# **Priority System Guidance Document**

For Eligible Infrastructure Projects
To Be Funded By The

# KENTUCKY CLEAN WATER STATE REVOLVING FUND 2027 Funding Cycle



Department for Environmental Protection
Division of Water

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#### I. Introduction

#### **PURPOSE**

The priority system is designed to prioritize eligible projects for funding through the Clean Water State Revolving Fund (CWSRF). The CWSRF is intended to fund projects for construction of publicly owned treatment works as defined in section 212 of the Clean Water Act, including stormwater projects. Amendments to the program also allow funding of projects for: decentralized systems; storm water or subsurface drainage water; water conservation, efficiency, or reuse; watershed projects as defined in section 122; energy consumption; reuse or recycling of wastewater, stormwater, or subsurface drainage water; security; and assistance by nonprofit agencies. The CWSRF may also fund nonpoint source pollution control activities which implement the U.S. EPA-approved *Kentucky Nonpoint Source Management Plan: A Strategy for 2019-2023* (Kentucky Division of Water, 2019) required under Section 319 of the Clean Water Act, which lists specific activities for controlling nonpoint source pollution impacts and identifies responsible implementing agencies and potential/available funding sources.

#### METHODOLOGY

This document outlines the Division of Water's (DOW) project selection and ranking criteria which shall be used to establish project priority ranking in the annual CWSRF Intended Use Plan (IUP). This document complies with EPA's *Integrated Planning and Priority Setting in the Clean Water State Revolving Fund* guidance (EPA-832-R-01-002 March 2001), which states, "An integrated planning and priority setting system is effective if it ensures that CWSRF-funded projects address high priority water quality problems. Four actions are key to its success: identifying water quality priorities, assessing the CWSRF role, undertaking outreach efforts, and selecting priority projects."

DOW is committed to reassessing the Integrated Project Priority Ranking Criteria and Points System upon the completion of the initial review and ranking process and development of the Project Priority List. Modifications may be made to the criteria and points system if it is determined this process does not meet EPA's guidance for utilizing the CWSRF to address the high priority water quality problems.

# II. Identifying and Ranking Water Quality Priorities

DOW operates several water quality programs that have proven useful to identify criteria for ranking projects in the context of CWSRF funding priority.

All surface waters in Kentucky are assessed based on a five-year, rotating watershed basin cycle. Assessment data and narrative explanations are compiled into the 305(b) Report to Congress. Section 303(d) of the CWA requires each state to list those waters within its boundaries for which technology based effluent limitations are not stringent enough to protect any water quality standard applicable to such waters. The 303(d) List of Waters identifies all waters assessed as "impaired" for one or more pollutants and are therefore waters not "meeting the water quality standard." Listed waters are prioritized with respect to designated use classifications and the severity of pollution. The 305(b) report and 303(d) list are now published together in the *Integrated Report to Congress on Water Quality in Kentucky* <a href="https://eec.ky.gov/Environmental-Protection/Water/Monitor/Pages/IntegratedReportDownload.aspx.">https://eec.ky.gov/Environmental-Protection/Water/Monitor/Pages/IntegratedReportDownload.aspx.</a>

Kentucky is required to develop Total Maximum Daily Loads (TMDLs) for those water bodies that are not meeting water quality standards. The TMDL process establishes the allowable loadings of pollutants or other quantifiable parameters for a waterbody based on the relationship between point and nonpoint pollution sources and in-stream water quality conditions. See the following website for approved TMDLs.

https://eec.ky.gov/Environmental-Protection/Water/Protection/TMDL/Pages/Approved-TMDLs.aspx

As required in 200 KAR 17:050, the cabinet must determine the priority for funding eligible projects to be included on the Project Priority List based on criteria established pursuant to 33 U.S.C. 1296, which states that projects should be designed to achieve optimum water quality management consistent with public health and water quality goals, and the following:

#### A. Project Needs

A project is awarded points based on the importance of the need in addressing a water quality or public health problem. Each of the need categories are defined in this section.

Criterion #1: <u>Combined Sewer Overflow (CSO) Correction</u>- Correction measures used to achieve water quality objectives by preventing or controlling periodic discharges of a mixture of stormwater and untreated wastewater (combined sewer overflows) that occur when the capacity of a sewer system is exceeded.

Points Received: 40

Criterion #2: <u>Sanitary Sewer Overflow (SSO) Correction</u>- Control of sanitary sewer overflows caused by undersized lines and/or excessive infiltration and inflow into the sanitary sewer collection system. Sanitary sewer overflow refers to overflow, spill, release, or discharge of untreated or partially treated wastewater from a sanitary sewer system.

Points Received: 30

Criterion #3: Replacement or Rehabilitation of Aging Infrastructure, including correction of moderate infiltration and inflow (i.e., no associated SSO)- The problem of water penetration into a sewer system from the ground through such means as defective pipes or manholes or from sources such as drains, storm sewers, and other improper entries into the systems is referred to as infiltration and inflow (I/I). Reinforcement or reconstruction of structurally deteriorating sewers and pipes used to collect and convey wastewater by gravity or pressure flow to a common point are projects designed to correct I/I (i.e., no associated SSO) go under this criterion.

Points Received: 50

Criterion #4: New Treatment Plant- Construction of a new facility including any devices and systems used in the storage, treatment, recycling or reclamation of municipal sewage, sewage sludge, and biosolids, or industrial waste.

Points Received: 10

Criterion #5: New Collector Sewers and Appurtenances- Install new pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that will convey the wastewater to a treatment plant.

Points Received: 10

Criterion #6: <u>Decentralized Wastewater Treatment Systems</u>- Eligible projects include replacement, upgrade, or modification of inadequate or failing systems or the installation of a new system including single or cluster systems. This includes onsite, mound, and/or cluster treatment systems that process household and/or commercial sewage that may include, but are not limited to, septic systems, disposal beds, and packaged wastewater treatment plants

configured to treat and dispose of wastewater without offsite discharge. Often the wastewater is percolated into the soil through infiltration beds or trenches or is disposed by irrigation or other means.

Points Received: 20

Criterion #7: <u>Upgrade to Advanced Treatment</u>- Upgrade of a facility to a level of treatment that is more stringent than secondary treatment or produces a significant reduction in nonconventional pollutants.

Points Received: 20

Criterion #8: Emerging Contaminants- Eligible projects may include but are not limited to monitoring, testing, outreach, and mitigation programs associated with addressing emerging contaminants in solids, collection systems, indirect dischargers, and effluent.

Points Received: 65

Criterion #9: Optimization of Existing Treatment Plant- Rehabilitation, upgrades, improvements, or expansion of existing treatment plant.

Points Received: 50

Criterion #10: <u>New Interceptors and Appurtenances</u>- Install new major sewer lines receiving wastewater flows from collector sewers. The interceptor sewer carries wastewater directly to the treatment plant or another interceptor.

Points Received: 10

Criterion #11: <u>Storm Water Control</u>- Storm water is defined as runoff water resulting from precipitation. Includes activities to plan and implement municipal storm water management programs with environmental benefits pursuant to National Pollutant Discharge Elimination System permits for discharges from municipal separate storm sewer systems. Eligible projects include projects that manage, reduce, treat, or recapture stormwater.

