycle stations). Impaired, partial support was indicated if any one criterion for these parameters was not met in 11-25 percent of the samples. A segment was impaired, not supporting, if any one of these criteria was not met in more than 25 percent of the samples.

Table 3.2.-3 Kentucky designated uses and indicators used to assess level of support.

| <u>Use</u>   | Aquatic Life                | <u>Recreation</u>                 | Fish Consumption   | <sup>a</sup> Drinking Water |
|--------------|-----------------------------|-----------------------------------|--------------------|-----------------------------|
| Core         | Stream:                     | Stream:                           | Mercury            | Inorganic chemicals         |
| Indicators   | 1-3 biological communities: | Pathogen indicators:              | PCBs               | Organic chemicals           |
|              | macroinvertebrates, diatoms | fecal coliform; <i>E. coli</i>    |                    | Pathogen indicators:        |
|              | and fishes                  | рН                                |                    | fecal coliform, E. coli     |
|              | Dissolved oxygen            |                                   |                    |                             |
|              | Temperature                 | <u>Lakes/Reservoir:</u>           |                    |                             |
|              | рН                          | Pathogen indicators:              |                    |                             |
|              | Specific conductance        | fecal coliform or <i>E. coli</i>  |                    |                             |
|              |                             | рН                                |                    |                             |
|              | <u>Lake/Reservoir:</u>      |                                   |                    |                             |
|              | Dissolved oxygen            |                                   |                    |                             |
|              | Temperature                 |                                   |                    |                             |
|              | рН                          |                                   |                    |                             |
|              | Specific conductance        |                                   |                    |                             |
|              | Fish kills                  |                                   |                    |                             |
|              |                             |                                   |                    |                             |
| Supplemental | Chlorophyll-a               | Nuisance macrophytes              | Other chemicals of | Odor                        |
|              | Trophic State Index (TSI)   | Nuisance macroscopic algal growth | concern found      | Taste                       |
|              | Secchi depth                | Nuisance algal blooms             | in water quality   | Treatment problems          |
|              | Indicator health (vigor)    | Suspended sediment                | standards          | caused by poor water        |
|              | Chemical                    | Chemical                          |                    | Quality                     |
|              | Sediments                   |                                   |                    |                             |

<sup>&</sup>lt;sup>a</sup>All core indicators are based on "at the tap" MORs received from PWS

Data for mercury, cadmium, copper, iron, lead and zinc were analyzed for observations exceeding acute criteria listed in state water quality standards regulations using at least three years of data. The segment fully supported WAH use if all criteria were met at stations with quarterly or less frequent sampling, or if only one observation exceeded criteria at stations with monthly sampling. Partial support was indicated if any one criterion was not met more than once but in less than 10 percent of the samples. The segment was impaired, not supporting if criteria were exceeded in greater than 10 percent of the samples. The assessment criteria were closely linked to the way state and federal water quality criteria were developed. Aquatic life was considered protected if, on average, the acute criteria were not exceeded more than once every three years. Data were also compared to chronic criteria. Observations that equaled or were only slightly greater than chronic criteria were not considered to exceed water quality standards. Toxic criteria were assessed based on 12 monthly samples at the rotating watershed ambient water quality network and generally 48 samples from the primary ambient water quality network. The segment fully supported WAH use if all criteria met or exceeded only once. Impaired, partial support was assessed if any criterion was not met more than once, but in less than 10 percent of samples. The segment was impaired, not supporting if criteria were exceeded in greater than 10 percent of samples.

Fecal coliform or *Escherichia coli* and pH data were used to indicate the degree of support for primary contact recreation (PCR) (swimming) use. PCR assessment was based on six monthly grab samples collected during the recreation season of May – October. The use fully supported if the fecal coliform bacteria criterion of >400 colonies per 100 mL (>240 colonies per 100 mL for *E. coli*) was not met in less than 20 percent of samples; it was impaired, partial support if either criteria were not met in 25-33 percent of samples; and impaired, nonsupport if either criteria were not met in >33 percent of samples. Secondary contact recreation (SCR) was also assessed following the same method using fecal coliform data at the concentration of >2000 colonies per 100 mL. Streams with pH <6.0 SU or >9.0 SU were considered full support if these criteria were exceeded once, but in less than 10 percent of samples collected in the recreation season; impaired, partial support if the standard was exceeded more than once, but in less than 10

percent of the samples during the recreation season; and impaired, nonsupport if the criterion was exceeded in more than 10 percent of samples during the recreation season.

