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# DRINKING WATER STATE REVOLVING FUND

## State Fiscal Year 2020 Intended Use Plan

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COMMONWEALTH OF KENTUCKY



Prepared by the

KENTUCKY INFRASTRUCTURE AUTHORITY  
&  
ENERGY AND ENVIRONMENT CABINET

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# INTRODUCTION

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The 2020 Intended Use Plan (IUP) is a document that is required for participation in the Drinking Water State Revolving Fund Program (DWSRF). The IUP's purpose is to communicate Kentucky's DWSRF plan for state fiscal year 2020 to potential borrowers from the DWSRF, the public water systems (PWSs), the public, the U.S. Environmental Protection Agency (USEPA), and other interested parties. The IUP is prepared in accordance with the provisions of the Safe Drinking Water Act (SDWA), the America's Water Infrastructure Act of 2018, and the Consolidated Appropriations Act, 2019 (Pub. L. 116-6, March 15, 2019).

Projects to be considered for funding through the DWSRF are submitted during the initial call for projects. Projects are reviewed for eligibility and ranked for funding priorities. Seventy-seven projects were considered for funding from the DWSRF. The total amount requested is approximately \$130 million. The total project need from all funding sources is nearly \$788 million. The requests are primarily to fund construction but includes planning and design. The IUP identifies how the funds will be used to support the goals of the DWSRF and documents the list of projects anticipated for funding as shown on the Comprehensive Project Priority List. This Project Priority List (PPL) is provided in Appendix A.

An annual Intended Use Plan is required by Section 1452 of the SDWA and is an integral part of the process to request the funds. Each year, the US Congress authorizes funding for the DWSRF through the USEPA. USEPA then prepares allocations for states to receive the funds by way of a Capitalization Grant. The current IUP is for the 2019 Capitalization Grant, which is the 2019 Federal Fiscal Year (FFY) of October 1, 2019 through September 30, 2020. This IUP identifies how the funds available to Kentucky's DWSRF will be used during the 2020 state fiscal year (SFY) of July 1, 2019 through June 30, 2020.

The IUP will identify how the funds available to Kentucky's DWSRF will be used during each state fiscal year (SFY) to support the goals of the DWSRF. The 2020 IUP includes:

1. A description of the short and long term goals of the DWSRF;
2. The criteria and methods established for selecting projects;
3. Administration and operation policies of the DWSRF, including set-aside activities, established by the KIA for compliance with requirements of the US Congress authorization as administered by the USEPA;
4. The public participation process;
5. The sources and uses of available funds; and,
6. The Project Priority List - a list of eligible projects whose sponsors expressed interest in low interest rate loans from the DWSRF.

## What is the Drinking Water State Revolving Fund?

The DWSRF is a national program by which the USEPA provides grants to states to further the goals of the SDWA. The national DWSRF originated in 1996, as recognition of SDWA compliance costs led to support for a DWSRF program. The EPA implements the national DWSRF program in such a manner that preserves for states a high degree of flexibility to operate their programs in accordance with each state's unique needs and circumstances.

Kentucky's DWSRF financing program provides low interest loans for infrastructure projects that are considered a priority based on public health criteria outlined in the SDWA. Projects identified to receive funding are selected from the ranked group of Project Profiles submitted during an Annual Call for Projects. The DWSRF is administered by the KIA. By Memorandum of Agreement, the Kentucky Energy and Environment Cabinet (EEC) through the Division of Water (DOW) perform environmental and technical reviews on projects that seek assistance from the DWSRF. Since its inception in 1997, Kentucky's DWSRF has committed funds to 181 drinking water infrastructure projects, totaling more than \$441 million (through April, 2019).

### Eligibility

Only projects listed in the IUP are eligible for funding. Examples of eligible projects include:

- Planning, design, and construction of drinking water intake, treatment, or distribution systems
- Purchase of water systems by other public water systems
- Storage tanks and clearwells
- Drilled wells and wellhead areas
- Security related activities
- Emergency measures for the protection of public health
- Refinancing or buying eligible debt obligations of a public water system
- Any other structure or facility that the DOW considers necessary for efficient and sanitary operations

An eligible borrower or borrowing entity means any agency of the state or its political subdivisions, any city, or any special district created under the laws of the state acting individually or jointly under interagency or interlocal cooperative agreements to enter into assistance agreements with the authority as defined in KRS 224A.011(6). Some examples include:

- Municipal corporations
- Cities
- Agencies
- Commissions
- Authorities
- Districts

An eligible borrower must demonstrate the technical, financial and managerial capability to ensure compliance with the requirements of the Safe Drinking Water Act, unless the completion of the project receiving financial assistance will ensure compliance and the owners or operators of the systems agree to undertake feasible and appropriate changes in operations to ensure compliance over the long term. Contact the KIA if you need assistance determining your utility's eligibility status.

## **Ineligible Projects**

DWSRF funds shall not be used for:

- Projects not listed on the Project Priority List except for emergency projects.
- Dams or rehabilitation of dams.
- Water rights.
- Reservoirs, except for finished water reservoirs and those reservoirs that are part of a treatment process and are located on the property where the treatment facility is located.
- Laboratory fees and other monitoring expenses.
- Operation and maintenance expenses.
- Projects needed mainly for fire protection.
- Projects for systems that lack adequate capacity, unless financial assistance will assure capacity and compliance.
- Land acquisition where eminent domain is necessary.
- Projects primarily intended to finance the expansion of any public water system in anticipation of future population growth.
- Projects not favorably considered by the area water management council unless the KIA Board finds circumstance that justify overriding the council's recommendation.

## **Significant Federal Components and Requirements**

### ***Davis-Bacon Prevailing Wage Labor Laws Compliance***

Federal labor laws regarding prevailing wages, hours of work, and rates of pay are collectively known as the Davis-Bacon laws. All projects funded in whole or in part with assistance from DWSRF will be required to comply with Davis-Bacon laws and incorporate their provisions into any project work that has been or will be contracted. For more information on Davis Bacon laws, please visit: <http://www.dol.gov/whd/regs/compliance/whdfs66.pdf>.

### ***Additional Subsidization***

The authorization of the federal capitalization grant requires that beyond the subsidization provided through the low interest financing, additional subsidization is to be provided to utilities in

disadvantaged communities. The amount of the capitalization grant received from the federal government that is available for additional subsidization varies each year based on the allowable range authorized by the federal grant, and the amount decided upon by the Commonwealth of Kentucky. The FFY 2019 Capitalization Grant requires that at least 6 percent, or \$1,087,920, up to a maximum of 35 percent, \$6,346,200 be provided as additional subsidization as authorized by the SDWA. An additional Congressional subsidization amount of 20 percent, \$3,626,400 is required to be provided as authorized by the 2019 appropriation.

This additional subsidization is provided through forgiveness of a portion of the principal loan amount. The KIA Board sets the amount of additional subsidization to be provided, and determines the maximum amount to any single borrower as well as the criteria for determining the projects that will be offered additional subsidization. For SFY 2020 the total amount of additional subsidization is approximately thirty percent or \$5,439,600.

Fifty percent of the loan amount, up to a maximum of \$1.3 million, may be offered as principal forgiveness to projects that qualify for the lowest non-standard interest rate. Kentucky based the determinations on the system’s MHI and affordability index. The affordability index is calculated by the utility rate (4,000 gallons) for the year divided by the MHI. Whether or not a borrower has instituted regular rate increases is also a significant consideration. The table below consists of the ten projects being invited to submit a loan application that includes principal forgiveness in order of their affordability index.

Loan Number	Applicant	Requested Amount	Invited Amount	Last Rate Adjustment	Affordability Index	PF Amount
F20-035	McCreary County Water District	\$2,202,600	\$2,202,600	03/06/2015	1.98%	\$1,000,000
F20-036	McCreary County Water District	\$ 722,710	\$ 722,710	03/06/2015	1.98%	\$ 300,000
F20-008	Cumberland, City of	\$1,664,000	\$1,664,000	06/14/2016	1.79%	\$ 832,000
F20-010	Jackson, City of	\$2,000,000	\$2,000,000	07/01/2017	1.75%	\$1,000,000
F20-014	Letcher County Water & Sewer District	\$ 717,000	\$ 717,000	11/21/2017	1.73%	\$ 358,500
F20-031	Munfordville, City of	\$ 153,000	\$ 153,000	01/01/2019	1.70%	\$ 76,500
F20-013	Estill County Water District #1	\$1,080,000	\$1,080,000	08/20/2018	1.69%	\$ 540,000
F20-032	Estill County Water District #1	\$ 500,000	\$ 500,000	08/20/2018	1.69%	\$ 250,000
F20-041	Hyden-Leslie County Water District	\$1,000,000	\$1,000,000	10/29/2010	1.32%	\$ 500,000
F20-004	Greensburg, City of	\$4,875,000	\$4,875,000	08/01/2017	1.29%	\$ 582,600
						\$5,439,600

The last rate adjustment for three utilities is prior to 2016. Those projects will be evaluated upon receipt of their loan documents. Accordingly, the amount of principal forgiveness allocated to the project may be reduced. Principal forgiveness will be reallocated in subsequent invitations as available.

If a loan is eligible for principal forgiveness, it will be allocated only once. This includes projects receiving financing over multiple funding cycles, not individual increments. Principal forgiveness will not be provided on loan increase requests.

### ***American Iron and Steel (AIS) Utilization***

On June 10, 2014, the previously mentioned WRRDA amended the CWA to include permanent requirements for the use of American iron and steel products in DWSRF projects. The America's Water Infrastructure Act of 2018 extends the provision for DWSRF projects through FFY 2020. Materials utilized must be certified as AIS. Implementation guidance can be found at the link below:

<https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>

### ***Single Audit Requirement***

If more than \$750,000 of Federal funds is disbursed during any one (borrower) fiscal year, the borrower is required to have a single or program-specific audit conducted for that year in accordance with 2 CFR 200 *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*.

## DRINKING WATER STATE REVOLVING FUND GOALS

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The following are goals for implementation of the DWSRF. Some goals address improvements and enhancements to the process of administering the DWSRF by the KIA, while other goals address the overall priorities of meeting drinking water goals for the citizens of the Commonwealth of Kentucky.

### *The Sustainable Infrastructure Initiative*

The primary goal of the DWSRF program is to assist PWSs in providing safe drinking water at an affordable cost to their customers. The loan program offers low cost financing to PWSs for eligible drinking water infrastructure construction projects, planning and design costs relating to eligible projects, and eligible security projects. Through set-aside funds, the DWSRF is also used to improve environmental programs that support the goals of the SDWA. Examples include capacity development, operator certification, source water and wellhead protection. Effective and efficient administration of the DWSRF program, combined with below-market interest rates and long-term financing, will assist PWSs in providing sufficient quality and quantity of affordable potable water throughout Kentucky. Progress is reported for each SFY in the Annual Report to the USEPA.

Kentucky is working to provide knowledge and tools to ensure that the investments made in our water infrastructure move us toward a more sustainable footing. The goal can be achieved through strong infrastructure planning and management practices. Some of the key areas for action are:

- Asset Management - A management framework that ensures the right investments are made at the right time.
- Water & Energy Efficiency - Ensuring that water sector systems adopt sustainable practices and technologies for improving their efficiency, reducing costs, and addressing future needs.
- Infrastructure Financing & the Price of Water Services - Options to pay for water infrastructure needs.
- Alternative Technologies & Assessment - Using the best, newest, and most innovative solutions when investing in water infrastructure.

### *Short-Term Goals*

Goal #1: Enhance loan closing procedures and refine repayment procedures.

Goal #2: Promote the principles of EPA's Sustainable Infrastructure (SI) Initiative to loan recipients through education and outreach so that SI practices are considered in planning, design, and construction activities.

Goal #3: Improve SRF training to borrowers, project administrators, Area Development Districts, and the engineering community.

Goal #4: Identify distressed borrowers through compliance monitoring and provide targeted financial and managerial guidance.

- Goal #5: Develop a focused marketing strategy in conjunction with EEC to target systems with compliance and energy efficiency needs.
- Goal #6: Work toward the use of electronic forms and data as opposed to paper documents, where possible.

### *Long-Term Goals*

- Goal #1: Work with the EEC to explore solutions to increase energy efficiency for drinking water utilities and future non-compliance issues under the SDWA.
- Goal #2: Streamline loan processes and improve communication and the sharing of data between KIA and DOW.
- Goal #3 Create a utility portal within the Water Resource Information System (WRIS) to improve communication and reporting between the utility, KIA, and regulatory agencies.

## PROJECT PRIORITY LIST

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Following the USEPA's recommendation, Kentucky developed the Priority System Guidance Document (Appendix C) designed to determine the order in which projects are evaluated for funding based on the following criteria:

1. Most serious risk to human health;
2. Compliance with the requirements of the SDWA; and
3. Systems most in need on a per-household basis according to state affordability criteria.

Each year, the KIA issues a Call for Projects where potential borrowers were invited to submit DWSRF project information via the WRIS. The 2020 Call for Projects occurred October 3, 2018 through December 14, 2018. To communicate this Call for Projects, a press release through the Governor's Office was issued. Additionally, an email distribution was sent to all water utilities, ADDs, mayors, county judge executives, and the engineering community. A sample of the Call for Projects letter is attached in Appendix B.