Points Received: 20

Criterion #12: <u>Nonpoint Source (NPS) Pollution Control</u>- NPS projects may include, but are not limited to, stream restoration, Best Management Practices, and land purchases.

Points Received: 20

Criterion #13: Recycled Water Distribution- Projects may include, but are not limited to, the recycling of nonpotable water or reclaimed water for irrigation and other nonpotable uses.

Points Received: 10

Criterion #14: <u>Planning</u>- Developing plans to address water quality and water quality-related public health problems that are supported by sound science and appropriate technology. Examples included Watershed-Based Plan, Total Maximum Daily Load Implementation Plans, Long-term Control Plans for Combined Sewer Overflow (CSO), and the development of a facility plan.

Points Received: 10

Criterion #15: Other- Any project that does not meet the list of project needs definitions and/or standards provided above. If the project is to conduct optimization studies for technology-based limits for nutrients the project will receive 50 points\*. Project need must be provided.

Points Received: 10 or 50\*

#### B. Regionalization

Criterion #1: Will this project provide regionalization and/or consolidation of wastewater treatment systems?

This question addresses regionalized wastewater treatment approaches which may significantly minimize wastewater impacts. Regionalization occurs when smaller systems integrate part or all their wastewater management systems to reduce costs, improve service, and maintain regulatory compliance. Smaller systems, regardless of ownership status, lack economies of scale and often have a difficult time finding the capital and human resources required to comply with stringent water quality standards to remain viable. Regionalized wastewater treatment approaches may significantly minimize wastewater impacts, resulting in a reduced number of KPDES discharges. This includes projects that will combine one or more existing treatment plants, result in the abandonment of one or more wastewater treatment plants and connection to an existing wastewater treatment plant, acquisitions of smaller systems by larger systems, and mergers between utilities. **Project must reduce the number of KPDES discharges**.

Points Received: 35

Criterion # 2: Will this project eliminate a package treatment plant that is more than 25 years old?

Points Received: 30

Criterion # 3: Will this project eliminate a package treatment plant that has received notices of violations resulting in degradation of waters of Commonwealth within the last two state fiscal years?

Points Received: 30

#### C. Compliance and Enforcement

Criterion #1: <u>Is the project necessary to achieve full or partial compliance with a court order, or a judicial or administrative consent decree?</u>

Points Received: 50

Criterion #2: Primary system has not received any CWA Notices of Violation within the previous state fiscal year.

Points Received: 25

#### D. Water Quality

Criterion #1: Will the project implement an approved Total Maximum Daily Load (TMDL) for impaired waterbodies?

Is the project located on a stream that has an approved TMDL? See the following website for approved TMDLs <a href="https://eec.ky.gov/Environmental-Protection/Water/Protection/TMDL/Pages/Approved-TMDLs.aspx">https://eec.ky.gov/Environmental-Protection/TMDL/Pages/Approved-TMDLs.aspx</a>

Points Received: 10

Criterion #2: Will the project address existing or projected nutrient TMDL?

Is the TMDL established for nutrients or is the stream nutrient impaired? Refer to the DOW website for impairment/TMDL information <a href="https://eec.ky.gov/Environmental-Protection/Water/Protection/TMDL/Pages/Approved-TMDLs.aspx">https://eec.ky.gov/Environmental-Protection/TMDL/Pages/Approved-TMDLs.aspx</a>

Points Received: 30

Criterion #3: Will the project implement any part of an EPA Accepted Watershed Plan? Please refer to the list of approved watershed plans in Section VIII. DOW Priority

Watersheds (arcgis.com)
Points Received: 10

Criterion #4: Will the project make reasonable progress towards eliminating identified pollutant sources for waterbodies that appear in the *Integrated Report to Congress on Water Quality in Kentucky?* 

This question addresses the state's goal to improve water quality in impaired waterbodies. The Integrated Report and maps are available on DOW's website. https://eec.ky.gov/Environmental-

Protection/Water/Monitor/Pages/IntegratedReportDownload.aspx.

The reports list the impaired waterbodies with the pollutants of concern and probable sources of the pollutants.

Points Received: 20 for each pollutant-water body combination addressed.

Criterion #5: Will the project eliminate existing or potential sources of pollution in groundwater sensitivity areas?

This question considers the importance of groundwater as one of Kentucky's vital resources as a source of drinking water, a source for industrial and agricultural use, and the source of sustained base flow in most streams. Groundwater is classified according to its sensitivity to pollution on a scale from 1 (lowest) to 5 (highest). Groundwater data is available for download at:

https://opengisdata.ky.gov/maps/1ff198d08b0a4900bc806c8ccd6b11b9/about

Points Received: 15 if project is in a 4 or 5 sensitivity area Points Received: 10 if project is in a 2.5 or 3 sensitivity area

Criterion #6: Will the project eliminate existing or potential sources of pollution in an identified SWAPP zone or WHPA?

Each public water system (PWS) must develop a Source Water Assessment and Protection Plan (SWAPP) which delineates its drinking water source protection area, called SWAPP zones or Wellhead Protection Areas (WHPA), and potential sources of contamination within those areas. Look up SWAPP and WHPA areas in the Watershed Viewer at:

https://kygis.maps.arcgis.com/apps/webappviewer/index.html?id=c2324b998e78433aaf9e6a3d7ad9f86a

Points Received: 10 for each SWAPP Zone 1 or WHPA Zone 3 Points Received: 7 for each SWAPP Zone 2 or WHPA Zone 2 Points Received: 3 for each SWAPP Zone 3 or WHPA Zone 1

Criterion #7: Will the project make reasonable progress towards eliminating identified pollutant sources of water quality impairments within an identified DOW Priority Watershed?

The Division of Water has developed a list of state priority watersheds at the HUC12 level. Refer to the list of Kentucky Division of Water State Priority Watersheds in Section VII. <a href="https://kygis.maps.arcgis.com/apps/webappviewer/index.html?id=773b89336b914f909a">https://kygis.maps.arcgis.com/apps/webappviewer/index.html?id=773b89336b914f909a</a> d7036f7b1efd80

Points Received: 30

Criterion #8: Will the project protect Special Use Waters?

This question considers the importance of protecting special waters in Kentucky. Special Use Waters are rivers, streams and lakes listed in Kentucky Administrative Regulations (<a href="https://apps.legislature.ky.gov/law/kar/TITLE401.HTM">https://apps.legislature.ky.gov/law/kar/TITLE401.HTM</a>) as Cold Water Aquatic Habitat (401 KAR 10:031 Section 4), Exceptional Waters (401 KAR 10:030 Section 1), Reference

Reach Waters (401 KAR 10:030 Section 1), Outstanding State Resource Waters (401 KAR 10:031 Section 8), Outstanding National Resource Waters (401 KAR 10:030 Section 1), State Wild Rivers (Kentucky Wild Rivers Act of 1972), and Federal Wild and Scenic Rivers (Wild and Scenic Rivers Act, PL 90-542).

https://watermaps.ky.gov/forestry.html

Points Received: 10

Criterion #9: Will the project eliminate existing or potential sources of contamination within 5-miles upstream of a drinking water source location?