**Biological Data** (**streams**). Decisions about use attainment for aquatic life are primarily made using biological data obtained from monitoring programs within the DOW and other agencies. There are a number of reasons biological data are so important in making level of support decisions for aquatic life use. Biological communities (indicators) integrate their environment, and thus serve as good monitors of the conditions (physical, chemical, and habitat) they live in. The core indicators for bioassessment are outlined in Table 3.2.1-2. Level of use support is dependent on the indicator community(s) health and integrity, with supplemental physicochemical and habitat data. These results are applied for assessment purposes as outlined in Table 3.2.1-2.

Table 3.2.1-2. Biological criteria for assessment of warm water aquatic habitat (streams) use support<sup>a</sup>. Indicator **Fully Supporting** Partial Support **Nonsupport** Algae Diatom Bioassessment DBI classification of DBI classification Index (DBI) fair: increased biomass of poor; biomass Classification of (if nutrient enriched) of very low excellent or good; filamentous green (toxicity), or high biomass similar to (organic algae. enrichment). reference/control or STORET mean. Macroinvertebrates MBI classification of MBI classification Macroinvertebrate **Bioassessment Index** fair, EPT lower than of poor; EPT low, (MBI) excellent or good, expected in relation to TNI of tolerant high EPT, sensitive available habitat, taxa very high. species present. reduction in RA of Most functional sensitive taxa. Some groups missing alterations of functional from community. groups evident. Fishes Index of Biotic Integrity IBI fair. IBI poor, very (IBI) excellent or good; poor, or no fish. presence of rare, endangered or species of special concern.

<sup>&</sup>lt;sup>a</sup>Acronyms used in this table: EPT= Ephemeroptera, Plecoptera, Trichoptera; RA= Relative Abundance; TNI= Total Number of Individuals

Macroinvertebrates have been used extensively in water quality monitoring and impact assessment since the early 1900s. Today, macroinvertebrates are used throughout the world in water quality assessment as environmental indicators of biological integrity, to describe water quality conditions or health of the aquatic ecosystem, and to identify causes (pollutants) of impairment. This indicator community is relatively sedentary, spending a significant portion of their life cycle in the aquatic environment, various populations of a community are dependent on multiple habitats in the water column, occupy multiple consumer levels throughout the food web (herbivores, omnivores, and carnivores), and significantly, many sensitive taxa (benthos) live in or on the sediments of streams. These characteristics and habits make this a key indicator group of their environment. DOW defines benthic macroinvertebrates as organisms large enough to be seen by the unaided eye, can be retained by a U.S. Standard Number 30 sieve (28 mesh/inch, 600 µm openings), and live at least part of their life cycle within or upon available substrates of a waterbody. DOW relies on the analyses of macroinvertebrate communities in level of use support assessment for sections 305(b) and 303(d) of the Clean Water Act (CWA). In addition to determining use support level, biomonitoring will identify those Exceptional Waters (401 KAR 5:030) (those waters that are among the most biologically diverse and represent biological integrity to a high degree in a given bioregion) occurring across the commonwealth.

The evaluation of fish community structure is an important component of biological monitoring for providing reliable assessments for the CWA, Section 305(b). The primary goal of evaluating fish community structure is to ensure accurate assessments for 305(b) is to calculate the Index of Biotic Integrity (IBI) (Kentucky Index of Biotic Integrity (KIBI)) of the community present. Advantages of using fish as biological indicators include their widespread distribution, utilization of a variety of trophic levels, stable populations during summer months, and the availability of extensive life history information (Karr et al. 1986).

Algae (primarily diatoms) are indicators of water quality, particularly as it relates to trophic (fertility) status and toxicity conditions. The Diatom Bioassessment Index (DBI) is calculated when this indicator community is monitored. This indicator group is

critical to the food web of streams, beginning the process of primary production through photosynthesis.

**Federally Threatened and Endangered Species.** Waters with federally threatened or endangered species in November 1975 have an existing "use" of Outstanding State Resource Water and the loss or significant decline of one of these populations constitutes an impairment of use.

Lakes/Reservoirs. Lakes/reservoirs were assessed for aquatic life by measuring several physicochemical indicators, in addition to reported fish kills. The lack of a direct biological indicator is primarily due to most of this resource being manmade, thus supporting altered and unnatural biological communities that are composed almost exclusively of tolerant species (e.g. Tubificidae, *Chironomus* spp., *Chaoborus* spp., *Glyptotendipes* spp., etc.) that are capable of exploiting this naturally low DO-stressed environment. Thus, those core and supplemental indicators (Table 3.2.1-1) are of utmost importance to assure water quality conditions are suitable for supporting primarily sportfish, and associated prey fishes; these populations are the primary concern for aquatic life use being met or not in created environments. Table 3.2.1-3 outlines the criteria used in making use assessment decisions.