The Project Priority List is comprised of one list which serves as both a "fundable list" and a "comprehensive list." The fundable list is defined as a list of projects eligible for funding with available funds from the DWSRF. The projects on the comprehensive list may receive funding in the event that a project from the fundable list is withdrawn, deemed ineligible, or unable to meet the DWSRF program requirements within the given time frame.

Properly submitted projects were considered for funding and eligible projects placed on the Project Priority List. Projects were evaluated and assigned a score based upon the ranking criteria in the Priority System Guidance Document (Appendix C). In the event of a tie, the following factors were utilized to priority rank each project:

1. The size of 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 of the project; and
4. Financial need as evidenced by the median household income of the applicant.

The 2020 Project Priority List (Appendix A) shows that Kentucky has sufficient eligible projects to meet the binding commitment requirements of the FFY 2019 Capitalization Grant. A brief description of the following fields will be helpful in reviewing the list:

**Rank:** Rank of project on the comprehensive Project Priority List.

**Score:** Total number of points the project received using the ranking criteria in Appendix C.

**Loan Number:** Priority list tracking number for project. This is the assigned loan number for the project throughout the process and should be referred to on all correspondence regarding the project.

**Applicant:** Name of applicant identified on the Project Profile Form or the community in which the project is associated.

**Loan Package Title:** Short description of project components.

**Requested Loan Amount:** Amount of desired SRF loan identified on the Project Profile Form.

**Invited Loan Amount:** The amount of DWSRF funds that KIA has allocated to the proposed project. If this field lists a dollar amount greater than zero, then the project is invited for funding.

**Principal Forgiveness Amount:** Estimated amount of principal forgiveness that a project is eligible to receive. Eligibility does not guarantee that a project will be offered principal forgiveness due to the amount of funds available.

**GPR Amount:** Amount of desired SRF loan identified that may qualify as green infrastructure. The drinking water capitalization grant does not require that funds be used for projects which address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities (collectively referred to as "green" projects). However, projects on the priority list were awarded ranking points for components that could be identified as green.

**WRIS #:** The WRIS number is the identification number assigned to each project profile by an Area Water Management Council after a project has received endorsement. Information stored in the WRIS database includes geographic information system (GIS) data, information on water resources, and drinking and wastewater facilities. It is used by different entities and provides much of the information needed for all aspects of water resource planning.

The 2021 IUP process will begin in October 2019 with the annual Call for Projects and will conclude in December 2019 for projects to be considered in the SFY 2021 funding cycle. The following schedule is tentative:

2021 Call for Projects	October 1, 2019 - December 13, 2019
Creation of Project Priority List	January 1, 2020 - March 31, 2020
Public Notice Period for IUP	May 1, 2020 - June 1, 2020
Finalize 2020 IUP and send to USEPA	Prior to June 30, 2020

Email notifications will be sent in September 2019 to all water utilities, ADDs, mayors, county judge executives, economic development directors, the engineering community and other stakeholders announcing the Call for Projects.

# DWSRF ADMINISTRATION AND OPERATION

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As required by the SDWA, to the maximum extent practicable, highest priority projects are funded first, as ranked in the Project Priority List. Projects are vetted and many variables are considered prior to distribution of loan invitations.

## Administrative Considerations

### *Funding Limits*

Kentucky's DWSRF does not have a limit on the amount of funds that will be made available to any one borrower from a specific capitalization grant. However, limits may be imposed on borrowers that have outstanding loan balances or loan commitments that increase the concentration risk for the total KIA loan portfolio.

### *Addition of New Projects to the Project Priority List*

The Project Priority List may be amended during the year to add eligible projects. Major revisions to the IUP require public notice.

### *Emergency Projects*

The Project Priority List may be amended during the year for declarations of emergencies designated by the Governor or the Secretary of EEC. An emergency project might involve an unanticipated failure requiring immediate attention to protect public health. The emergency project must meet all eligibility and loan requirements, but the additional public review and comment requirement may be waived. The EPA must approve these deviations.

### *Refinancing*

Governmental agencies may request to refinance non-KIA loans through the DWSRF. Refinancing projects will be considered by KIA only when all the following criteria are met:

- There are sufficient funds available in the DWSRF to meet all other identified project needs for the program year;
- The applicant can show significant savings as a result of the refinancing;
- The applicant can identify an environmental problem within their jurisdiction that they are willing to immediately address with the savings achieved through the refinancing; and
- Projects, as constructed, met all the applicable program requirements.

## Small Systems

To the extent possible, a minimum of 15 percent of all funds credited to the project fund will be used to assist systems serving fewer than 10,000 persons. The following table lists the 25 projects for small systems of the total 39 projects invited in the first round to participate in the 2020 DWSRF program.

Rank	Score	Loan Number	WRIS PNum	Applicant	Project Title	Invited Loan Amount	Invite Status	Service Area Population	DCR	Principal Forgiveness Amount
0		F19-002	WX21205048	Morehead, City of	Regional Water Treatment Plant Construction	\$6,643,550		8,074	Yes*	\$0
2	565	F20-002	WX21155044	Lebanon Water Works Company Inc	Lebanon Main Replacement Project	\$5,238,230		6,144	Yes	\$0
4	350	F20-004	WX21087024	Greensburg, City of	Water Distribution System Improvements	\$4,875,000		2,283	Yes	\$0
5	255	F20-005	WX21133034	Fleming-Neon, City of	Fleming-Neon Waterline Improvement Project - Phase I	\$791,114	Conditional	3,081	Yes	\$0
6	230	F20-006	WX21175009	West Liberty, City of	Water Quality Improvements Project	\$500,000		3,431		\$0
8	220	F20-008	WX21095003	Cumberland, City of	Cumberland Water System Improvements	\$1,664,000		3,568	Yes	\$832,000
10	210	F20-010	WX21025059	Jackson, City of	Jackson Waterline Replacement Project Phase I	\$2,000,000		4,800	Yes	\$1,000,000
11	185	F20-011	WX21041006	Carrollton, City of	MainS - Materials and Infrastructure Size Replacement Project	\$1,961,266		4,629		\$0
12	175	F20-012	WX21137017	McKinney Water District	McKinney WD - Phase 1 Water Improvements Project	\$1,718,115	Conditional	4,274		\$0
13	145	F20-013	WX21065009	Estill County Water District #1	ECWD - Phase 11 - System Improvements / Unaccounted for Water Re	\$1,080,000	Conditional	9,374	Yes	\$540,000
15	140	F20-015	WX21183047	Fordsville, City of	Fordsville Water Tank Rehab Project	\$417,500		927		\$0
16	130	F20-016	WX21197020	Stanton, City of	Stanton - Water Improvements Project	\$700,000		5,398	Yes	\$0
17	125	F20-017	WX21139027	Salem, City of	Salem - Water Main Replacement Project	\$290,463		749	Yes	\$0
18	115	F20-018	WX21133055	Whitesburg, City of	Waterline Replacement and Water Tank Rehab	\$1,305,000	Conditional	3,203	Yes	\$0
21	105	F20-021	WX21165025	Cave Run Water Commission	Cave Run Water Commission Elevated Water Storage Tank Construction Project	\$1,171,350		-		\$0
22	105	F20-022	WX21089093	Flatwoods, City of	City of Flatwoods Water Tank Rehab Project	\$180,000		8,012		\$0
26	95	F20-026	WX21133100	Whitesburg, City of	Whitesburg - Water Storage Tank Replacement	\$947,000	Conditional	3,203	Yes	\$0
27	95	F20-027	WX21149005	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	\$1,305,650	Conditional	1,136		\$0
29	90	F20-029	WX21203008	Mount Vernon, City of	Tower Tank Transmission Main	\$323,300		4,404	Yes	\$0
30	90	F20-030	WX21041007	West Carroll Water District	Hardy Creek Extension	\$131,142		2,471		\$0
31	85	F20-031	WX21099040	Munfordville, City of	Munfordville Water Meter Replacement	\$153,000		1,484	Yes	\$76,500
32	85	F20-032	WX21065006	Estill County Water District #1	ECWD - Meter Purchase and Replacement Project	\$500,000	Conditional	9,374	Yes	\$250,000
33	85	F20-033	WX21235006	Williamsburg, City of	Valve locating; recovery; exercising and/or replacement	\$100,000	Conditional	5,248	Yes	\$0
34	85	F20-034	WX21143017	Lyon County Water District	LCWD - Water System and Storage Tank Improvements Project	\$2,094,675		4,039		\$0
40	80	F20-040	WX21199127	Science Hill, City of	KY 1247 Waterline Extension	\$514,700	Conditional	4,814		\$0
					<b>Totals:</b>	<b>\$36,605,055</b>				<b>\$2,698,500</b>

## Financial Terms of Loans

### *Interest Rates*

The KIA Board sets the interest rates provided through the DWSRF. The KIA Board must review and approve the interest rates at least annually. Rates are based on prevailing market conditions with the 20 Bond General Obligation Index as a reference rate. Kentucky has one standard interest rate and two non-standard interest rates for the DWSRF program dependent upon the community's Median Household Income (MHI). Information is provided in the next section for Kentucky's methodology for MHI determination.

1. The standard rate is applied when the MHI is equal to or above the Kentucky MHI of \$46,535.
2. The first non-standard rate is applied for the following reasons:
  - a. When the MHI is greater than 80% but less than the Kentucky MHI;
  - b. Projects that meet the definition for regionalization; or
  - c. Projects necessary for compliance with an Agreed Order or Consent Decree.
3. The second non-standard rate is applied when the MHI is equal to or below 80% of the Kentucky MHI. This rate is also known as the Disadvantaged community rate (DCR).
  - a. Projects that qualify for the DCR are eligible for principal forgiveness consideration and may request a loan amortization up to 40 years but not beyond the expected design life of the project .

The following interest rates were approved by the KIA Board on July 9, 2019 for this funding cycle:

Interest rate	MHI Threshold	Loan Type
2.50 (Standard)	> or = \$46,535	Construction
1.50 (Non-standard)	\$37,227 to \$46,534	Construction
0.50 (Non-standard-DCR)	< or = \$37,228	Construction
2.50	NA	Planning and Design

### *MHI Determination*

Each project's MHI threshold is calculated automatically in the WRIS Portal. The calculation uses a Default Weighted Proximity Analysis (DWPA). This analysis uses the water distribution/sewer collection lines in the project profile mapping to perform a spatial analysis that estimates the serviceable population of the project area. This is done by applying 2010 census blocks and a weighted MHI value using the applicable 5-Year American Community Survey Estimates. The MHI values generated using the DWPA method are in the WRIS Project Profiles.

If the applicant or representative has concerns with the default method, two alternative options are available: Modified Weighted Proximity Analysis or MHI Income Survey. Borrowers should not

proceed with either alternative MHI methodology without first contacting KIA Staff. The Modified Weighted Proximity Analysis is a GIS based assessment that uses customer meters or address points to calculate an estimated MHI for the project or service area. The second option is to complete an MHI Income Survey using a multi-funding source questionnaire for the project service area.

### ***Repayment Terms***

Planning and design loans will be amortized over five years. If the planning and design loan is rolled into a KIA funded construction loan, the term for the planning and design amount will convert to the term approved for the construction loan. Construction loans will have a standard 20 year repayment term. All repayment terms cannot exceed the expected design life of the project. At the KIA Board's discretion, the repayment term for a construction loan may be extended to 30 years for any DWSRF-eligible project or 40 years in the case of a disadvantage community. Principal and interest payments on each loan will commence no later than the date specified in the Assistance Agreement.

### ***Loan Servicing Fees***

A loan servicing fee of 0.25 percent on the annual outstanding loan balance will be charged as a part of each semi-annual loan payment in accordance with 200 KAR 17:070, Section 12. The fee is assessed to recover administrative expenses incurred over the life of the loan. These fees are accounted for outside of the program fund and will be used for necessary DWSRF program expenses.

### ***Large Project Financing***

Due to statewide demand, KIA may not have the capacity to offer full construction loans for large projects during a single funding cycle. As such, large project funding may be provided in increments pursuant to the initial loan Assistance Agreement and subsequent amendments. Each increment will have the same interest rate as established in the initial agreement. Approval of each amount is not guaranteed and would depend on the continued creditworthiness of the borrower. KIA will reassess loan compliance and creditworthiness prior to approval of each planned increment.

The City of Morehead has a large project listed in the 2020 project ranking. KIA committed \$1,297,200 for planning and design loan and \$6,554,200 for a construction loan to this large project financing to date. The City received an invitation to submit a loan application in the amount of \$6,643,550 for additional funding of the new regional water treatment plant (see Appendix A.)

If a Modified Weighted Proximity Analysis or Income Survey Report is prepared to justify the lowest non-standard interest rate in the initial construction loan period, the borrower will automatically qualify for the disadvantaged or lowest non-standard interest rate for the subsequent funding cycles without having to perform additional MHI analysis.

### *Planning and Design (P&D) Loans*

KIA recognizes that larger or particularly complex projects may require a lengthy planning and design process and thus may not be ready for construction within the allotted twelve months after the Conditional Commitment Letter is issued or perhaps even with a six month extension period.

P&D loans provide an opportunity for utilities to determine their exact needs without the time constraints in the project funding process. For ranked projects that require funding for planning and design, before funding is available to draw (under a construction loan), KIA encourages applicants to apply for a P&D loan rather than a full construction loan.