This question considers the importance of protecting drinking water supplies from potential contaminant sources.

https://kygis.maps.arcgis.com/apps/webappviewer/index.html?id=c2324b998e78433aaf9e63d7ad9f86a

Points Received: 10

Criterion #10: Will the project eliminate failing on-site septic systems or straight pipes? This question considers the importance of protecting groundwater and surface water quality from potential contaminant sources.

Points Received: 20

#### E. Disadvantaged Community Financial Need

This section of the project ranking criteria considers the importance or the ability of facilities/systems to acquire and manage sufficient financial resources to achieve and maintain regulatory compliance. Project-based census data may be used if provided by the applicant.

Points will be given if the project is in an area of Kentucky where the Median Household Income (MHI) is below 80 percent of the Commonwealth's MHI as determined by the American Community Survey (ACS) 5-Year Estimate.

Points Received: 70

Points will be given if the project is an area with a MHI between 80 and 100 percent of the Commonwealth's MHI as determined by the ACS 5 Year Estimate.

Points Received: 50

#### F. Planning

Criterion #1: Points can be applied in this category if the wastewater system has a documented asset management plan, which includes an asset inventory, strategic plan, and capital improvement plan. Points can be applied for each component of an asset management plan. Supporting documents must be uploaded into the WRIS or submitted independently to the Division of Water for verification to award the points.

The intent of providing priority points in this category is to encourage wastewater systems to develop and implement asset management planning. A complete inventory of assets is required to obtain points in this category. The complete Asset Inventory can be one submitted to the Division of Water or completed under the Asset Management Tab in the WRIS. However, wastewater systems should have an established inventory of known assets and be actively updating their asset inventory as unknown assets are discovered and new assets are added. The DOW must verify documentation of an asset management plan implemented by the public water system to receive points in this category. The asset management plan or a letter verifying implementation of an asset management plan are both acceptable and may be uploaded into the WRIS or sent to the DOW. A copy of the CWSRF Asset Management Verification Form is included as Attachment IX at the end of

this document. The verification form should be uploaded to the project profile under the asset management tab in WRIS to receive the Asset Management points

#### Asset Management Plan

• **Asset Inventory**: a list of above and below ground assets, which, includes as available the date constructed/installed, identifying information, location, remaining useful life, condition, estimated cost to replace, and priority rating, based on criticality.

Points Received: 20

• Strategic Plan: at a minimum, must include a mission statement, level of service goals for the system that are SMART (Specific, Measurable, Attainable, Realistic, and Time-bound), and preventive maintenance program.

Points Received: 20

• Capital Improvement Plan: a list of capital projects for the next five (5) years or more which includes project title, anticipated year of construction, cost estimate, and sources of potential funding.

Points Received: 10

Points Received: 5

Points Received: 0

Points Received: 20

Criterion #2: Monthly bill, based on 4,000 gallons, as a percentage of system-wide or project-based census data Median Household Income is:

Greater than or equal to 2% Between 1 and 1.99% Below 1%

Criterion #3: <u>System financial audits:</u> System has three completed financial audits as required by Kentucky Statute KRS 91A.040. For proposed projects not meeting this requirement, the proposed project may be bypassed for the CWSRF. System must submit verification that audits have been conducted by completing the information in WRIS.

Points Received: 1

Criterion #4: System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure (The funds allocated to the current sinking fund account should not be a requirement of an existing loan, but a good business practice). To obtain points under this category supporting documents must be uploaded in WRIS (i.e. approved budget).

Points Received: 25

### G. Cyber Security

Points are awarded for the installation of cyber security to protect against the unauthorized use of systems, networks, programs, and devices. Some examples include "upgrading outdated computers and software, creating secure network backups, enhancing the security of information technology and operational technology systems, installing or updating SCADA systems, providing on-site back up power generation, and installing threat detection and monitoring systems."

Points Received: 5

#### H. Green Projects

The following four categories will be considered incentives by the Kentucky Division of Water, and projects that incorporate components from any of the categories will receive bonus points. **Projects with an "\*" may require business case**.

#### 1. Green Infrastructure:

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements, and cisterns.

- Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment, or retrofits including permeable pavement, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- Wet weather management systems for parking areas including permeable pavement, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- Implementation of comprehensive street tree or urban forestry programs, including expansion of tree boxes to manage additional stormwater and enhance tree health.
- Stormwater harvesting and reuse projects, such as cisterns and the systems that allow for utilization of harvested stormwater, including pipes to distribute stormwater for reuse.
- Downspout disconnection to remove stormwater from sanitary, combined sewers and separate storm sewers and manage runoff onsite.
- Comprehensive retrofit programs designed to keep wet weather discharges out
  of all types of sewer systems using green infrastructure technologies and
  approaches such as green roofs, green walls, trees and urban reforestation,
  permeable pavements and bioretention cells, and turf removal and
  replacement with native vegetation or trees that improve permeability.
- Establishment or restoration of permanent riparian buffers, floodplains, wetlands, and other natural features, including vegetated buffers or soft bioengineered stream banks. This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that can accommodate a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds this may not be the original hydrology.
- Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).

- Includes constructed wetlands.
- May include natural or restored wetlands if the wetland and its multiple functions are not degraded and all permit requirements are met.
- The water quality portion of projects that employ development and redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.
- Fee for simple purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.
- Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients, and other pollutants.\*

Points Received: 10 each / maximum 50

Projects That Do Not Meet the Definition of Green Infrastructure:

- Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
- Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins. In-line and end-of-pipe treatment systems that only filter or detain stormwater.
- Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal/floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
- Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels.
- Hardening, channelizing or straightening streams and/or stream banks.
- Street sweepers, sewer cleaners, and Vactor trucks unless they support green infrastructure projects.

### 2. Water Efficiency:

EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. For more information refer to the WaterSense Program site at <a href="https://www.epa.gov/watersense">https://www.epa.gov/watersense</a>

- Installing or retrofitting water efficient devices, such as plumbing fixtures and appliances
  - For example -- shower heads, toilets, urinals, and other plumbing devices
  - Implementation of incentive programs to conserve water such as rebates.
- Installing any type of water meter in previously unmetered areas
  - If rate structures are based on metered use
  - Can include backflow prevention devices if installed in conjunction with water meter.
- Replacing existing broken/malfunctioning water meters, or upgrading existing meters, with:
  - Automatic meter reading systems (AMR), for example: Advanced metering infrastructure (AMI), Smart meters
  - Meters with built in leak detection.