Trophic status was assessed in lakes/reservoirs using the Carlson Trophic State Index (TSI) for chlorophyll-*a*. This method was convenient because it allows lakes to be ranked numerically according to increasing eutrophy, and also provides for a distinction between oligotrophic, mesotrophic, eutrophic, and hyper-eutrophic lakes. The growing season (March – October) average TSI value was used to rank each lake. Areas of lakes that exhibited trophic gradients or embayment differences often were analyzed separately.

# 3.2.2 Other Data Sources

**Discharge Monitoring Reports (DMRs).** Discharge monitoring report (DMR) data, collected by Kentucky Pollutant Discharge Elimination System (KPDES) permit holders, were assessed through DOW's permit compliance database. Depending on the relative sizes of the wastewater discharge, the receiving stream and the severity of

Table 3.2.1-1. Criteria for lake/reservoir use support classification.

|  | Warm Water   | Secondary Contact  | Domestic   |
|--|--|--|--|
| Category   | Aquatic Habitat  | Water Recreation   | Water Supply   |
| Not Supporting:  | (At least two of the following criteria)                             | (At least one of the following criteria)   | (At least one of the following criteria)                   |
|  | Fish kills caused by poor water quality                              | Widespread excess<br>macrophyte/macro-<br>scopic algal growth                    | Chronic taste and odor complaints caused by algae          |
|  | Severe hypolimnetic oxygen depletion                                 | Chronic nuisance algal blooms  | Chronic treatment problems caused by poor water quality    |
|  | Dissolved oxygen<br>average less than 4<br>mg/l in the<br>epilimnion |  | Exceeds drinking water MCL                                 |
| Partially Supporting: (At least one of the following criteria) | Dissolved oxygen<br>average less than 5<br>mg/l in the<br>epilimnion | Localized or<br>seasonally excessive<br>macrophyte/macro-<br>scopic algal growth | Occasional taste and odor complaints caused by algae       |
|  | Severe hypolimnetic oxygen depletion                                 | Occasional nuisance algal blooms   | Occasional treatment problems caused by poor water quality |
|  | Other specific cause (i.e. low pH)                                   | High suspended sediment concentrations during the recreation season              |  |
| Fully  | None of the above  | None of the above  | None of the above  |
| Supporting:  |  |  |  |

the violations of permit limits, it sometimes was possible to assess in-stream uses as nonsupporting either AL or PCR. Because in-stream data were usually not collected, stream assessments based only on DMR data were considered evaluated, not monitored, and these segments were assigned to category 5B.

Corps of Engineers (COE) Reservoir Projects. Dam projects on major streams in Kentucky were monitored with the cooperation of the COE. During the Interagency Monitoring and Planning Meeting those reservoirs in the BMU of focus were identified and a cooperative effort between DOW and COE resulted. Reservoir water quality variables were monitored over the growing season (March – October) and major in-flow and out-flow tributaries of these reservoirs were monitored for water quality. Aquatic life use support level was determined using these monitored data for reservoir and monitored tributaries. The Louisville COE District covers both the Kentucky River and Salt-Licking Rivers BMUs reported on in this IR.

# 3.2.3 Fish Consumption Use Support

Fish consumption is a category that, in conjunction with aquatic life use, assesses attainment of the fishable goal of the Clean Water Act. Assessment of the fishable goal was separated into these two categories in 1992 because the fish consumption advisory does not preclude attainment of the aquatic life use and vice versa. Separating fish consumption and aquatic life use support gave a clearer picture of actual water quality conditions.

Kentucky revised its methodology for issuing fish consumption advisories in 1998 to a risk-based approach patterned after the Great Lakes Initiative. The risk-based approach generally was more conservative than the Food and Drug Administration (FDA) action levels that were used previously. For example, the FDA action level for mercury was 1.0 mg/Kg, but the risk-based number for issuing an advisory was as low as 0.12 mg/Kg. As a result of this change in methodology, a statewide advisory was issued in April 2000 for children under six and women of childbearing age to not consume more than one meal per week of any fish from Kentucky waters because of mercury. However, EPA (2001a) issued a draft mercury water quality criterion expressed as a methylmercury

concentration in fish tissue of 0.3 mg/Kg. Therefore, for purposes of 305(b) reporting, waters were not considered impaired unless fish exhibited mercury tissue concentrations of at least 0.3 mg/Kg. In other words, the fish tissue concentration triggering the statewide advisory (0.12 mg/Kg) was considered more stringent than water quality standards.

Other than the statewide advisory for mercury explained above, the following criteria were used to assess support for the fish consumption use:

- Fully supporting- no fish consumption restrictions or bans in effect;
   highest species average concentration ≤0.3 mg/Kg
- Impaired: Partial support- "restricted consumption," fish consumption advisory in effect for general population or a subpopulation that potentially could be at a greater cancer risk (e.g. pregnant women, children); highest species average concentration > 0.3 mg/Kg 1.0 mg/Kg. Restricted consumption was defined as limits on the number of meals consumed per unit time for one or more fish species
- Impaired: Not supporting- a no consumption fish advisory or ban in effect for general population or a subpopulation that potentially could be at greater risk, for one or more fish species, or a commercial fishing ban in effect; highest species average concentration > 1.0 mg/Kg.