P&D loans can cover initial engineering assessments of the facilities, regionalization studies, alternative analyses, water supply evaluations, and rate studies for affordability. Additionally, P&D loans can be utilized to move forward into project design. This is specifically helpful for projects that may involve significant renovations at existing facilities or phased projects. P&D loans can also include easement acquisition and legal costs. Borrowers may draw funds throughout the planning process, however, only 50% of design costs may be drawn until plans and specifications have been approved by the DOW.

The standard interest rate will apply during the five-year term of the loan. However, if the applicant initiates construction within a prescribed timeframe (generally one year) after approval of plans and specifications for the project, the P&D loan may be added to a construction loan with the applicable interest rate for which the applicant would otherwise qualify and the term established in the Conditional Commitment Letter. Projects with an existing P&D loan through the DWSRF or any other KIA loan fund receive a priority funding position to apply for a construction loan in a subsequent year's Intended Use Plan, based upon project readiness. Subsequent construction loans will be subject to interest rates and principal forgiveness amounts for the funding cycle in which the construction loan is reviewed by the KIA board.

## Loan Invitations

### *Bypass Process*

Once the projects submitted are ranked in the Project Priority List, the KIA issues conditional invitations to apply for funding. A high-priority project that does not demonstrate readiness to proceed within the given timeframe will be bypassed. This bypass may occur at the request of the utility or as a decision from the KIA staff.

A bypassed project becomes ineligible for DWSRF funding in the current funding year. Bypassed project profiles will remain in the WRIS portal, but the utility must reapply through the annual Call for Projects process to be re-ranked for future funding cycles. Some examples that justify a bypass include, but are not limited to the following:

- Project is fully funded;
- Incomplete or unavailable audits (2016, 2017, and 2018);
- Borrower does not demonstrate readiness to proceed based upon project schedule;
- Non-compliance or delinquent payment on an existing KIA loan;
- Incomplete loan application;
- Applicant unresponsiveness;
- Applicant cannot establish a dedicated source of revenue for the repayment of the loan;
- Applicant has multiple projects under construction; or
- Applicant voluntarily postpones accepting invitation.

Ten projects are being bypassed during the first round of invitations.

- Five of those were funded from the DWSRF during the current year.
- Two are due to unavailable audits. One was because of multiple projects and other concerns.
- Two are for the City of Eubank because the projects were combined with project number WX2119909. These projects were WX21199106 and WX21199115 titled “Water Meter Replacement Project and Relocation Water Line form KY 501 Bridge at RR-Kings Mountain”. Those projects are ranked 70 and 71.

Two projects were not included in the Comprehensive List in Appendix A because they were combined with another project profile.

- The City of Lebanon requested to keep WX21155044 titled “Lebanon Main Replacement Project” but to included projects WX21155023 and WX21155017 titled “Calvary Road Waterline Replacement and Lebanon Water Works City Replacement II”. The combined project is ranked second on the priority project list.

### *Invitation Process*

An invitation letter is emailed to potential borrowers with specific instructions. There are two types of invitations:

1. Twenty-nine projects will receive standard invitations that do not require consultation with the KIA staff. The invitations will include instructions to electronically accept or decline the invitation through KIA's website with a deadline for submitting a loan application.
2. Ten projects will receive conditional invitations that require consultation with the KIA staff. The conditional invitation will provide reasons for the consultation, which is required prior to proceeding with the loan process.

Applicants that do not meet the deadline requirements may also be bypassed and subsequent eligible project(s) will receive invitations. This process will continue until all estimated available funds have been allocated. If, upon receipt of the loan application, the project scope differs significantly from information originally scored in the ranked project profile, KIA reserves the right to have the project reassessed by DOW. Changes in project scope can potentially impact funding priority.

Upon receipt of a complete loan application, KIA staff will review the information and prepare a credit analysis. KIA staff will present financial analysis and any conditional requirements for each loan to the KIA Board. Upon KIA Board approval, a Conditional Commitment Letter will assure that funding will remain committed to the project for a period established in the letter, provided all of the conditions are met. All DWSRF program requirements must be met by the term outlined in the Conditional Commitment Letter. An extension of up to six months for approved applicants that experience extenuating circumstances may be granted.

Actual project funding amounts may vary from amounts presented in the Project Priority List due to updated cost estimates and funding received from other sources. Increases to existing loans must be approved prior to the date of initiation of operation. The application invitation process is designed to commit available funds as soon as possible with limited invitation iterations.

Given an uncertain invitation acceptance rate, KIA will invite significantly more project dollars than are available to fund. If more projects than anticipated accept an invitation to apply it is possible that presentation of an invited project or projects to the KIA Board will be delayed until later in the year, will not be funded, or will be invited to apply for other KIA loan programs. If this situation occurs KIA will communicate with individual borrowers as expeditiously as possible.

### *Invitation List*

The following table lists the 39 projects that received an invitation to participate in the DWSRF for SFY 2020. The two highlighted projects have received KIA funding for large project financing (yellow) or a planning and design loan (blue).

2020 DWSRF Project Priority Fundable List							
Rank	Score	Loan Number	WRIS P Num	Applicant	Project Title	Invited Loan Amount	Service Area Population
0		F19-002	WX21205048	Morehead, City of	Regional Water Treatment Plant Construction	\$6,643,550	8,074
1		F20-001	WX21113040	Nicholasville, City of	Nicholasville 24" Parallel Transmission Main	\$3,266,502	31,402
2	565	F20-002	WX21155044	Lebanon Water Works Company Inc	Lebanon Main Replacement Project	\$5,238,230	6,144
4	350	F20-004	WX21087024	Greensburg, City of	Water Distribution System Improvements	\$4,875,000	2,283
5	255	F20-005	WX21133034	Fleming-Neon, City of	Fleming-Neon Waterline Improvement Project - Phase I	\$791,114	3,081
6	230	F20-006	WX21175009	West Liberty, City of	Water Quality Improvements Project	\$500,000	3,431
7	224	F20-007	WX21087023	Green-Taylor Water District	Green-Taylor Water District--Line Extensions to Improve Flow	\$1,518,120	11,334
8	220	F20-008	WX21095003	Cumberland, City of	Cumberland Water System Improvements	\$1,664,000	3,568
9	220	F20-009	WX21001029	Adair County Water District	CAUD- Water Main Replacement	\$1,342,530	16,734
10	210	F20-010	WX21025059	Jackson, City of	Jackson Waterline Replacement Project Phase I	\$2,000,000	4,800
11	185	F20-011	WX21041006	Carrollton, City of	MainS - Materials and Infrastructure Size Replacement Project	\$1,961,266	4,629
12	175	F20-012	WX21137017	McKinney Water District	McKinney WD - Phase 1 Water Improvements Project	\$1,718,115	4,274
13	145	F20-013	WX21065009	Estill County Water District #1	ECWD - Phase 11 - System Improvements / Unaccounted for Water Re	\$1,080,000	9,374
14	143	F20-014	WX21133035	Letcher County Water & Sewer District	Water Line Extensions for Federal Prison Facility at Roxanna	\$717,000	10,726
15	140	F20-015	WX21183047	Fordsville, City of	Fordsville Water Tank Rehab Project	\$417,500	927
16	130	F20-016	WX21197020	Stanton, City of	Stanton - Water Improvements Project	\$700,000	5,398
17	125	F20-017	WX21139027	Salem, City of	Salem - Water Main Replacement Project	\$290,463	749
18	115	F20-018	WX21133055	Whitesburg, City of	Waterline Replacement and Water Tank Rehab	\$1,305,000	3,203
19	115	F20-019	WX21199002	Somerset, City of	Oak Hill Storage Tank Replacement, 5 MG Booster Station, & Water Main Extension	\$5,879,878	17,450
20	115	F20-020	WX21199131	Somerset, City of	Valley Oak Industrial Park Water System Improvements	\$1,148,000	17,450
21	105	F20-021	WX21165025	Cave Run Water Commission	Cave Run Water Commission Elevated Water Storage Tank Construction Project	\$1,171,350	-
22	105	F20-022	WX21089093	Flatwoods, City of	City of Flatwoods Water Tank Rehab Project	\$180,000	8,012
23	105	F20-023	WX21113047	Nicholasville, City of	Nicholasville - Hayden Park Water Main Replacement	\$755,000	31,402
24	100	F20-024	WX21239030	Versailles, City of	Automatic Meter Reading (AMR) System	\$2,807,000	14,350
26	95	F20-026	WX21133100	Whitesburg, City of	Whitesburg - Water Storage Tank Replacement	\$947,000	3,203
27	95	F20-027	WX21149005	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	\$1,305,650	1,136
29	90	F20-029	WX21203008	Mount Vernon, City of	Tower Tank Transmission Main	\$323,300	4,404
30	90	F20-030	WX21041007	West Carroll Water District	Hardy Creek Extension	\$131,142	2,471
31	85	F20-031	WX21099040	Munfordville, City of	Munfordville Water Meter Replacement	\$153,000	1,484
32	85	F20-032	WX21065006	Estill County Water District #1	ECWD - Meter Purchase and Replacement Project	\$500,000	9,374
33	85	F20-033	WX21235006	Williamsburg, City of	Valve locating; recovery; exercising and/or replacement	\$100,000	5,248
34	85	F20-034	WX21143017	Lyon County Water District	LCWD - Water System and Storage Tank Improvements Project	\$2,094,675	4,039
35	85	F20-035	WX21147015	McCreary County Water District	Stearns to Smithtown Phase 2 - Water Line Replacements	\$2,202,600	16,057
36	85	F20-036	WX21147035	McCreary County Water District	Marsh Creek to HWY 92	\$722,710	16,057
37	85	F20-037	WX21035043	Murray, City of	Murray WTP Switchgear	\$1,705,000	21,763
38	85	F20-038	WX21199095	Eubank, City of	Eubank - Water Line Replacement and Water Meter Replacement	\$2,079,000	10,014
39	85	F20-039	WX21009033	Glasgow Water and Sewer Commission	Glasgow Water Improvement - 24-Inch Transmission Line Pritchardsville to Old Cavalry Drive	\$2,600,000	36,783
40	80	F20-040	WX21199127	Science Hill, City of	KY 1247 Waterline Extension	\$514,700	4,814
41	80	F20-041	WX21131002	Hyden-Leslie County Water District	Phase III b Water System Improvements	\$1,000,000	10,296
<b>Totals:</b>						<b>\$64,348,395</b>	

## Structure of the DWSRF Program in Kentucky

KIA administers the DWSRF under a Memorandum of Agreement with DOW, pursuant to Kentucky Revised Statute (KRS) 224A.1115 and Kentucky Administrative Regulation (KAR) 200 KAR 17:070<sup>1</sup>. The following contacts can assist with DWSRF inquiries:

Contact	Agency	
Donna McNeil Executive Director (502) 892-3496 <a href="mailto:Donna.McNeil@ky.gov">Donna.McNeil@ky.gov</a>	KIA	Intended Use Plan, Loan Application, Financial Terms, Interest Rates, General Information
Don Schierer WRIS Data Manager (502) 892-3446 <a href="mailto:Don.Schierer@ky.gov">Don.Schierer@ky.gov</a>	KIA	Project Profile Submittal
Jory Becker Environmental Control Branch Manager (502) 782-6887 <a href="mailto:Jory.Becker@ky.gov">Jory.Becker@ky.gov</a>	DOW	Request for Proposals (RFPs), Set-Aside Activities
Russell Neal Environmental Control Supervisor (502) 782-7026 <a href="mailto:Russell.Neal@ky.gov">Russell.Neal@ky.gov</a>	DOW	CW Priority List, Environmental Review, Regional Facility Plans
Buddy Griffin Environmental Control Supervisor (502) 564-3410 <a href="mailto:Buddy.Griffin@ky.gov">Buddy.Griffin@ky.gov</a>	DOW	Procurement, Bidding Requirements

### *Borrower Loan Compliance and Financial Monitoring*

The borrower's ability to repay its loans has a direct effect on the financial condition of the DWSRF. Additionally, maintaining a positive operating cash flow and capital asset reserve funding program will protect both the utility and its customers financially against unforeseen capital replacements in the future. Upon acceptance of a loan, each borrower agrees to a number of post-closing conditions, some of which are noted below, to remain in compliance with the terms of the loan.

- a) The borrower must provide audited financial statements to KIA within six months of the entity's fiscal year end date. KIA will review each borrower's financial performance and, if necessary, will work with them to identify ways to remedy any non-compliance issues.

<sup>1</sup> KRS Ch. 224A.1115 and 200 KAR 17:070 may be found on the Internet from the Kentucky Legislature Home Page address: <http://lrc.ky.gov/home.htm>.

- b) Borrowers are required to fund a repair and replacement reserve account equal to 5 percent of the KIA loan amount over 20 years and maintained for the life of the loan. This requirement may be waived if a documented replacement program is in place and being actively funded at a level that is acceptable to KIA.