- Can include backflow prevention devices if installed in conjunction with water meter replacement.
- Retrofitting/adding AMR capabilities or leak detection equipment to existing meters (not replacing the meter itself).
- Water audit and water conservation plans, which are reasonably expected to result in a capital project.
- Recycling and water reuse projects that replace potable sources with nonpotable sources,
  - Gray water, condensate, and wastewater effluent reuse systems (where local codes allow the practice)
  - Extra treatment costs and distribution pipes associated with water reuse.
- Retrofit or replacement of existing landscape irrigation systems with more efficient landscape irrigation systems, including moisture and rain sensing equipment.
- Retrofit or replacement of existing agricultural irrigation systems with more efficient agricultural irrigation systems.
- Water meter replacement with traditional water meters.\*
- Projects that result from a water audit or water conservation plan.\*
- Storage tank replacement/rehabilitation to reduce loss of reclaimed water.\*
- New water efficient landscape irrigation system (where there currently is not one).\*
- New water efficient agricultural irrigation system (where there currently is not one).\*

#### Points Received: 15 each/ no maximum

Projects That Do Not Meet the Definition of Water Efficiency:

- Agricultural flood irrigation.
- Lining canals to reduce water loss.
- Replacing drinking water distribution lines.
- Leak detection equipment for drinking water distribution systems, unless used for reuse distribution pipes.

### 3. Energy Efficiency:

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

- Renewable energy projects such as wind, solar, geothermal, microhydroelectric, and biogas combined heat and power systems (CHP) that provide power to a POTW. Micro-hydroelectric projects involve capturing the energy from pipe flow.
  - POTW owned renewable energy projects can be located onsite or offsite.
  - Includes the portion of a publicly owned renewable energy project that serves POTW's energy needs.
  - Must feed into the grid that the utility draws from and/or there is a direct connection.
- Collection system Infiltration/Inflow (I/I) detection equipment
- POTW energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas, which are reasonably expected to result in a capital project are eligible.
- POTW projects or unit process projects that achieve energy efficiency

improvement. Retrofit projects should compare energy used by the existing system or unit process to the proposed project. The energy used by the existing system should be based on name plate data when the system was first installed, recognizing that the old system is currently operating at a lower overall efficiency than at the time of installation. New POTW projects or capacity expansion projects should be designed to maximize energy efficiency and should select high efficiency premium motors and equipment where cost effective. Estimation of the energy efficiency is necessary for the project to be counted toward Green Project Reserve (GPR).\*

- Projects implementing recommendations from an energy audit.\*
- Projects that cost effectively eliminate pumps or pumping stations.\*
- Infiltration/Inflow (I/I) correction projects that save energy from pumping and reduced treatment costs and are cost effective\*.
- Projects that count toward GPR cannot build new structural capacity.
   These projects may, however, recover existing capacity by reducing flow from I/I.\*
- Replacing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors.\*
- Upgrade of POTW lighting to energy efficient sources such as metal halide pulse start technologies, compact fluorescent, light emitting diode (LED).\*
- Supervisory Control And Data Acquisition (SCADA) systems can be justified based upon substantial energy savings.\*
- Variable Frequency Drive can be justified based upon substantial energy savings.\*

#### Points Received: 15 each/ no maximum

Projects That Do Not Meet the Definition of Energy Efficiency:

- Renewable energy generation that is *privately* owned or the portion of a publicly owned renewable energy facility that does not provide power to a POTW, either through a connection to the grid that the utility draws from and/or a direct connection to the POTW.
- Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency.
- Facultative lagoons, even if integral to an innovative treatment process.
- Hydroelectric facilities, except micro-hydroelectric projects. Microhydroelectric projects involve capturing the energy from pipe flow.

#### 4. Environmentally Innovative:

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way.

- Total/integrated water resources management planning likely to result in a capital project.
- Utility Sustainability Plan consistent with EPA SRF's sustainability policy.
- Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry)
- Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.
- Construction of US Building Council Leadership in Energy and

- Environmental Design (LEED) certified buildings or renovation of an existing building on POTW facilities.
- Decentralized wastewater treatment projects that include upgrades, repairs, or replacement of existing inadequate or failing systems and installation of new single or cluster systems.
- Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.\*
- Projects or components of projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.\*
- Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.\*
- POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.\*
- Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects such as:\*
  - Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment.
  - Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals. Includes composting, class A and other sustainable biosolids management approaches.
- Educational activities and demonstration projects for water or energy efficiency.\*
- Projects that achieve the goals/objectives of utility asset management plans.\*
- Sub-surface land application of effluent and other means for ground water recharge, such as spray irrigation and overland flow.\*
  - Spray irrigation and overland flow of effluent is not eligible for GPR where there is no other cost-effective alternative.

Points Received: 10 each / maximum 50

Projects That Do Not Meet the Definition of Environmentally Innovative:

- Air scrubbers to prevent nonpoint source deposition.
- Facultative lagoons, even if integral to innovative treatment processes.
- Surface discharging decentralized wastewater systems where there are cost effective soil-based alternatives.
- Higher sea walls to protect POTW from sea level rise.
- Reflective roofs at POTW to combat heat island effect.

#### I. Project Readiness:

Criterion# 1: Borrower has submitted complete technical plans to the Division of Water; and

Criterion# 2: Borrower has conducted a full environmental review for all components of the project or has completed the crosscutter scoping process (including eClearinghouse, US Fish and Wildlife service, National Resource Conservation Service, and U. S. Army Corps of Engineers); and

Criterion# 3: <u>Borrower has received funding commitments from other funding sources; or the CWSRF is the sole source of funding.</u>

To be considered "project ready", the borrower must have completed a majority of the planning phase and be ready to bid on the project.

Points Received: 30 if all three criteria have been met

**Note:** A full environmental review does not have to be finalized however the crosscutter scoping process must be complete. Plans do not have to be approved by the Division of Water, but they must have been submitted for review. Potential borrowers may be asked to provide proof to substantiate claims.

# III. Summary of Points System Used to Establish Project Priority Ranking

	Priority Ranking Criteria	Possible Points	
A. F	A. Project Needs Category		
1.	Combined Sewer Overflow (CSO) Correction	40	
2.	Sanitary Sewer Overflow (SSO) Correction	30	
3.	Replacement or Rehabilitation of Aging Infrastructure, including correction of moderate infiltration and inflow (i.e., no associated SSO).	50	
4.	New Treatment Plant	10	
5.	New Collector Sewers and Appurtenances	10	
6.	Decentralized Wastewater Treatment Systems	20	
7.	Upgrade to Advanced Treatment	20	
8.	Emerging Contaminants	65	
9.	Optimization of Existing Treatment Plant	50	
10.	New Interceptors and Appurtenances	10	
11.	Storm Water Control	20	
12.	Nonpoint Source (NPS) Pollution Control	20	
13.	Recycled Water Distribution	10	
14.	Planning	10	
15.	Other (specify):	10/50	
B. F	Regionalization		
1.	Will this project provide regionalization and/or consolidation of wastewater treatment systems? Proposed project reduces the number of NPDES discharges by regionalization.	35	
2.	Will this project eliminate a package treatment plant that is more than 25 years old?	30	
3.	Will this project eliminate a package treatment plant that has received notices of violations resulting in degradation of waters of Commonwealth within the last two state fiscal years?	30	
C. Compliance and Enforcement			
1.	Is the project necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative consent decree?	50	
2.	Primary system has not received any Notices of Violation within the previous state fiscal year	25	
D. Water Quality			
1.	Will the project allow the system to address existing Total Maximum Daily Load (TMDL)?	10	