# 3.2.4 Drinking Water Supply

Drinking water use support was determined in several ways. First, compliance with maximum contaminant levels (MCLs) in finished water was determined by the annual average of quarterly samples. These MCL data were gleaned from monthly operating reports (MORs) submitted to DOW, Drinking Water Branch, from treatment facilities. Drinking water use assessments in reservoirs were supplemented by surveys of drinking water operators on any taste and odor problems and use of biocides (Table 3.2.1-1). The routine application of a biocide, or use of carbon filtration, were reasons for assessing a source of water as not fully supporting the domestic water supply use. Instream water quality data generally were not available to assess drinking water use.

# 3.2.5 Impairments and Sources

Impairments (pollutants and pollution) and sources were categorized according to EPA guidance. Impairments for primary contact recreation, fish consumption, and water supply usually were easily identified. The majority of segment/waterbodies not supporting aquatic life use were determined by biological monitoring; in addition to occasional physicochemical indications of impairment, impairments were often identified by biocommunity index(s), and observations and judgment of field biologists. All impairments may not be evident in the field and there may be other pollutants contributing to use impairment that were not listed. Sources of all types of use impairments were more difficult to determine and should be considered as "probable" sources at the 305(b) stage. Once on the 303(d)-list, subsequent intensive monitoring and watershed reconnaissance of land uses will more fully identify sources.

#### **3.2.6 Determination of Assessment Segments**

Once an assessment is made on a waterbody, an appropriate segment or portion of the water body representative of the monitored area is determined. Part of this determination is based on the type of monitoring (e.g. physicochemical, biological, bacteriological, fish tissue, or lake/reservoir).

Aquatic Life, Recreation and Fish Consumption Uses. This monitoring activity occurs throughout the state at the Primary Ambient Water Quality Stations (Primary Network) and in the Rotating Watershed Stations particular to the BMU cycle phase. Since the Primary Network stations are located on large streams and rivers, these assessment segments are taken downstream and upstream to the point of significant streams entering the monitored stream. Significance of tributaries is based on the watershed area and relative volume. Another important factor considered in defining segments is significant changes in land use from sample area, such as leaving a contiguous forested area, and entering a non-forested area with fragmented riparian vegetative zone. Since many of DOW's PCR-SCR (recreation) monitoring locations are associated with the ambient water quality network, the same rational is used to define these segments and typically follows the defined segment for the accompanying aquatic life use assessment.

Those waters assessed for aquatic life use having biological community data often will be of shorter segment reach since these indicators are typically more responsive to subtle changes in water quality as they integrate these conditions over a relatively long time. Also, the habitat conditions along the corridor being assessed are paid close attention to for the same reasons as physicochemical considerations for biological communities. Typically the smaller the watershed, a proportionately greater segment will be defined since the conditions and influences from surrounding land use are similar and localized in those streams. In larger watersheds, typically greater than five square miles, proportionately smaller assessment segments are defined due to the increased potential of sources of pollutants and habitat influences. These segments are defined by upstream and downstream tributaries judged to be of significant drainage area to the receiving stream.

Fish consumption segments are defined in a similar method as those reaches assessed using only physicochemical, or bacteria data. Many fish species are relatively long ranging, and that factor has significant consideration in defining segments. Also, with the plethora of sources, and the fact that much of the mercury in waters comes via atmospheric deposition, relatively long reaches are often defined when making these assessments. However, significant tributaries are often used to make the upstream and downstream termini, with less consideration given to habitat for the reasons given above.

Drinking Water. Since this use was assessed using finished water data supplied by Public Water Systems (PWS), the assessment segments were usually conservative when applied to the source water. The assessment segments were typically taken from the point of withdrawal and extended upstream one mile. A few exceptions to that rule occurred when multiple uses were assessed (e.g. fish tissue, aquatic life) in the same general area of PWS withdrawal points. Those segments were usually longer (see section above on these use assessment segments) in order to accommodate those other uses that overlapped the PWS withdrawal point. This was a result of not being able to have multiple uses assessed as different segments within assessment segments. In the case of reservoirs, the assessment was applied to the waterbody.

Most stream miles in Kentucky not supporting aquatic life use are impaired primarily by the pollutants sedimentation/siltation (habitat smothering), nutrient enrichment, and salinity/TDS/chlorides, and pollution in the form of habitat alterations

(often related to loss of vegetation in the riparian zone). All these pollutants affect habitat or physicochemical variables that manifest in the biological community structure.



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