KIA has three staff that will be responsible to monitor borrower loan compliance as well as process specific loan documents such as the loan assistance agreements, draw requests, closeout documents, and required audit information. The compliance coordinators have been assigned borrowers geographically by ADDs. Their contact information and assigned ADD office is as follows:

Regional Compliance Coordinator	ADDs
Debbie Landrum (502) 892-3454 <a href="mailto:Debbie.Landrum@ky.gov">Debbie.Landrum@ky.gov</a>	Lincoln Trail, KIPDA, Northern Kentucky, Bluegrass
Sarah Parsley (502) 892-3177 <a href="mailto:Sarah.Parsley@ky.gov">Sarah.Parsley@ky.gov</a>	Buffalo Trail, Gateway, FIVCO, Big Sandy, Kentucky River, Cumberland Valley
Julie Bickers (502) 892-3455 <a href="mailto:Julie.Bickers@ky.gov">Julie.Bickers@ky.gov</a>	Purchase, Pennyrile, Green River, Barren River, Lake Cumberland

***Fund Transfers between the CWSRF and the DWSRF***

Transfers between the SRF programs are allowed up to a maximum of 33 percent of the total DWSRF capitalization grants received. KIA reserves the right to transfer the maximum allowable 33 percent of uncommitted repayment funds from the CWSRF to the DWSRF repayment fund as loan demand arises. This decision will be evaluated annually by KIA and DOW. These funds will be distributed using the same criteria and method as described in the governing IUP. Funds not transferred within one fiscal year of receipt of a capitalization grant award shall be reserved for transfer in future years.

## SET-ASIDE ACTIVITIES

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Under the 1996 Amendments to the SDWA, Congress allowed states to “set-aside” a portion of their DWSRF capitalization grant to support water systems with non-infrastructure needs. Section 1452 of the SDWA, as amended, contains the provisions governing the DWSRF Program. Federal regulations allow states to “set aside” up to 31 percent of each capitalization grant for various programs, aside from project loans, and can use these funds to hire state staff or to contract with third party technical experts.

Kentucky will set aside 31 percent of the 2019 capitalization grant. Any set-aside funds that are not taken in one year or are transferred into the construction account will be reserved for use in a future year. Required set-aside work plans are included as Appendix D.

The four types of set-asides:

<b>Set-Aside Description</b>	<b>Maximum Allotment</b>
Administration and Technical Assistance	4.0%
State Program Management	10.0%
Small Systems Technical Assistance	2.0%
Local Assistance and Other State Programs	15.0%
<b>Total</b>	<b>31.0%</b>

DWSRF set-asides are not allowed to be used for water system infrastructure projects, except for planning and design activities. The set-aside activities are to support activities to ensure safe and affordable drinking water by:

- Providing states with flexible tools to assist water systems with training, technical assistance and pre-construction activities, and
- Extending and enhancing the impact of DWSRF funding by ensuring that water systems have the technical, managerial, and financial capacity to obtain a loan and to effectively maintain their resources.

### *Administration and Technical Assistance – 4% maximum*

The Administration and Technical Assistance set-aside allows states to use up to 4 percent of the capitalization grant, \$400,000, or 1/5th percent of the current valuation of the fund (whichever is greater), for costs associated with administering and implementing the state’s DWSRF Program and providing technical assistance to systems of all sizes. Most states reserve this set-aside to cover a portion of the loan program administration costs that can include direct technical assistance to water systems in completing DWSRF loan applications. While this set-aside has been

typically used only for state program administration, there is an opportunity to support technical assistance to water systems serving more than 10,000 persons. The maximum four percent is set-aside to be divided with one percent or \$181,320 to the KIA and three percent or \$543,960 to EEC for administration activities of the DWSRF Program.

***Small System Technical Assistance – 2% maximum***

This set-aside is for small water systems serving 10,000 or fewer persons. These systems typically face greater challenges than larger systems due to limited economies of scale. This set-aside allows states to use up to 2 percent of the capitalization grant to provide technical assistance and training to help small systems build the capacity they need to provide safe drinking water. States provide technical assistance to small water systems, including assistance in planning new infrastructure projects, payments to third-party technical assistance providers and specialized small system training. Kentucky will set-aside the maximum two percent or \$362,640 to EEC as noted in the workplan located in Appendix D.

***State Program Management – 10% maximum***

The State Program Management set-aside allows states to use up to 10 percent of their annual allotment to develop and implement water system Capacity Development and Operator Certification Programs, administer Source Water Protection Programs or support other state drinking water program activities. There is a broad range of eligible activities for administering and implementing the state PWSS Program. Kentucky will set-aside the maximum ten percent or \$1,813,200 to EEC as noted in the workplan located in Appendix D.

***Local Assistance and Other State Programs - 15%***

The Local Assistance and Other State Programs set-aside allows states to use up to 15 percent of their annual capitalization grant to assist in the development and implementation of local drinking water initiatives and other state programs, (e.g., capacity development and source water protection). This set-aside can also be used for direct financial assistance to water systems. A maximum of 10 percent out of the 15 percent set-aside funds can be spent on any single effort. An advantage of this set-aside is that source water and wellhead protection activities are more broadly defined compared to the State Program Management set-aside requirements. Examples of activities include: developing and implementing asset management plans for communities, providing grants to systems considering regionalization or consolidation and providing loans for the implementation of source water quality protection efforts. Kentucky will set-aside the maximum fifteen percent or \$2,719,800 to EEC as noted in the workplan located in Appendix D for the following programs:

- Capacity Development - TMF and Operator Certification      10% or \$1,813,200
- Source Water Assessment      2% or \$362,640
- Wellhead Protection      3% or \$543,960

## FUNDS AVAILABLE TO BE COMMITTED AND DISBURSED

Kentucky's DWSRF is capitalized by appropriations from the U.S. Congress and the Kentucky General Assembly. The fund provides, in perpetuity, financial assistance to Kentucky's eligible DWSRF projects. As of June 30, 2018 the DWSRF had net assets of \$245,928,000 and 144 active loans. During SFY 2020, Kentucky will rely on funding as outlined in Table A to provide financial assistance and to support the operations of KIA and DOW.

**Table A**  
**Kentucky DWSRF Sources and Uses of Funds for 2020**

July 1, 2019 through June 30, 2020

Funding Sources	Federal Contribution	State Contribution	DWSRF	Total
Uncommitted Prior Year Loan Funds			22,000,000	22,000,000
Loan Repayments (P&I)			18,701,583	18,701,583
Investment Interest Earnings			1,000,000	1,000,000
Banked Prior Year Set-Aside Funds	1,500,000			1,500,000
2019 Capitalization Grant	18,132,000	3,626,400		21,758,400
<b>Total Funding Sources</b>	<b>19,632,000</b>	<b>3,626,400</b>	<b>41,701,583</b>	<b>64,959,983</b>
Funding Uses				
Financial Assistance	12,511,080	3,626,400	36,362,520	52,500,000
Leverage Bond Debt Service			5,339,063	5,339,063
Banked Prior Year Set-Aside Funds	1,500,000			1,500,000
FFY 2019 Administration (4%)	725,280			725,280
FFY 2019 State Program Management (10%)	1,813,200			1,813,200
FFY 2019 Technical Assistance (2%)	362,640			362,640
FFY 2019 Local and Other Assistance (15%)	2,719,800			2,719,800
<b>Total Funding Uses</b>	<b>19,632,000</b>	<b>3,626,400</b>	<b>41,701,583</b>	<b>64,959,983</b>

During the 2020 IUP funding cycle, KIA will have an estimated \$52,500,000 available to fund eligible DWSRF projects. This is comprised of uncommitted funds that were carried over from fiscal 2019, the 2019 capitalization grant of \$18,132,000, state match funds of \$3,626,400, estimated loan repayments of \$18,701,583 and \$1,000,000 interest earnings on existing cash balances. Funding is reduced by leverage bond debt service of \$5,339,063, administrative costs of \$725,280 (4 percent) and other set-aside costs totaling \$4,895,640 (27 percent). Any set-aside funds that are not taken in one year or are transferred into the construction account will be reserved for use in a future year.

The \$3,626,400 state match will consist of proceeds from the sale of tax-exempt revenue bonds with debt service provided by the Commonwealth. The anticipated submission date for the 2019 capitalization grant application is July 30, 2019, with the grant award being made available on October 1, 2019.

KIA received budgetary authorization to issue agency leverage bonds during the 2018-2020 biennium in an amount not to exceed \$30 million. Bond proceeds are deposited into the fund and used to make eligible DWSRF loans. For this authorization to become effective, KIA must obtain approval from the Kentucky Infrastructure Authority Board, the Capital Projects and Bond Oversight Committee, the Office of the State Budget Director and the Office of Financial Management in the Finance and Administration Cabinet with respect to the timing and amount of the leverage bond issuance. KIA may elect to defer issuance of bonds or to not commit the entire authorization amount.

## PUBLIC PARTICIPATION

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The draft 2020 DWSRF IUP including the Project Priority List will be made available for public review and comment on the KIA website at [www.kia.ky.gov](http://www.kia.ky.gov) from June 21, 2019 through July 22, 2019. A public meeting was held Wednesday, July 17, 1:30 p.m., EST, at the office of the Kentucky Infrastructure Authority, 100 Airport Road, 3<sup>rd</sup> Floor, Frankfort, KY 40601. One public comment was submitted during the review and comment period and is summarized in Appendix E. Written comments were to be submitted to Donna McNeil, KIA Executive Director, by mail to the address above or by email: [Donna.McNeil@ky.gov](mailto:Donna.McNeil@ky.gov).