2.	Will the project allow the system to address existing or projected nutrient TMDL?	30
3.	Will the project allow the system to address an approved Watershed Management Plan?	10
4.	Will the project make reasonable progress towards eliminating identified pollutant sources for waterbodies that appear on the Integrated Report to Congress on Water Quality in Kentucky?	20 points for each pollutant-waterbody combination
5.	Does the project eliminate existing or potential sources of pollution in groundwater sensitivity areas?	15 points for high or highest sensitivity 10 points for moderate sensitivity
6.	Is the project located within an identified SWAPP zone or WHPA?	10 for each Zone 1 or 3 7 for each Zone 2 or 2 3 for each Zone 3 or 1
7.	Will the project make reasonable progress towards eliminating identified pollutant sources of water quality impairments within an identified DOW Priority Watershed?	30
8.	Will the project have a positive effect on Special Use Waters?	10
9.	Will the project have a positive impact on drinking water sources within a 5-mile radius of its location?	10
10.	Will the project eliminate failing on-site septic tanks or straight pipes?	20
E. F	inancial Need	
1.	Borrowers with a median household income (MHI) below 80 percent of the State's MHI as determined by the current American Community Survey (ACS) 5-Year Estimate	70
2.	Borrowers with a MHI between 80 and 100 percent of the State's MHI as determined by the current ACS 5-Year Estimate	50
F. P	lanning	
	Asset Management Plan	
1.	Asset Inventory	20
	Strategic Plan	20
	Capital Improvement Plan	20
	System's monthly wastewater bill, based on 4,000 gallons, as a percentage of Median Household Income is:	
2.	Greater than or equal to 2.0%	10
	Between 1 and 1.99%	5
	Below 1%	0
3.	System Financial Audits	1

4.	System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure	25
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G. Cyber Security		
1.	Cyber security to protect against the unauthorized use of systems, networks, programs, and devices.	5
H. Gree	n Projects (See Green Project Reserve Guidance Document)	
1.	Green Infrastructure: Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as:  • Implementation of green streets • Wet Weather management systems for parking areas • Implementation of comprehensive urban forestry programs • Stormwater harvesting and reuse • Downspout disconnection • Comprehensive retrofit programs designed to keep wet weather discharges out of sewer systems • Establishment or restoration of riparian buffers, floodplains, wetlands, or other natural features • Management of wetlands • Purchase of land or easements on land that has a direct benefit to water quality	10 pts. each/50 pts. Maximum

2.	Water Efficiency: The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:  Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals) Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement) Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention Retrofitting/adding AMR capabilities or leak equipment to existing meters  Developing water audit and conservation plans, which are reasonably expected to result in a capital project  Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse) Retrofit or replacement of existing landscape irrigation/agricultural systems to more efficient landscape/agricultural irrigation systems (rain and moisture sensing equipment)  Water meter replacement with traditional water meters * Projects that result from a water audit or water conservation plan* Storage tank replacement/rehabilitation to reduce water loss* New water efficient landscape/agricultural irrigation system, where there currently is not one*	15 pts. Each/ no maximum
3.	<ul> <li>Energy Efficiency: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:</li> <li>Renewable energy projects such as wind, solar, geothermal, and micro-hydroelectric, and biogas combined heat and power systems that provide power to a POTW</li> <li>POTW-owned renewable energy projects</li> <li>Collection system infiltration/inflow (I/I) detection equipment</li> <li>POTW energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas</li> <li>Projects that achieve a reduction in energy consumption (pumps, motors)*</li> <li>Projects that cost effectively eliminate pumps or pumping stations*</li> <li>I/I correction projects that save energy from pumping and reduced treatment costs*</li> <li>Replacing old motors with premium energy efficiency motors*</li> <li>Upgrade of POTW lighting to energy efficient sources*</li> <li>SCADA systems where substantial energy savings can be demonstrated*</li> <li>Variable Frequency Drive (VFD) controllers where substantial energy savings can be demonstrated*</li> </ul>	15 pts. Each/ no maximum

4.	<ul> <li>Environmentally Innovative: Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include:</li> <li>Total integrated water resources management planning likely to result in a capital project</li> <li>Utility sustainability plan consistent with EPA's sustainability policy</li> <li>Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry if it is being done for an SRF eligible facility</li> <li>Planning activities by a POTW to prepare for adaption to the long-term effects of climate change and/or extreme weather</li> <li>Construction of US Building Council LEED certified buildings, or renovation of an existing building on POTW facilities</li> <li>Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems by constructing a new system or replacing deficient system.</li> <li>Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal*</li> <li>Projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are CWSRF eligible*</li> <li>Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaption study*</li> <li>POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae*</li> <li>Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment*</li> <li>Treatment technologies that significantly reduce the volume of residuals, generation of residuals, or lower the amount of chemicals in the residuals*</li> <li>Educational activities and demonstration projects for water or energy efficiency*</li> <li>Projects that achieve the goals/objectives of utility asse</li></ul>	10 pts. each/50 pts. maximum		
I. Project Readiness				
1.	Borrower has submitted complete technical plans and specifications to the Division of Water; and			
2.	Borrower has conducted a full environmental review for all components of the project or has completed the crosscutter scoping process (including eClearinghouse, US Fish and Wildlife service, National Resource Conservation Service, State Historic Preservation Office, and US Army Corps of Engineers reviews); and			
3.	Borrower has received funding commitments from other funding sources, where applicable			

<sup>\*</sup>Denotes that a business case may be required.

## IV. Developing and Updating the Project Priority List and Intended Use Plan

For a project to be considered for funding from the CWSRF, it must appear on the Comprehensive Project Priority List for the state fiscal year in which the project will receive a binding commitment. To be included in this list, an eligible project applicant must complete or update a Project Profile (and related mapping) in the Water Resource Information System (WRIS) through the Area Development District (ADD). **Projects will not be accepted after the call for projects is closed.** Once the project is submitted for CWSRF funding, DOW staff will evaluate the project based on the ranking system discussed above and assign the project a numeric score. Eligible projects will then be added to the next Comprehensive Project Priority List. In the event of a tie, the following factors will be utilized to priority rank each project: (1) service of a small system as defined by population; (2) projects with existing enforcement actions (i.e. Agreed Orders, Consent Decrees); (3) water quality impacts; and (4) financial need as evident by the median household income of the applicant. If the project is only for accommodating future growth and will not address an existing water quality or public health need and therefore does not receive any points from the above criteria, the project will be still included on the Comprehensive Project Priority List if it is eligible for CWSRF funding.

DOW and the Kentucky Infrastructure Authority (KIA) will prepare an annual Intended Use Plan (IUP) that will describe how the state intends to use the funds in the Kentucky CWSRF for each state fiscal year, and how those uses support the objectives of the CWA. DOW will publish and maintain the IUP and Project Priority List on its CWSRF website. Each IUP will include an updated Comprehensive Project Priority List and a Fundable List of projects that are anticipated to receive funding during that state fiscal year. Once the IUP has been drafted, notice will be given to the public that the draft IUP is available for review and comment for a period of at least 30 days. After the comment period has ended DOW and KIA will review any comments received and make changes to the IUP as appropriate. Both the draft and final IUPs will be available on DOW's CWSRF website.

https://eec.ky.gov/Environmental-Protection/Water/Funding/cwintendeduseplan/Pages/default.aspx

# V. Eligible Project Applicants/Projects

Any governmental agency shall be eligible to apply for financial assistance for planning, design, and construction of eligible projects. Any project that triggers the requirement of 401 KAR 5:006 wastewater planning regulation to submit a facility plan will be eligible for planning and design loan only. A sewer extension project will be deemed ineligible if the receiving wastewater treatment plant is at or over 90% (for <10 mgd) or 95% (for >10 mgd) of its design capacity.

#### VI. References

Kentucky Division of Water website:

https://eec.ky.gov/Environmental-Protection/Water/Pages/default.aspx

Kentucky Division of Water CWSRF website:

https://eec.ky.gov/Environmental-Protection/Water/Funding/CWSRF/Pages/default.aspx

Kentucky Infrastructure Authority website:

http://kia.ky.gov/

U.S. EPA CWSRF website:

https://www.epa.gov/cwsrf

# VII. Kentucky Division of Water State Priority Watersheds

# **DOW Priority Watersheds**

# Big Sandy/Little Sandy

Blackberry Creek-Tug Fork	
Sycamore Creek-Tug Fork	050702010312
Pond Creek	050702010313
Upper Big Creek	050702010501
Lower Big Creek	050702010502
Miller Creek-Tug Fork	050702010506
Jennie Creek-Tug Fork	050702010602
Coldwater Fork	050702010603
Drag Creek-Tug Fork	050702010607
Beaver Creek	0507020301
Abbott Creek-Levisa Fork	050702030206
Buffalo Creek-Johns Creek	050702030304
Daniels Creek-Johns Creek	050702030305
Headwaters Little Sandy River	050901040101
Laurel Creek	050901040102
Middle Fork Little Sandy River	050901040103
Newcombe Creek	050901040104
South Ruin Creek-Little Sandy River	050901040105
Caney Creek	050901040301
Bruin Creek-Little Sandy River	050901040303

### **Cumberland River**

Looney Creek-Poor Fork Cumberland River	051301010102
Upper Clover Fork Cumberland River	051301010104
Lower Clover Fork Cumberland River	051301010105
Lower Poor Fork Cumberland River	051301010106
Upper Straight Creek	051301010301
Lower Straight Creek	051301010302
Upper Stinking Creek	051301010304
Lower Stinking Creek	051301010305
Headwaters Laurel River	051301010801
Little Laurel River	051301010802
Robinson Creek-Laurel River	051301010803
Lower Marsh Creek	051301010902
Roundstone Creek	0513010203
Little Rockcastle River	051301020402
Brushy Creek	051301030103

Lower Pitman Creek	051301030204
Big Clifty Creek-Fishing Creek	051301030304
Lower Crocus Creek	051301030607
Big Renox Creek-Cumberland River	051301030701
Little River	0513020505
Donaldson Creek	051302050701
Upper Eddy Creek	051302050704
Lower Eddy Creek	051302050706
McNabb Creek-Cumberland River	051302050707
Lower Livingston Creek	051302050803
Richland Creek-Cumberland River	051302050804
Headwaters Red River	051302060101
Sulphur Spring Creek-Red River	051302060102
Lower South Fork Red River	051302060202
Sinking Creek	051302060203
Little Whippoorwill Creek	051302060204
Pleasant Grove Creek-Red River	051302060205
Whippoorwill Creek	0513020603
City of Oak Grove-West Fork Red River	051302060604
Valley Branch-Spring Creek	051302060701
Buzzard Creek-Red River	051302060702

### **Green River**

Upper Green River	0511000101
Robinson Creek	0511000102
Headwaters Casey Creek	051100010301
Woods Creek-Casey Creek	051100010302
Upper Dry Creek	051100010303
Lower Dry Creek-Casey Creek	051100010304
Bryant Creek-Green River	051100010305
Casey Creek-Green River	051100010306
White Oak Creek-Green River	051100010307
Butler Creek-Green River	051100010308
Little Barren River	0511000106
Ugly Creek-Green River	051100010808
Upper Walters Creek	051100010901
South Fork Branch-South Fork Nolin River	051100010902
Lower Walters Creek-South Fork Nolin River	051100010903
Castleman Creek-North Fork Nolin River	051100010904
McDougal Creek-North Fork Nolin River	051100010905
Nolin River	0511000110
Bacon Creek – Nolin River	0511000111
Echo River-Green River	051100011301
Buffalo Creek-Green River	051100011302
Little Trace Creek-Line Creek	051100020101