## APPENDIX A

# COMPREHENSIVE PROJECT PRIORITY LIST

**2020 DWSRF Project Priority List**

Rank	Score	Loan Number	WRIS PNum	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite or Bypassed	Cumulative Loan Amount	Service Area Population	Service Area MHI	DCR	Principal Forgiveness Amount	Cumulative Principal Forgiveness
0		F17-012	WX21071730	Southern Water & Sewer District	SWSD - Lackey to Wayland Water Line Replacement	\$1,500,000	\$1,500,000	\$0	Bypassed	\$0	19,030	\$31,007	Yes	\$0	\$0
0		F18-016	WX21073012	Frankfort Electric & Water Plant Board	Frankfort Plant Board Water Storage Improvement Project	\$4,000,000	\$4,000,000	\$0	Bypassed	\$0	36,733	\$49,107		\$0	\$0
0		F19-002	WX21205048	Morehead, City of	Regional Water Treatment Plant Construction	\$28,428,000	\$6,643,550	\$6,643,550		\$6,643,550	8,074	\$38,554	Yes*	\$0	\$0
0		F19-005	WX21199128	Burnside, City of	Burnside Combined Waterline Improvements	\$2,227,000	\$2,227,000	\$0	Bypassed	\$6,643,550	1,388	\$34,900	Yes	\$0	\$0
0		F19-018	WX21087022	Green-Taylor Water District	Green-Taylor Water District - Distribution Upgrades	\$564,600	\$564,600	\$0	Bypassed	\$6,643,550	11,334	\$38,602		\$0	\$0
0		F19-041	WX21089101	South Shore, City of	New South Shore Water Treatment Plant	\$3,051,133	\$3,051,133	\$0	Bypassed	\$6,643,550	4,589	\$38,059		\$0	\$0
1		F20-001	WX21113040	Nicholasville, City of	Nicholasville 24" Parallel Transmission Main	\$4,634,160	\$3,266,502	\$3,266,502		\$9,910,052	31,402	\$48,925		\$0	\$0
2	565	F20-002	WX21155044	Lebanon Water Works Company Inc	Lebanon Main Replacement Project	\$5,238,230	\$3,249,140	\$5,238,230		\$15,148,282	6,144	\$30,025	Yes	\$0	\$0
3	385	F20-003	WX21169039	Edmonton, City of	Edmonton Water Improvement Project - Contract A & B	\$5,000,000	\$5,104,900	\$0	Bypassed	\$15,148,282	7,196	\$32,630	Yes	\$0	\$0
4	350	F20-004	WX21087024	Greensburg, City of	Water Distribution System Improvements	\$4,875,000	\$4,875,000	\$4,875,000		\$20,023,282	2,283	\$26,787	Yes	\$0	\$0
5	255	F20-005	WX21133034	Fleming-Neon, City of	Fleming-Neon Waterline Improvement Project - Phase I	\$2,791,114	\$791,114	\$791,114	Conditional	\$20,814,396	3,081	\$33,798	Yes	\$0	\$0
6	230	F20-006	WX21175009	West Liberty, City of	Water Quality Improvements Project	\$1,500,000	\$500,000	\$500,000		\$21,314,396	3,431	\$42,506		\$0	\$0
7	224	F20-007	WX21087023	Green-Taylor Water District	Green-Taylor Water District--Line Extensions to Improve Flow	\$1,518,120	\$1,518,120	\$1,518,120		\$22,832,516	11,334	\$38,602		\$0	\$0
8	220	F20-008	WX21095003	Cumberland, City of	Cumberland Water System Improvements	\$1,664,000	\$1,664,000	\$1,664,000		\$24,496,516	3,568	\$22,294	Yes	\$832,000	\$832,000
9	220	F20-009	WX21001029	Adair County Water District	CAUD- Water Main Replacement	\$1,342,530	\$1,342,530	\$1,342,530		\$25,839,046	16,734	\$34,173	Yes	\$0	\$832,000
10	210	F20-010	WX21025059	Jackson, City of	Jackson Waterline Replacement Project Phase I	\$2,000,000	\$2,000,000	\$2,000,000		\$27,839,046	4,800	\$26,944	Yes	\$1,000,000	\$1,832,000
11	185	F20-011	WX21041006	Carrollton, City of	MainS - Materials and Infrastructure Size Replacement Project	\$2,161,266	\$1,961,266	\$1,961,266		\$29,800,312	4,629	\$46,328		\$0	\$1,832,000
12	175	F20-012	WX21137017	McKinney Water District	McKinney WD - Phase 1 Water Improvements Project	\$1,718,115	\$1,718,115	\$1,718,115	Conditional	\$31,518,427	4,274	\$40,512		\$0	\$1,832,000
13	145	F20-013	WX21065009	Estill County Water District #1	ECWD - Phase 11 - System Improvements / Unaccounted for Water Re	\$1,080,000	\$1,080,000	\$1,080,000	Conditional	\$32,598,427	9,374	\$30,074	Yes	\$540,000	\$2,372,000
14	143	F20-014	WX21133035	Letcher County Water & Sewer District	Water Line Extensions for Federal Prison Facility at Roxanna	\$6,517,000	\$717,000	\$717,000		\$33,315,427	10,726	\$29,428	Yes	\$358,500	\$2,730,500
15	140	F20-015	WX21183047	Fordsville, City of	Fordsville Water Tank Rehab Project	\$417,500	\$417,500	\$417,500		\$33,732,927	927	\$37,589		\$0	\$2,730,500
16	130	F20-016	WX21197020	Stanton, City of	Stanton - Water Improvements Project	\$700,000	\$700,000	\$700,000		\$34,432,927	5,398	\$36,090	Yes	\$0	\$2,730,500
17	125	F20-017	WX21139027	Salem, City of	Salem - Water Main Replacement Project	\$580,925	\$290,463	\$290,463		\$34,723,390	749	\$36,106	Yes	\$0	\$2,730,500
18	115	F20-018	WX21133055	Whitesburg, City of	Waterline Replacement and Water Tank Rehab	\$1,305,000	\$1,305,000	\$1,305,000	Conditional	\$36,028,390	3,203	\$34,559	Yes	\$0	\$2,730,500
19	115	F20-019	WX21199002	Somerset, City of	Oak Hill Storage Tank Replacement, 5 MG Booster Station, & Water Main Extension	\$5,879,878	\$5,879,878	\$5,879,878		\$41,908,268	17,450	\$28,825	Yes	\$0	\$2,730,500
20	115	F20-020	WX21199131	Somerset, City of	Valley Oak Industrial Park Water System Improvements	\$1,148,000	\$1,148,000	\$1,148,000		\$43,056,268	17,450	\$28,825	Yes	\$0	\$2,730,500
21	105	F20-021	WX21165025	Cave Run Water Commission	Cave Run Water Commission Elevated Water Storage Tank Construction Project	\$1,171,350	\$1,171,350	\$1,171,350		\$44,227,618	-			\$0	\$2,730,500
22	105	F20-022	WX21089093	Flatwoods, City of	City of Flatwoods Water Tank Rehab Project	\$180,000	\$180,000	\$180,000		\$44,407,618	8,012	\$49,591		\$0	\$2,730,500
23	105	F20-023	WX21113047	Nicholasville, City of	Nicholasville - Hayden Park Water Main Replacement	\$755,000	\$755,000	\$755,000		\$45,162,618	31,402	\$48,925		\$0	\$2,730,500
24	100	F20-024	WX21239030	Versailles, City of	Automatic Meter Reading (AMR) System	\$2,807,000	\$2,807,000	\$2,807,000		\$47,969,618	14,350	\$48,264		\$0	\$2,730,500
25	95	F20-025	WX21109002	McKee, City of	Downtown Water Storage Tank Replacement	\$1,825,000	\$1,825,000	\$0	Bypassed	\$49,794,618	898	\$17,419	Yes	\$0	\$3,643,000
26	95	F20-026	WX21133100	Whitesburg, City of	Whitesburg - Water Storage Tank Replacement	\$947,000	\$947,000	\$947,000	Conditional	\$50,741,618	3,203	\$34,559	Yes	\$0	\$3,643,000

**2020 DWSRF Project Priority List**

Rank	Score	Loan Number	WRIS PNum	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite or Bypassed	Cumulative Loan Amount	Service Area Population	Service Area MHI	DCR	Principal Forgiveness Amount	Cumulative Principal Forgiveness
27	95	F20-027	WX21149005	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	\$1,305,650	\$1,305,650	\$1,305,650	Conditional	\$52,047,268	1,136	\$46,287		\$0	\$3,643,000
28	94	F20-028	WX21119011	Hindman, City of	Hindman Waterline Extensions	\$1,231,000	\$1,231,000	\$0	Bypassed	\$52,047,268	2,938	\$28,145	Yes	\$0	\$3,643,000
29	90	F20-029	WX21203008	Mount Vernon, City of	Tower Tank Transmission Main	\$323,300	\$323,300	\$323,300		\$52,370,568	4,404	\$26,909	Yes	\$0	\$3,643,000
30	90	F20-030	WX21041007	West Carroll Water District	Hardy Creek Extension	\$131,142	\$131,142	\$131,142		\$52,501,710	2,471	\$45,041		\$0	\$3,643,000
31	85	F20-031	WX21099040	Munfordville, City of	Munfordville Water Meter Replacement	\$510,000	\$153,000	\$153,000		\$52,654,710	1,484	\$23,999	Yes	\$76,500	\$3,719,500
32	85	F20-032	WX21065006	Estill County Water District #1	ECWD - Meter Purchase and Replacement Project	\$1,319,450	\$500,000	\$500,000	Conditional	\$53,154,710	9,374	\$30,074	Yes	\$250,000	\$3,969,500
33	85	F20-033	WX21235006	Williamsburg, City of	Valve locating; recovery; exercising and/or replacement	\$100,000	\$100,000	\$100,000	Conditional	\$53,254,710	5,248	\$32,559	Yes	\$0	\$3,969,500
34	85	F20-034	WX21143017	Lyon County Water District	LCWD - Water System and Storage Tank Improvements Project	\$2,094,675	\$2,094,675	\$2,094,675		\$55,349,385	4,039	\$51,115		\$0	\$3,969,500
35	85	F20-035	WX21147015	McCreary County Water District	Stearns to Smithtown Phase 2 - Water Line Replacements	\$2,202,600	\$2,202,600	\$2,202,600		\$57,551,985	16,057	\$20,544	Yes	\$1,000,000	\$4,969,500
36	85	F20-036	WX21147035	McCreary County Water District	Marsh Creek to HWY 92	\$1,444,710	\$722,710	\$722,710		\$58,274,695	16,057	\$20,544	Yes	\$300,000	\$5,269,500
37	85	F20-037	WX21035043	Murray, City of	Murray WTP Switchgear	\$1,705,000	\$1,705,000	\$1,705,000		\$59,979,695	21,763	\$30,366	Yes	\$0	\$5,269,500
38	85	F20-038	WX21199095	Eubank, City of	Eubank - Water Line Replacement and Water Meter Replacement	\$2,079,000	\$2,079,000	\$2,079,000		\$62,058,695	10,014	\$34,776	Yes	\$0	\$5,269,500
39	85	F20-039	WX21009033	Glasgow Water and Sewer Commission	Glasgow Water Improvement - 24-Inch Transmission Line Pritchardsville to Old Cavalry Drive	\$2,600,000	\$2,600,000	\$2,600,000		\$64,658,695	36,783	\$39,960		\$0	\$5,269,500
40	80	F20-040	WX21199127	Science Hill, City of	KY 1247 Waterline Extension	\$514,700	\$514,700	\$514,700	Conditional	\$65,173,395	4,814	\$39,529		\$0	\$5,269,500
41	80	F20-041	WX21131002	Hyden-Leslie County Water District	Phase III b Water System Improvements	\$4,621,000	\$1,000,000	\$1,000,000		\$66,173,395	10,296	\$28,648	Yes	\$170,100	\$5,439,600
42	80	F20-042	WX21239033	Versailles, City of	Versailles - Water Distribution System Improvements Phase 2	\$1,480,000	\$1,480,000	\$0		\$66,173,395	14,350	\$48,264		\$0	\$5,439,600
43	80	F20-043	WX21239034	Versailles, City of	Versailles - Water Distribution System Improvements - Low Pressu	\$1,314,500	\$1,314,500	\$0		\$66,173,395	14,350	\$48,264		\$0	\$5,439,600
44	80	F20-044	WX21117210	Northern Kentucky Water District	Taylor Mill Treatment Plant Emergency Generator	\$9,450,000	\$8,000,000	\$0		\$66,173,395	242,910	\$59,009		\$0	\$5,439,600
45	75	F20-045	WX21239035	Versailles, City of	Versailles - Water Treatment Plant Improvements - Generators	\$3,375,500	\$3,375,500	\$0		\$66,173,395	14,350	\$48,264		\$0	\$5,439,600
46	70	F20-046	WX21131006	Hyden-Leslie County Water District	Phase VI Water System Improvements	\$655,000	\$655,000	\$0		\$66,173,395	10,296	\$28,648	Yes	\$0	\$5,439,600
47	69	F20-047	WX21237746	Campton, City of	Campton South Valeria Water Extension Project	\$1,177,000	\$1,177,000	\$0		\$66,173,395	6,715	\$23,717	Yes	\$0	\$5,439,600
48	65	F20-048	WX21095670	Cumberland, City of	City of Cumberland 10 Inch Waterline Upgrade	\$1,210,000	\$1,000,000	\$0		\$66,173,395	3,568	\$22,294	Yes	\$0	\$5,439,600
49	65	F20-049	WX21225048	Uniontown, City of	Uniontown New Booster Pump Station Project	\$314,350	\$250,000	\$0		\$66,173,395	1,131	\$26,272	Yes	\$0	\$5,439,600
50	65	F20-050	WX21157007	Benton, City of	City of Benton-Line Replacement Along Main Street	\$1,255,500	\$125,550	\$0		\$66,173,395	6,560	\$43,877		\$0	\$5,439,600
51	62	F20-051	WX21025008	Breathitt County Water District	Hwy 30 East and KY 542 Lambric Waterline Extensions	\$2,921,000	\$2,921,000	\$0		\$66,173,395	7,407	\$26,028	Yes	\$0	\$5,439,600
52	61	F20-052	WX21027028	Hardinsburg, City of	City of Hardinsburg - Extension Area A	\$1,379,590	\$1,379,590	\$0		\$66,173,395	12,469	\$46,572		\$0	\$5,439,600
53	60	F20-053	WX21003012	Scottsville, City of	City of Scottsville - WTP Emergency Generator Project	\$1,493,000	\$1,493,000	\$0		\$66,173,395	5,114	\$31,022	Yes	\$0	\$5,439,600
54	60	F20-054	WX21083062	Mayfield, City of	Mayfield Electric & Water-WTP Clearwell Rehabilitation	\$250,000	\$250,000	\$0		\$66,173,395	10,709	\$26,583	Yes	\$0	\$5,439,600
55	60	F20-055	WX21161024	Maysville, City of	Mayslick Tank	\$1,850,500	\$750,000	\$0		\$66,173,395	11,459	\$33,790	Yes	\$0	\$5,439,600
56	51	F20-056	WX21027029	Hardinsburg, City of	City of Hardinsburg - Extension Area B	\$1,315,980	\$1,315,980	\$0		\$66,173,395	12,469	\$46,572		\$0	\$5,439,600
57	45	F20-057	WX21095666	Cumberland, City of	City of Cumberland Water Treatment Plant Upgrades (Was WX21095662)	\$1,750,000	\$1,750,000	\$0		\$66,173,395	3,568	\$22,294	Yes	\$0	\$5,439,600
58	45	F20-058	WX21065007	Estill County Water District #1	ECWD/Beattyville Emergency Regional Interconnect	\$818,421	\$818,421	\$0		\$66,173,395	7,290	\$22,347	Yes	\$0	\$5,439,600
59	45	F20-059	WX21237009	Campton, City of	Spring Branch, Kelse Holland Fork And Becky Patton Water Line	\$227,000	\$227,000	\$0		\$66,173,395	6,715	\$23,717	Yes	\$0	\$5,439,600
60	45	F20-060	WX21161044	Maysville, City of	Maysville Third Street Waterline Replacement	\$1,200,000	\$1,200,000	\$0		\$66,173,395	11,459	\$33,790	Yes	\$0	\$5,439,600
61	35	F20-061	WX21035030	Dexter-Almo Heights Water District	Dexter-Almo Heights Water District- Boggess Drive Loop	\$180,000	\$180,000	\$0		\$66,173,395	2,130	\$43,103		\$0	\$5,439,600