Mill Creek         051100020103           East Fork Barren River         051100020104           Long Fork         051100020105           Salt Lick Creek         051100020107           Indian Creek         051100020108           Sugar Creek-Barren River         051100020109           Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020205           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         0511000203           Lower Bays Fork         05110002040           Lower Middle Fork Drakes Creek-Drakes Creek         051100020901           Jennings Creek         051100020901           Rays Branch-Barren River         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Indian Camp Creek </th <th>Trace Creek-Line Creek</th> <th>051100020102</th>	Trace Creek-Line Creek	051100020102
East Fork Barren River         051100020104           Long Fork         051100020105           Salt Lick Creek         051100020107           Indian Creek         051100020107           Puncheon Creek         051100020109           Sugar Creek-Barren River         051100020201           Upper Long Creek         051100020202           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020205           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020403           Lower Middle Fork Drakes Creek-Drakes Creek         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020901           Rich Pond         051100020902           Rays Branch-Barren River         051100020902           Rays Branch-Barren River         051100030204           Norman Branch-Rocky Creek         051100030301           Indian Camp Creek         051100030303	Mill Creek	
Long Fork         051100020105           Salt Lick Creek         051100020106           Indian Creek         051100020107           Puncheon Creek         051100020108           Sugar Creek-Barren River         051100020109           Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020403           Lower Middle Fork Drakes Creek-Drakes Creek         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020902           Rays Branch-Barren River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Ca	East Fork Barren River	051100020104
Salt Lick Creek         051100020106           Indian Creek         051100020107           Puncheon Creek         051100020108           Sugar Creek-Barren River         051100020109           Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020403           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020607           Jennings Creek         051100020901           Rays Branch-Barren River         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030204           Norman Branch-Rocky Creek         051100030303           Caney Creek-Pond Creek         051100030303 <t< td=""><td></td><td>051100020105</td></t<>		051100020105
Indian Creek         051100020107           Puncheon Creek         051100020108           Sugar Creek-Barren River         051100020109           Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403		051100020106
Sugar Creek-Barren River         051100020109           Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020403           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020902           Headwaters Mud River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030303           Caney Creek         051100030303           Caney Creek-Pond Creek         051100030303           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Lower East Fork Deer Creek-Deer Creek         05110005003  <	Indian Creek	051100020107
Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Caney Creek-Pond Creek         051100030303           Caney Creek-Pond Creek         051100040502           Morrison Run-Rough River         0511000503           Lower East Fork Deer Creek-Deer Creek         0511000503	Puncheon Creek	051100020108
Upper Long Creek         051100020201           Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Caney Creek-Pond Creek         051100030303           Caney Creek-Pond Creek         051100040502           Morrison Run-Rough River         0511000503           Lower East Fork Deer Creek-Deer Creek         0511000503	Sugar Creek-Barren River	051100020109
Lower Long Creek         051100020202           Pinchgut Creek-Barren River         051100020203           Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Caney Creek-Pond Creek         051100030303           Upper Caney Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Lower East Fork Deer Creek-Deer Creek         051100050201           Panther Creek         0511000503		051100020201
Glover Creek-Barren River         051100020204           Upper Peter Creek         051100020205           Lower Peter Creek         051100020207           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Lower Long Creek	051100020202
Upper Peter Creek         051100020205           Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Pinchgut Creek-Barren River	051100020203
Lower Peter Creek         051100020206           Walnut Creek - Barren River         051100020207           Skaggs Creek - Beaver Creek         051100020403           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030303           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Lower East Fork Deer Creek-Deer Creek         051100050201           Panther Creek         05110005030	Glover Creek-Barren River	051100020204
Walnut Creek - Barren River       051100020207         Skaggs Creek - Beaver Creek       0511000203         Difficult Creek-Barren River       051100020403         Lower Bays Fork       051100020404         Lower Middle Fork Drakes Creek-Drakes Creek       051100020607         Rich Pond       051100020901         Jennings Creek       051100020902         Rays Branch-Barren River       051100020903         Headwaters Mud River       051100030204         Norman Branch-Rocky Creek       051100030207         Welch Creek       051100030303         Indian Camp Creek       051100030303         Caney Creek-Pond Creek       051100030403         Upper Caney Creek       051100040401         Morrison Run-Rough River       051100050105         Lower East Fork Deer Creek-Deer Creek       051100050201         Panther Creek       0511000503	Upper Peter Creek	051100020205
Skaggs Creek – Beaver Creek         0511000203           Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020607           Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Lower East Fork Deer Creek-Deer Creek         051100050201           Panther Creek         0511000503	Lower Peter Creek	051100020206
Difficult Creek-Barren River         051100020403           Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Walnut Creek - Barren River	051100020207
Lower Bays Fork         051100020404           Lower Middle Fork Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Skaggs Creek – Beaver Creek	0511000203
Lower Middle Fork Drakes Creek-Drakes Creek         051100020607           Rich Pond         051100020901           Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100040502           Lower East Fork Deer Creek-Deer Creek         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Difficult Creek-Barren River	051100020403
Rich Pond       051100020901         Jennings Creek       051100020902         Rays Branch-Barren River       051100020903         Headwaters Mud River       051100030204         Norman Branch-Rocky Creek       051100030207         Welch Creek       051100030301         Indian Camp Creek       051100030303         Caney Creek-Pond Creek       051100030403         Upper Caney Creek       051100040401         Morrison Run-Rough River       051100040502         Lower East Fork Deer Creek-Deer Creek       051100050105         Buck Creek       051100050201         Panther Creek       0511000503	Lower Bays Fork	051100020404
Jennings Creek         051100020902           Rays Branch-Barren River         051100020903           Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Lower Middle Fork Drakes Creek-Drakes Creek	051100020607
Rays Branch-Barren River       051100020903         Headwaters Mud River       051100030204         Norman Branch-Rocky Creek       051100030207         Welch Creek       051100030301         Indian Camp Creek       051100030303         Caney Creek-Pond Creek       051100030403         Upper Caney Creek       051100040401         Morrison Run-Rough River       051100040502         Lower East Fork Deer Creek-Deer Creek       051100050105         Buck Creek       051100050201         Panther Creek       0511000503	Rich Pond	051100020901
Headwaters Mud River         051100030204           Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100040502           Lower East Fork Deer Creek-Deer Creek         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Jennings Creek	051100020902
Norman Branch-Rocky Creek         051100030207           Welch Creek         051100030301           Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100040502           Lower East Fork Deer Creek-Deer Creek         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Rays Branch-Barren River	051100020903
Welch Creek       051100030301         Indian Camp Creek       051100030303         Caney Creek-Pond Creek       051100030403         Upper Caney Creek       051100040401         Morrison Run-Rough River       051100040502         Lower East Fork Deer Creek-Deer Creek       051100050105         Buck Creek       051100050201         Panther Creek       0511000503	Headwaters Mud River	051100030204
Indian Camp Creek         051100030303           Caney Creek-Pond Creek         051100030403           Upper Caney Creek         051100040401           Morrison Run-Rough River         051100040502           Lower East Fork Deer Creek-Deer Creek         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Norman Branch-Rocky Creek	051100030207
Caney Creek-Pond Creek       051100030403         Upper Caney Creek       051100040401         Morrison Run-Rough River       051100040502         Lower East Fork Deer Creek-Deer Creek       051100050105         Buck Creek       051100050201         Panther Creek       0511000503	Welch Creek	051100030301
Upper Caney Creek         051100040401           Morrison Run-Rough River         051100040502           Lower East Fork Deer Creek-Deer Creek         051100050105           Buck Creek         051100050201           Panther Creek         0511000503	Indian Camp Creek	051100030303
Morrison Run-Rough River051100040502Lower East Fork Deer Creek-Deer Creek051100050105Buck Creek051100050201Panther Creek0511000503	Caney Creek-Pond Creek	051100030403
Lower East Fork Deer Creek-Deer Creek051100050105Buck Creek051100050201Panther Creek0511000503	Upper Caney Creek	051100040401
Buck Creek         051100050201           Panther Creek         0511000503	Morrison Run-Rough River	051100040502
Panther Creek 0511000503	Lower East Fork Deer Creek-Deer Creek	051100050105
	Buck Creek	051100050201
City of Sacramento – Cypress Creek 051100060404	Panther Creek	0511000503
	City of Sacramento – Cypress Creek	051100060404

# Kentucky River

Crafts Colly Creek-North Fork Kentucky River	051002010103
Cowan Creek-North Fork Kentucky River	051002010104
Walker Creek-North Fork Kentucky River	051002010706
Hell Creek-North Fork Kentucky River	051002010707
Bear Creek-Middle Fork Kentucky River	051002020407
Red Bird River	0510020302
Contrary Creek – Kentucky River	051002040105
Swift Camp Creek	051002040204
Clifty Creek-Red River	051002040205

Gladie Creek-Red River	051002040206
Indian Creek-Red River	051002040209
Upper Otter Creek	051002050105
Headwaters Silver Creek	051002050201
Lower Howard Creek-Kentucky River	051002050302
Upper Paint Lick Creek	051002050303
Upper Dix River	0510020504
Hanging Fork Creek	0510020505
Upper East Hickman Creek	051002050601
West Hickman Creek	051002050602
Glenns Creek	051002050709
North Elkhorn Creek	0510020508
South Elkhorn Creek	0510020509
Goose Creek-Benson Creek	051002051002
Lower North Benson Creek-Benson Creek	051002051005
Sixmile Creek	0510020511
Lower Ten Mile Creek	051002051402
Severn Creek	051002051505
Whites Run-Kentucky River	051002051510

# Licking River

Elk Fork	0510010102
Triplett Creek	0510010106
Slate Creek	0510010107
Locust Creek-Licking River	051001010807
Poplar Creek-Fleming Creek	051001010905
North Fork Licking River	0510010110
Blanket Creek-Licking River	051001011203
South Fork Grassy Creek	051001011204
Cruises Creek	051001011301
Phillips Creek-Licking River	051001011302
Pond Creek-Licking River	051001011303
Upper Banklick Creek	051001011304
Lower Banklick Creek	051001011305
DeCoursey Creek-Licking River	051001011306
Strodes Creek	0510010201
Stoner Creek	0510010202
Hinkston Creek	0510010203
Silas Creek	051001020401
Grays Run-South Fork Licking River	051001020402
Indian Creek-South Fork Licking River	051001020403
Mill Creek	051001020404
Twin Creek	051001020405
Raven Creek	051001020406
Curry Creek-South Fork Licking River	051001020407
Crooked Creek	051001020501

# Ohio River

Ninemile Creek-Ohio River	050902011208
Woolper Creek	050902030801
Taylor Creek-Ohio River	050902030802
Middle Creek-Ohio River	050902030804
Upper Gunpowder Creek	050902030806
Lower Gunpowder Creek	050902030807
Lick Creek-Ohio River	050902030808
Brush Creek-Harrods Creek	051401010502
Beargrass Creek	051401010902
Mill Creek Cutoff	051401010903
Fall Run-Ohio River	051401010904
Fourmile Creek-Ohio River	051401010906
Tioga Creek-Ohio River	051401040102
Eagle Creek-Ohio River	051402020401
Bayou Creek-Ohio River	051402060701
Shawnee Creek Slough	080101000102
Ford Creek-Mayfield Creek	080102010102
Key Creek-Mayfield Creek	080102010104
Gilbert Creek-Mayfield Creek	080102010105
Hurricane Creek-Mayfield Creek	080102010205
Truman Creek-Mayfield Creek	080102010303
Upper Bayou De Chien	080102010401
Cane Creek	080102010402
Middle Bayou De Chien	080102010404
Lower Bayou De Chien	080102010405
Opossum Creek-Obion Creek	080102010503
Russells Creek-Obion Creek	080102010505
Hurricane Creek-Obion Creek	080102010506
Cane Creek-Obion Creek	080102010507
Wolf Creek-Richland Creek	080102020204

### Salt River

Salt River	0514010201
Timber Creek-Salt River	051401020201
Little Beech Creek-Salt River	051401020303
Clear Creek – Bullskin Creek	0514010203
Guist Creek	0514010205
Currys Fork	051401020803
Long Run	051401020805
Pennsylvania Run-Cedar Creek	051401021002

Cedar Creek	051401021101
Long Lick Creek	051401021102
Cedar Point Branch-Salt River	051401021304
Long Lick Creek	051401030204
Wilson Creek	051401030602
Crooked Creek	051401030604
Lower Pup Creek	051402010804
Canoe Creek	0514020204
Piney Creek-Lake Beshear	051402050104
Middle Fork Massac Creek	051402060302
Black Branch-Massac Creek	051402060304
Middle Humphrey Creek	051402060602

### Tennessee River

Blood River	0604000508
Panther Creek-Kentucky Lake	060400050906
Turkey Creek-Kentucky Lake	060400050907
Jonathan Creek – Kentucky Lake	0604000510
Clarks River	0604000601
West Fork Clarks River	0604000602
West Fork Clarks River	0604000603
Clarks River	0604000604
Upper Cypress Creek	060400060501
Lower Cypress Creek	060400060503
White Oak Creek-Tennessee River	060400060505

# VIII. 319h Funded Watershed-Based Plans in Kentucky

Watershed Name	River Basin	Plan Status
Bacon Creek	Green	Accepted
Banklick Creek	Licking	Accepted
Bee Creek	Tennessee	Under Development
Brushy Creek	Upper Cumberland	Accepted
Cane Run	Kentucky	Accepted
Chestnut Creek	Four Rivers	Accepted
Clarks Run	Kentucky	Accepted
Clarks Run	Licking	Under Development
Clayton Creek	Tennessee	Under Development
Corbin City Reservoir	Upper Cumberland	Accepted
Curry's Fork	Salt	Accepted
Damon Creek	Four Rivers	Accepted
Darby Creek	Salt	Accepted
Dry Creek	Licking	Accepted
Glenns Creek	Kentucky	Under Development
Gunpowder Creek	Licking	Accepted
Hancock Creek	Licking	Accepted
Hanging Fork Creek	Kentucky	Accepted
Hardy Creek	Salt	Under Development
Hinkston Creek	Licking	Accepted
Jennings Creek	Green	Under Development
Lake Linville	Cumberland	Under Development
Lower Howards Creek	Kentucky	Accepted
Lower Pitman Creek	Cumberland	Under Development/
		Status not available
McDougal Creek & Castleman Creek	Green	Accepted
Middle Fork Beargrass Creek	Salt	Accepted
Mill Creek	Salt	Under Development
North Fork Kentucky River	Kentucky	Accepted
Pleasant Run	Green	Accepted
Red Bird River	Kentucky	Accepted
Red River	Kentucky	Accepted
Rock Creek	Upper Cumberland	Accepted
South Fork Little River	Four Rivers	Accepted
Stockton Creek	Licking	Accepted
Sulphur Creek	Salt	Accepted
Ten Mile Creek	Kentucky	Accepted
Triplett Creek	Licking	Accepted
Upper Buck Creek	Upper Cumberland	Under Development
Upper Paint Lick Creek	Kentucky	Under Development
West Hickman Creek	Kentucky	Accepted
Wolf Run	Kentucky	Updating
Woolper Creek	Licking	Accepted

# IX. CWSRF Asset Management Verification Form

Part (A)	: System Identification
System N	ame:
Permit/P	WSID #: KY
Agency Ir	
Part (B):	Verification Date
Date of th	e verification:
Date of th	e verification:
Date of th	e verification:
	Verification Statement
Part (C):	Verification Statement
Part (C):	(Name of certifying official) erify that the system named in Part A above has the following pieces of an Assment Program [select all that apply]:
Part (C):	Verification Statement  [Name of certifying official] erify that the system named in Part A above has the following pieces of an Ass
Part (C):	Name of certifying official     Part A above has the following pieces of an Assment Program [select all that apply]:    Asset Inventory: A list of above and belowground assets, which, includes as availadate constructed/installed, identifying information, location, remaining useful life, coestimated cost to replace, and priority rating, based on criticality.    Strategic Plan: At a minimum, must include a mission statement, level of service gets.
Part (C):	[Name of certifying official] erify that the system named in Part A above has the following pieces of an Assment Program [select all that apply]:  Asset Inventory: A list of above and belowground assets, which, includes as availadate constructed/installed, identifying information, location, remaining useful life, coestimated cost to replace, and priority rating, based on criticality.
Part (C):	Name of certifying official     erify that the system named in Part A above has the following pieces of an Assment Program [select all that apply]:    Asset Inventory: A list of above and belowground assets, which, includes as availadate constructed/installed, identifying information, location, remaining useful life, coestimated cost to replace, and priority rating, based on criticality.    Strategic Plan: At a minimum, must include a mission statement, level of service gethe system that are SMART (Specific, Measureable, Attainable, Realistic, and Time-be