**2020 DWSRF Project Priority List**

Rank	Score	Loan Number	WRIS PNum	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite or Bypassed	Cumulative Loan Amount	Service Area Population	Service Area MHI	DCR	Principal Forgiveness Amount	Cumulative Principal Forgiveness
62	35	F20-062	WX21089005	Worthington, City of	Worthington: Clean out Wells to Increase Output	\$98,400	\$98,400	\$0		\$66,173,395	1,613	\$47,870		\$0	\$5,439,600
63	35	F20-063	WX21089102	Greenup, City of	City of Greenup new Water Treatment Plant	\$14,599,000	\$13,999,000	\$0		\$66,173,395	10,226	\$41,300		\$0	\$5,439,600
64	30	F20-064	WX21107054	Nebo Water District	Nebo Tank Rehabilitation and AMR Project	\$590,000	\$590,000	\$0		\$66,173,395	3,771	\$56,615		\$0	\$5,439,600
65	25	F20-065	WX21095008	Lynch, City of	Lynch - Backwash at WTP	\$392,650	\$392,650	\$0		\$66,173,395	829	\$40,157		\$0	\$5,439,600
66	25	F20-066	WX21095638	Lynch, City of	City of Lynch - Water Treatment Plant Rehabilitation	\$1,000,000	\$1,000,000	\$0		\$66,173,395	829	\$40,157		\$0	\$5,439,600
67	25	F20-067	WX21089013	Greenup, City of	Greenup: New Water Intake Structure	\$4,900,000	\$4,900,000	\$0		\$66,173,395	10,226	\$41,300		\$0	\$5,439,600
68	20	F20-068	WX21233023	Dixon, City of	Dixon Water Line Upgrade	\$377,500	\$377,500	\$0		\$66,173,395	768	\$47,337		\$0	\$5,439,600
69	20	F20-069	WX21143018	Kuttawa, City of	Kuttawa - New Water Treatment Plant Project	\$550,000	\$550,000	\$0		\$66,173,395	770	\$55,495		\$0	\$5,439,600
70	0	F20-070	WX21199106	Eubank, City of	Water Meter Replacement Project	\$357,000	\$357,000	\$0	Bypassed	\$66,173,395	10,014	\$34,776	Yes	\$0	\$5,439,600
71	0	F20-071	WX21199115	Eubank, City of	Relocate Water Line from KY 501 Bridge at RR - Kings Mountain	\$302,000	\$302,000	\$0	Bypassed	\$66,173,395	10,014	\$34,776	Yes	\$0	\$5,439,600
<b>Totals:</b>						<b>\$178,493,039</b>	<b>\$134,092,029</b>	<b>\$66,173,395</b>						<b>\$5,439,600</b>	

## APPENDIX B

### CALL FOR PROJECTS LETTER



## KENTUCKY INFRASTRUCTURE AUTHORITY

**Matthew G. Bevin**  
Governor

Capital Center Complex  
1024 Capital Center Drive, Suite 340  
Frankfort, Kentucky 40601  
(502) 573-0260  
(502) 573-0157 (fax)  
kia.ky.gov

**Donna McNeil**  
Executive Director

September 28, 2018

To Whom It May Concern:

The Kentucky Infrastructure Authority and the Kentucky Division of Water are announcing the 2020 Drinking Water State Revolving Fund (DWSRF) Call for Projects.

### **The Drinking Water State Revolving Fund Call For Projects Will Be Open from October 3, 2018 to December 14, 2018**

If you have a drinking water project that will need funding during the 2020 state fiscal year (July 1, 2019 through June 30, 2020), we want to hear from you as your project may be eligible for funding from the DWSRF. The DWSRF is a competitive program. To apply for a low interest DWSRF loan, your project must be ranked on the 2020 DWSRF Project Priority List developed by the Division of Water (DOW). Projects will not be carried forward from the 2019 Project Priority List to the 2020 Project Priority List.

### **You Will Need a Project Profile for Your Project**

To submit a project for inclusion on the DWSRF Priority List, you must work with your local Area Development District (ADD) to complete or update a Project Profile (and related mapping) in the Water Resource Information System (WRIS). The ADD will ask you to complete a [Project Profile Pre-Application Form](#) which includes all of the information needed by DOW to review and rank potential DWSRF projects. Once your project has been submitted electronically by the ADD, you will receive an email confirmation. Please ensure that the project cost estimate and schedule have been updated. No requests for funding will be accepted after the Call for Projects period ends.

### **Your Project Profile MUST be Approved by the Area Water Management Council**

For your project to be included in the DWSRF Priority List your Project Profile must have Area Water Management Council (AWMC) approval. The ADD staff may have already contacted you to provide additional information to update your existing project profiles. To give the ADD staff time to get your profile approved by the AWMC, you must get the profile information to your AWMC before their next meeting.

DOW strongly encourages you to read the [Priority System Guidance Document](#) before you submit your Project Profile as you might obtain some useful ideas to improve your project's overall score. Only those projects that start construction by March 31, 2021 will be considered for funding.

## Current Interest Rates

KIA sets interest rates annually. Projected interest rates for the 2020 funding cycle will be provided in the DWSRF Intended Use Plan (IUP) which will be available late spring 2019. KIA currently offers three interest rates for the DWSRF program in the 2019 funding cycle.

Loan Type	MHI Threshold	Interest Rate
Construction	> or = \$44,811	3.0%
Construction	\$35,850 - \$44,810	2.0%
Construction	< or = \$35,849	0.5%
Planning and Design	NA	3.0%

The 2.0% rate also applies to those projects that facilitate compliance with an order or judgment addressing environmental non-compliance or those systems that are considered regional. If you are interested in pursuing an alternative Median Household Income (MHI) determination methodology (Modified Weighted Proximity Analysis/Income Survey) you must contact KIA during the Call for Projects before you proceed. Consideration for an alternate MHI determination and the methodology used will be at the discretion of KIA. These must be completed prior to our Spring Intended Use Plan/Invitation cycle. Please consult our Median Household Income Determination Guidance documents on the [KIA Forms page](#) for more information.

## Questions?

If you have questions on project eligibility please contact Anshu Singh ([anshu.singh@ky.gov](mailto:anshu.singh@ky.gov)) at (606) 929-5285 or Russell Neal ([russell.neal@ky.gov](mailto:russell.neal@ky.gov)) of the Division of Water, Water Infrastructure Branch at (502) 782-7026. For more information on loan requirements, terms or borrower eligibility contact Ashley Adams ([ashleym.adams@ky.gov](mailto:ashleym.adams@ky.gov)) of the Kentucky Infrastructure Authority at (502) 892-3429. For more information about completing a Project Profile contact Kelly Cunnagin ([kelly.cunnagin@ky.gov](mailto:kelly.cunnagin@ky.gov)) of the Kentucky Infrastructure Authority at (502) 892-3178.

Sincerely,



Donna McNeil, Executive Director  
Kentucky Infrastructure Authority

## APPENDIX C

# PRIORITY SYSTEM GUIDANCE DOCUMENT

# **KENTUCKY**

## **Priority System Guidance Document**

For Drinking Water Projects  
Eligible To Be Funded By The

**KENTUCKY DRINKING WATER STATE REVOLVING  
FUND**

**2020 Funding Cycle**



**ENERGY AND ENVIRONMENT CABINET**  
**Department for Environmental Protection**  
**Division of Water**

300 Sower Boulevard – 3<sup>rd</sup> Floor  
Frankfort, Kentucky 40601  
Phone: (502) 564-3410  
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**Kentucky Priority System Guidance Document for Drinking Water**

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## INTRODUCTION

### PURPOSE

The Drinking Water State Revolving Fund (DWSRF) priority system was developed to prioritize eligible projects for funding from the DWSRF. The DWSRF funds are intended to facilitate the ability of a Public Water System (PWS) to obtain and maintain financial, managerial and technical capabilities for compliance with the Safe Drinking Water Act (SDWA). This includes compliance with existing and future national drinking water standards or other activities to significantly further the health protection objectives of the SDWA.

### METHODOLOGY

The structure of the priority system incorporates new rules and initiatives promulgated since the 1996 amendments to the SDWA. The amendments encompass financial, managerial, and technical capacity; Surface Water Treatment Rule; Total Coliform Rule; Lead and Copper Rule; Asbestos Standard; Enhanced Surface Water Treatment Rule; Disinfectants and Disinfection Byproducts Rule; Groundwater Rule; and best available and affordable technology. Projects are prioritized based on scores derived from a comprehensive review of each project using the DWSRF ranking criteria.

### PRIORITY FORMULA

Violations of drinking water standards occur for a variety of reasons. A proactive approach has been developed to determine priority based on infrastructure needs to address the goals of the SDWA.

### APPLYING THE PRIORITY SYSTEM TO PROJECTS

The Division of Water (DOW) assigns points in each of nine categories: Regionalization, Public Health Criteria-Treatment, Public Health Criteria-Distribution, Extension of Service, Security, Compliance and Enforcement, Public Water System Financial Need, Asset Management, Sustainable Infrastructure, and Project Readiness (see Table 1, DWSRF Ranking Criteria). Points are based on information provided by PWSs and/or their consultants, and submitted by local area development districts through the Water Resources Information System (WRIS). The total score is of the sum of all points assigned in each of the nine categories.

### TIE BREAKER

It is possible the points assignment process could result in two or more projects having the same total score. A tie breaker has been developed for this situation considering the following factors: maintaining priorities to be funded in the order as set forth by the priority formula, expending DWSRF dollars to maximize the benefit toward compliance with the SDWA, and providing funding of projects that are affordable to the households that benefit from the project.

Those PWSs serving a population of 10,000 people or less are prioritized over those serving populations over 10,000. Consideration is then given to those projects with existing enforcement actions (i.e. Agreed Orders). Lastly, the financial need as evidenced by the median household income (American Community Survey 5-Year Estimates 2011-2015) of the applicant is taken into consideration.

## I. REGIONALIZATION

This category allows affordable alternatives for a PWS to obtain and maintain financial, managerial and technical capabilities to comply with the SDWA through mergers, interconnections, and emergency planning.

### A. **Elimination of a Public Water System (PWS) through a merger or acquisition (elimination of a PWSID)**

Under this category, points will be provided to projects promoting regionalization. This is not the same as an interconnection where two or more water systems provide potable water supplies to one another, but retain their own individual identities and PWSIDs. The merger must result in the dissolution of the PWSID of the receiving PWS. (Example: Sun Water Works is extending a transmission main to Beach Water Works because their wells are contaminated. Under formal agreement, the entire Beach Water Works service area will now be converted to the Sun Water Works service area and the wells and treatment plant will be closed. Beach Water Works will no longer be in the business of producing water or maintaining a distribution system and therefore will not have a PWSID number.)

**Points Received: 50**

### B. **Elimination of a water treatment plant as a result of an interconnection**

This section applies points to a project that will result in the elimination of a water treatment plant, as a result of an interconnection, that is in need of rehabilitation, modification or expansion to comply with the SDWA. This is different from a merger in that both utilities will remain solvent with individual PWSIDs. (Example: Coral Water Works is extending a transmission main to the Reef Water Works system that will allow the aging water treatment plant to be closed down. Coral Water Works will provide all of the water to the Reef Water Works distribution system under a purchase contract, however, Reef Water Works will remain in business as a distribution system only and will retain a PWSID number.)

**Points Received: 25**

### C. **Acquisition of a supplemental potable water supply**

**Points Received: 15**

### D. **Replacement or supplemental raw water supply**

**Points Received: 15**

### E. **Acquisition of an emergency potable water supply**

A PWS is responsible for ensuring, even in drought conditions, sufficient quantity and quality of raw and potable water supplies are available to meet demands. This section provides points to projects that are securing supplemental potable water supplies rather than constructing a new water treatment plant; or to projects looking to replace an existing raw water supply. This section also provides points to those utilities that protect public health by planning for emergencies through an interconnection with a neighboring utility.

**Points Received: 15**

#### RESTRICTIONS:

Reservoirs, dams, dam rehabilitation, and water rights are not eligible for funding from the DWSRF.

## II. PUBLIC HEALTH CRITERIA – TREATMENT

This category provides points to treatment projects that will provide improved compliance with the National Drinking Water Standards of the SDWA.

### A. Treatment Facilities

i) **Construction of a new water treatment plant (where one does not presently exist) or expansion of an existing plant**

New water treatment facilities or water treatment plant expansions are limited to 20 points unless a need for best available technology is demonstrated based on raw or finished water quality or other extenuating circumstances. Additional points may be applied under B, C, or D for such cases.

Examples include but are not limited to, the construction of a new water treatment plant or an expansion of an existing water works facility where it is unfeasible to purchase a supplemental supply from another PWS; construction of a new intake structure; or upgrade of intake pumps or any other treatment processes resulting in an increase in the production capacity of the plant, etc.

**Points Received: 20**

ii) **Rehabilitation and/or upgrade of the water treatment plant**

Water treatment plant rehabilitation projects are limited to 10 points unless the proposed project is needed to acquire or maintain compliance with the National Drinking Water Standards of the SDWA. In such cases, additional points may be applied under B, C, or D.

Examples may include, but are not limited to the functional replacement of treatment processes due to age/condition, the upgrade of any treatment process to meet drinking water standards with no increase in treatment capacity, etc.

**Points Received: 10**

iii) **Redundant processes/emergency power generators**

Redundant processes and/or emergency power generators at the treatment facilities.

**Points received: 10 for each unit**

### B. Treatment – Acute Public Health Risk

i) **Infrastructure options to meet Cryptosporidium removal/inactivation requirements**

Examples of treatment projects include, but are not limited to, installation of membrane technology, additional filtration, improvements to sedimentation basins such as softening or construction of a pre-sedimentation basin, ozone, UV, chlorine dioxide, etc.

**Points Received: 25**

ii) **Modifications to meet CT inactivation requirement**

Disinfection techniques need to comply with CT inactivation requirements of the Surface Water Treatment Rule and the Groundwater Rule. Examples of treatment projects include, but are not limited to, alternate disinfection feed points, baffling of clearwells, etc.

**Points Received: 20**

### C. Treatment – Chronic Public Health Risk

i) **Modifications to address disinfection byproducts requirements**

Examples of treatment projects include, but are not limited to, changing disinfectants, modification of disinfection feed points, Granular Activated Carbon (GAC), coagulation, etc.

**Points Received: 25**

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### ii) **Modifications to address VOC, IOC, SOC, radionuclide requirements**

Examples of treatment projects include, but are not limited to, aeration, improved coagulation, non-conventional treatments, air stripping, new chemical feed, etc.

**Points Received: 15**

### D. **Treatment- Infrastructure to address Secondary Contaminants**

Examples of treatment projects under II(d) to address Secondary Contaminants include, but are not limited to, water softening, sedimentation basin covers, corrosion control systems, green sand filters, new chemical feed system for manganese removal, etc.

**Points Received: 10**

#### RESTRICTIONS:

Points will be assigned to project components under B, C, and D where a need for the project can be adequately demonstrated. A history of non-compliance may be required for certain treatment applications in order to receive points. In some cases, specific monitoring must warrant the need for the project in order to receive points.

## III. PUBLIC HEALTH CRITERIA – DISTRIBUTION

This category provides points to distribution projects that will provide improved compliance with the National Drinking Water Standards of the SDWA.

### A. **Hydraulics/Storage**

Examples of projects under this category include waterline replacements, new water storage tanks or pump stations, and rehabilitation of existing storage tanks or pump stations. The applicant must be prepared to demonstrate the need for the project whether it be loss of pressure, inadequate storage, or significant water loss to support the need for the project. For waterline replacement projects, scores are applied based upon the number of roads that are affected. ***It is imperative*** road names be provided in the Project Profile to receive all applicable points.

#### i) **Replacement of inadequately sized waterlines, lines with leaks, breaks, or restrictive flows due to age, or lead or asbestos-cement pipe**

**Points Received: 10 for each road**

#### RESTRICTIONS:

Identify the primary reason for the replacement in the Project Profile. A waterline may in fact, need to be replaced because it is both undersized and made up of asbestos-cement. However, points can only be applied under one category (see example below). If a project consists of multiple replacements throughout an area, each alignment can be assigned 10 points for either inadequately sized lines; leaks, breaks or restrictive flows; or asbestos cement or lead waterlines.

*Example:*

*Project A consists of a county-wide waterline replacement project broken down as follows:*

i.	Replacement of 2,000 LF of undersized waterline along <b>Riley Road</b>	10 pts.
ii.	Replacement of 3,000 LF of undersized waterline along <b>Fair Road</b>	10 pts.
iii.	<u>Replacement of 1,000 LF of asbestos-cement waterline along <b>Oaks Rd.</b></u>	10 pts.
		30 pts.

*On the contrary, if a waterline is both undersized and is composed of asbestos-cement (within the same alignment), only 10 points could be applied, as follows:*

▪	Replacement of 2,000 LF of undersized waterline along KY Road	10 pts.
▪	<u>Replacement of 2,000 LF of asbestos-cement waterline along KY Road</u>	0 pts.
		10 pts.

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- ii) **Rehabilitation or replacement of a water storage tank**  
**Points Received: 30 for each tank**
- iii) **New water storage tank**  
**Points Received: 20 for each tank**
- iv) **New or rehabilitated pump station (not associated with a new tank)**  
**Points Received: 10 for each pump station**

### B. Finished Water Quality

- i) **Infrastructure to address inadequate turnover and disinfection byproducts (DBPs)**  
Examples include the installation of a water storage tank mixing system to address a DBP issue, or looping of waterlines to improve service. If unable to comply with the DBP Rule then information should be provided in the project profile to support the need.  
**Points Received: 20**
- ii) **Redundant equipment/emergency power generators**  
Provide redundancy or emergency power within the distribution system  
**Points Received: 10 for each unit**

### C. Extension of Service

This section applies points to waterline extension projects. The waterline extension must be for the use of existing households and to serve areas where existing potable water supplies such as wells or cisterns are contaminated or where there is insufficient financial and technical capability to maintain a compliant water supply system. Twenty points will be applied to a waterline extension project under this category for the first 10 households. Every 10 households thereafter will accumulate two additional points, to be added to the total score.

**Points Received: 20 up to 10 existing homes and  
2 for every additional 10 existing homes thereafter**

*Example:*

*Project A consists of a county-wide waterline extension project, extending approximately 40,000 LF of waterlines to 150 existing homes throughout the county.*

▪ <i>First 10 households</i>	<i>20 pts.</i>
▪ <i>140 remaining households (14*2pts=28pts)</i>	<i>28 pts.</i>
	<i>Total: 48 pts.</i>

#### RESTRICTIONS:

The DWSRF cannot fund waterline extension projects to primarily accommodate growth. The need must apply to at least 50 percent of the households potentially affected by the project.

## IV. SECURITY

### A. Measures taken at the water treatment plant facilities or within the distribution system

This category allows points to be applied to a project for measures taken at the physical location of the water treatment plant facilities or within the distribution system, with the intent to prevent, deter, and readily respond to terroristic acts. Examples include, but are not limited to, fencing, video surveillance of treatment and/or storage facilities, alarms, signs, lock gates, and radio intercom systems.

**Points Received: 5 for each component**

#### RESTRICTIONS:

Salaries for security personnel are not eligible for funding through the DWSRF.

## V. COMPLIANCE AND ENFORCEMENT

- A. **Entities with executed Court Orders or Agreed Orders**  
Project must achieve full or partial compliance with an Order or other enforcement action by addressing terms of the Order.  
**Points Received: 50**
- B. **Primary system has not received any SWDA Notices of Violation within the previous state fiscal year-July through June, i.e. July 2015 – June 2016)**  
**Points Received: 25**

## VI. PUBLIC WATER SYSTEM FINANCIAL NEED

- A. **Borrowers with a median household income (MHI) below 80 percent of the Commonwealth's MHI**  
As determined by the current American Community Survey (ACS) 5-Year Estimate  
**Points Received: 20**
- B. **Borrowers with a MHI between 80 and 100 percent of the Commonwealth's MHI**  
As determined by the current American Community Survey (ACS) 5-Year Estimate  
**Points Received: 10**

## VII. ASSET MANAGEMENT

- A. **System has an Asset Management Program or similar planning document**  
Points will be given if the system has a documented inventory of its treatment and distribution system assets and has analyzed the condition of each asset, including risks of failure. Also included must be anticipated dates of rehabilitation and ultimate replacements and the amount of revenues needed for rehabilitation or replacement of each asset.  
**Points Received: 20**  
  
To obtain points under this category, supporting documents, such as an asset inventory along with a capital improvement plan based off the inventory, must be uploaded into the WRIS. If WRIS is used as an inventory tool, indicate in the textbox.
- B. **System's monthly wastewater bill, based on 4,000 gallons, as a percentage of Median Household Income is:**  

Greater than or equal to 2%	<b>Points Received: 10</b>
Between 1 and 1.99%	<b>Points Received: 5</b>
Below 1%	<b>Points Received: 0</b>
- C. **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)**  
**Points Received: 10**

To obtain points under this category, supporting documents must be uploaded into the WRIS.

## VIII. SUSTAINABLE INFRASTRUCTURE

### A. Green Infrastructure

Green stormwater infrastructure includes a wide array of practices at multiple scales managing wet weather and maintaining and restoring natural hydrology by infiltration, evapotranspiration, and harvesting and reuse. 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 pavement, and cisterns.

**Points Received: 5 each with a maximum of 10**

*Examples:*

- *Pervious or porous pavement*
- *Bioretention*
- *Green roofs*
- *Rainwater harvesting/cisterns*
- *Gray water use*
- *Xeriscape*
- *Landscape conversion programs*
- *Retrofitting or replacing existing irrigation systems with moisture and rain sensing equipment*

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 soil-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. Green infrastructure projects that include pipes to collect stormwater may be justified as innovative environmental projects.

### B. 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.

**Points Received: 15 each with no maximum**

*Examples:*

- *Installing or retrofitting water efficient devices such as plumbing fixtures and appliances, for example: showerheads, toilets, urinals, and other plumbing devices*
- *Implementation of incentive programs to conserve water such as rebates*
- *Installing WaterSense labeled products (<https://www.epa.gov/watersense>)*

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- *Installing any type of water meter in previously unmetered areas if rate structures are based on metered use or includes backflow prevention devices if installed in conjunction with water meter.*
- *Replacing existing broken/malfunctioning water meters with Automatic Meter Reading systems (AMR), meters with built in leak detection, or backflow prevention devices if installed in conjunction with water meter replacement.*
- *Retrofitting/adding AMR capabilities or leak equipment to existing meters (not replacing the meter itself).*
- *Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment.*
- *Developing conservation plans/programs reasonably expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for additional capital investment.*
- *Recycling and water reuse projects that replace potable sources with non-potable sources such as gray water, condensate, and wastewater effluent reuse systems (where local codes allow the practice) and extra treatment costs and distribution pipes associated with water reuse.*
- *Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems, including moisture and rain sensing controllers.*
- *Projects that result from a water efficiency related assessments (such as water audits, leak detection studies, conservation plans, etc) as long as the assessments adhered to the standard industry practices referenced above.*
- *Distribution system leak detection equipment, portable or permanent.*
- *Automatic flushing systems (portable or permanent).*
- *Pressure reducing valves (PRVs).*
- *Internal plant water reuse (such as backwash water recycling).*
- *Water meter replacement with traditional water meters\**
- *Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks\**
- *Storage tank replacement/rehabilitation to reduce water loss\**
- *New water efficient landscape irrigation system (where there currently is not one).\**

Projects That Do Not Meet the Definition of Water Efficiency:

- Covering open, finished water reservoirs

### C. 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.

**Points Received: 15 each with no maximum**

*Examples:*

- *Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provide power to a utility (<http://www.epa.gov/cleanenergy>). Micro-hydroelectric projects involve capturing the energy from pipe flow.*
- *Utility-owned renewable energy projects can be located on-site or off-site, includes the portion of a publicly owned renewable energy project that serves the utility's energy needs, and must feed into the grid that the utility draws from and/or there is a direct connection.*
- *Utility 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 energy efficiency capital projects or in a reduction in demand to alleviate the need for additional capital investment.*

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- *Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)).\**
- *Pump refurbishment to optimize pump efficiency (such as replacing or trimming impellers if pumps have too much capacity, replacing damaged or worn wearing rings/seals/bearings, etc.).\**
- *Projects that result from an energy efficiency related assessments (such as energy audits, energy assessment studies, etc).\**
- *Projects that cost effectively eliminate pumps or pumping stations. \**
- *Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.\**
- *Upgrade of lighting to energy efficient sources (such as metal halide pulse start technologies, compact fluorescent, light emitting diode, etc).\**
- *Automated and remote control systems (SCADA) that achieve substantial energy savings (see AWWA M2 Instrumentation and Control).\**

*\*Denotes that a business case may be required*

Projects That Do Not Meet the Definition of Energy Efficiency:

- *Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency. (Note: replacing it with higher efficiency equipment requires a business case)*
- *Hydroelectric facilities, except micro-hydroelectric projects. Micro-hydroelectric projects involve capturing the energy from pipe flow.*

### D. 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.

**Points Received: 5 each with a maximum of 10**

*Examples:*

- *Total/integrated water resources management planning, or other planning framework where project life cycle costs (including infrastructure, energy consumption, and other operational costs) are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions.*
- *Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.*
- *Eligible source water protection planning, including periodic, updated, or more detailed source water delineation or assessment as part of a more comprehensive source water protection program; or source water monitoring (not compliance monitoring) and modeling as part of a more comprehensive source water protection program.*
- *Planning activities by a utility to prepare for adaptation to the long-term effects of climate change and/or extreme weather.*
- *Utility Sustainability Plan consistent with EPA's SRF 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), as long as it is being done for a facility which is eligible for DWSRF assistance.*
- *Source Water Protection Implementation Projects such as voluntary, incentive based source water protection measures, where the state primacy agency has determined that the use of such measures will reduce or preclude the need for treatment.*
- *Construction of US Building Council LEED certified buildings, or renovation of an existing building, owned by the utility, which is part of an eligible DWSRF project. All building costs are eligible, not just stormwater, water efficiency and energy efficiency related costs. Costs are not limited to the incremental additional costs associated with LEED certified buildings. Any level of certification (Platinum, Gold, Silver, Certified) is eligible.*

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- *Projects, or components of projects, that result from total/integrated water resources management planning (including climate change) that are DWSRF eligible.\**
- *Projects that significantly reduce or eliminate the use of chemicals in water 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.\**
- *Trenchless or low impact construction technology.\**
- *Using recycled materials or re-using materials on-site.\**
- *Educational activities and demonstration projects for water or energy efficiency (such as rain gardens). \**
- *Projects that achieve the goals/objectives of utility asset management plans.\**

*\*Denotes that a business case may be required*

Projects That Do Not Meet the Definition of Environmentally Innovative:

- Higher sea walls to protect water infrastructure facilities from sea level rise.
- Reflective roofs at water infrastructure facilities to combat heat island effect.

## IX. PROJECT READINESS

To be considered “project ready”, the borrower must have completed a majority of the planning phase and be ready to bid the project. All three of the criteria under this category must be met in order to receive the full 30 points.

**Note:** A full environmental review does not have to be finalized however the cross-cutter 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.

- A. Borrower has submitted complete technical plans to the Division of Water; and,**
- B. Borrower has conducted a full environmental review for all components of the project or has completed the cross-cutter scoping process (including eClearinghouse, US Fish and Wildlife Service, National Resources Conservation Service, U. S. Fish and Wildlife, and U. S. Army Corps of Engineers); and,**
- C. Borrower has received funding commitments from other funding sources; or the DWSRF is the sole source of funding.**  
**Points Received: 30**

Note: **Projects will *not be accepted* after the call for projects is closed.**

## Kentucky Priority System Guidance Document for Drinking Water

### DWSRF Ranking Criteria

I	Regionalization	Possible Points
A	Elimination of a Public Water System (PWS) through a merger or acquisition ( <i>Elimination of a PWSID</i> ).	50
B	Elimination of a water treatment plant through an interconnection	25
C	Acquisition of a supplemental potable water supply	15
D	Replacement or supplemental raw water source	15
E	Acquisition of an emergency potable water supply	15

II	Public Health Criteria – Treatment	Possible Points
A	<u>Treatment Facilities</u>	
	i) Construction of a new water treatment plant (where one does not presently exist) or expansion	20
	ii) Rehabilitation and/or upgrade of the water treatment plant	10
	iii) Redundant processes/ emergency power generators	10
B	<u>Treatment – Acute Public Health Risk</u>	
	i) Infrastructure options to meet Cryptosporidium removal/ inactivation requirements	25
	ii) Modifications to meet CT inactivation requirement	20
C	<u>Treatment – Chronic Public Health Risk</u>	
	i) Modifications to address disinfection byproducts requirements	25
	ii) Modifications to address VOC, IOC, SOC, radionuclide requirements	15
D	Treatment – Infrastructure to address Secondary Contaminants	10

III	Public Health Criteria – Distribution	Possible Points
A	<u>Hydraulics/Storage</u>	
	(i) Replacement of inadequately sized waterlines, lines with leaks, breaks, or restrictive flows due to age, or lead or asbestos-cement pipe	10
	(ii) Rehabilitation or replacement of a water storage tank	30
	(iii) New water storage tank	20
	(iv) New or rehabilitated pump station (not an appurtenance to a new tank)	10
B	<u>Finished Water Quality</u>	
	(i) Infrastructure to address inadequate turnover and disinfection byproducts	20
	(ii) Redundant equipment/emergency power generators	10
C	<u>Extension of Service</u> Waterline extensions to serve existing households with inadequate domestic water supplies such as contaminated wells or cisterns (Up to 10 existing homes)	20
	Two additional points for every additional 10 households thereafter	2

IV	Security	Possible Points
	Measures taken at the water treatment plant facilities or within the distribution system	5

V	Compliance and Enforcement	Possible Points
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A	Entities with executed Court Orders or Agreed Orders <i>(Project must address the terms of the Order)</i>	50
B	System has not received any Notices of Violation within the previous state fiscal year – July 2015-June 2016	25

VI	Public Water System Financial Need	Possible Points
A	Borrowers with a median household income (MHI) below 80 percent of the Commonwealth's MHI as determined by the current American Community Survey (ACS) 5-Year Estimate	20
B	Borrowers with a MHI between 80 and 100 percent of the Commonwealth's MHI as determined by the current ACS 5-Year Estimate	10

VII	Asset Management	Possible Points
A	System has an Asset Management Program or similar planning document	20
B	System's monthly water bill, based on 4,000 gallons, as a percentage of Median Household Income is:	
	Greater than or equal to 2.0%	10
	Between 1 and 1.99%	5
	Below 1%	0
C	System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure	10

VIII	Green Projects (See Green Project Reserve Guidance Document)	Possible Points
A	<p><u>Green Infrastructure</u> : 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:</p> <ul style="list-style-type: none"> <li>• Bioretention</li> <li>• Green streets</li> <li>• Green roofs</li> <li>• Permeable pavement</li> <li>• Cisterns</li> </ul>	5 each/10 maximum

## Kentucky Priority System Guidance Document for Drinking Water

B	<p><b><u>Water Efficiency:</u></b> 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:</p> <ul style="list-style-type: none"> <li>• Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals)</li> <li>• Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement)</li> <li>• Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention</li> <li>• Retrofitting/adding AMR capabilities or leak equipment to existing meters</li> <li>• Conducting water utility audits, leak detection studies, and water use efficiency baseline studies, which are reasonably expected to result in a capital project or in a reduction in demand to alleviate the need for additional capital investment</li> <li>• Developing conservation plans/programs reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment</li> <li>• 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)</li> <li>• Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems</li> <li>• Water meter replacement with traditional water meters *</li> <li>• Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks*</li> <li>• Storage tank replacement/rehabilitation to reduce water loss*</li> <li>• New water efficient landscape irrigation system, where there currently is not one*</li> </ul>	15 each with no maximum
C	<p><b><u>Energy Efficiency:</u></b> 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:</p> <ul style="list-style-type: none"> <li>• Renewable energy projects, which are part of a public health project, such as wind, solar, geothermal, and micro-hydroelectric that provides power to a utility</li> <li>• Utility-owned or publically-owned renewable energy projects</li> <li>• Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas</li> <li>• Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)*)</li> <li>• Pump refurbishment to optimize pump efficiency*</li> <li>• Projects that result from an energy efficient related assessment*</li> <li>• Projects that cost effectively eliminate pumps or pumping stations*</li> <li>• Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient*</li> <li>• Upgrade of lighting to energy efficient sources*</li> <li>• Automated and remote control systems (SCADA) that achieve substantial energy savings*</li> </ul>	15 each with no maximum

## Kentucky Priority System Guidance Document for Drinking Water

D	<p><b>Environmentally Innovative:</b> 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:</p> <ul style="list-style-type: none"> <li>• Total integrated water resources management planning, or other planning framework where project life cycle costs are minimized, which enables communities to adopt more efficient and cost-effective infrastructure solutions</li> <li>• Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity</li> <li>• Source water protection planning (delineation, monitoring, modeling)</li> <li>• Planning activities to prepare for adaptation to the long-term affects of climate change and/or extreme weather</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 as long as it is being done for an SRF eligible facility</li> <li>• Construction of US Building Council LEED certified buildings, or renovation of an existing building</li> <li>• Projects that significantly reduce or eliminate the use of chemicals in water treatment*</li> <li>• 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*</li> <li>• Trenchless or low impact construction technology*</li> <li>• Using recycled materials or re-using materials on-site*</li> <li>• Educational activities and demonstration projects for water or energy efficiency (such as rain gardens)*</li> <li>• Projects that achieve the goals/objectives of utility asset management plans*</li> </ul>	5 each/10 maximum
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\*Denotes that a business case may be required.

IX	Project Readiness	Possible Points
	<p>A. Borrower has submitted complete technical plans and specifications to the Division of Water; and,</p> <p>B. Borrower has conducted a full environmental review for all components of the project or has completed the cross-cutter scoping process (including eClearinghouse, USFWS, NRCS, and USACoE); and,</p> <p>C. Borrower has received funding commitments from other funding sources, or the DWSRF is the sole source of funding</p>	30

## APPENDIX D

### SET-ASIDE WORK PLANS

**KENTUCKY DIVISION OF WATER  
ENERGY AND ENVIRONMENT CABINET**

**2019 WORKPLANS**

	%	FFY 2019	Expended by:
Grant Amount \$:		\$ 18,132,000	
<b>DWSRF Program Admin(4% max available):</b>		\$ 725,280	
DOW (max 3%)	<b>3</b>	\$ 543,960	<b>January 2020</b>
KIA (1%)	<b>1</b>	\$ 181,320	
<b>Subtotal Amount:</b>		<b>\$ 543,960</b>	
<b>State Program Mgt. (10% max available):</b>		\$ 1,813,200	
<b>Supplement PWSS Program</b>	<b>10</b>	<b>\$ 1,813,200</b>	
DOW Personnel		\$ 1,604,571	
Contractual		\$ 208,629	
<b>Subtotal Amount:</b>		<b>\$ 1,813,200</b>	<b>December 2019</b>
<b>Small Systems Tech. Assist (2% max):</b>		\$ 362,640	
DOW Personnel	<b>2</b>	\$ 362,640	
<b>Subtotal Amount:</b>		<b>\$ 362,640</b>	<b>January 2020</b>
<b>State/Local Assist (up to 15%-10% max):</b>		\$ 2,719,800	
<b>Capacity Development - TMF Assistance</b>	<b>10</b>	<b>\$ 1,813,200</b>	<b>September 2020</b>
DOW Personnel		\$ 1,240,200	
Travel		\$ 30,000	
Contracts		\$ 246,000	
Dev/Implement Operator Cert Program		\$ 297,000	<b>September 2020</b>
<b>Source Water Assessment Program:</b>	<b>2</b>	<b>\$ 362,640</b>	<b>June 2021</b>
DOW Personnel		\$ 142,640	
Contracts		\$ 220,000	
<b>Wellhead Protection Program</b>	<b>3</b>	<b>\$ 543,960</b>	<b>August 2020</b>
DOW Personnel		\$ 543,960	
Equipment		\$ -	
Travel		\$ -	
Contracts		\$ -	
<b>Subtotal Amount:</b>		<b>\$ 2,719,800</b>	
<b>Total Set Aside Amount:</b>	<b>31</b>	<b>\$ 5,620,920</b>	
Total DOW Set Aside Amount:	30	\$ 5,439,600	
Total KIA Set Aside Amount:	1	\$ 181,320	

## **Supplement to the Public Water System Supervision Program State Program Management**

### **Introduction**

Kentucky's Public Water System Supervision Program (PWSS) conducts compliance determination and evaluation of public water systems, review of plans and specifications for public water system treatment and distribution facilities, and technical assistance.

The major activities projected for the PWSS program include the compliance activities associated with all current Safe Drinking Water Act (SDWA), including the Revised Total Coliform Rule (RTCR). The implementation of the SDWA, along with special primacy requirements, continues to impact Kentucky's staffing resources.

The Division of Water (DOW) will use the PWSS Supplement funds to provide additional resources for:

- Primacy package and state regulation development;
- Compliance determination and evaluation of public water systems;
- Sanitary surveys and inspections;
- Safe Drinking Water Information System (SDWIS) impacts;
- Drinking water laboratory certification;
- Review of plans and specifications for public water system treatment and distribution facilities, including water availability;
- Technical, managerial, and financial assistance to all public water systems as needed;
- Training for the entire drinking water industry upon request; and
- Planning and coordination of various DOW programs related to the SDWA.

### **Compliance Activities**

The SDWA regulations require continued monitoring, evaluation, and reporting by both the public water systems and the primacy agency. The existing SDWIS database is nearing the end of its functionality and will be undergoing a major overhaul at the federal level. Additional resources may be required to coordinate with USEPA and their contractors in the implementation of the new, updated database. As of FFY 2010 enforcement activities and appropriate remedial measures are processed based on the USEPA Enforcement Referral Policy (ERP). DOW is also responsible for the Drinking Water Laboratory Certification program, conducting chemistry and Cryptosporidium audits, reviewing microbiology audits, and program coordination.

State Program Management funds will be used to continue refinement of the sanitary survey process and further development of such initiatives as water audits and drinking water sanctions, in coordination with the Drinking Water Capacity Development Program.

### **Plans, Specifications and Water Quantity Review Activities**

The DOW reviews plans and specifications for drinking water treatment and distribution facilities for compliance with federal and state drinking water standards. The technical review process is one of continuous improvement and is modified and enhanced as necessary to implement new strategies and initiatives. Activities to be conducted include:

- Review and approval of drinking water plans and specifications to maintain/obtain compliance with the SDWA,
- Water availability assessments in conjunction with the DOW Watershed Management program,
- On-site construction inspections of infrastructure projects funded by the Drinking Water State Revolving Funds, and
- Development of standard operating procedures for the program.

### **Technical Assistance Program Activities**

The Drinking Water program participates in the Area-Wide Optimization Program (AWOP) with the USEPA. The program strives to optimize the treatment, maintenance, administration, and design of surface water treatment plants. The initiative includes:

- Developing evaluation processes to insure the best possible water quality is provided to all customers by each water system;
- Providing technical assistance to surface water systems to enable them to meet, not only the regulatory turbidity level, but also the more stringent turbidity goals of the AWOP; and
- Increasing participation in similar AWOP-based program for disinfection by-product control.

In addition, the Technical Assistance program continues to train DOW's staff in the goals, objectives, and technical aspects of water treatment plant and distribution system optimization. Based upon the same performance criteria, all surface water treatment systems are evaluated by a self-evaluation program, by DOW's Field Office personnel on-site, or by Technical Assistance personnel on-site. Technical Assistance staff also participates in sanitary surveys and limited emergency response.

## Planning and Coordination Activities

The development of partnerships among various state programs is necessary to efficiently and effectively implement the SDWA. Kentucky's diverse programs for drinking water, groundwater, water quantity, water quality, enforcement, watershed, operator certification, and various other programs are required to coordinate their activities and products to support and enhance each other with the common goal of sufficient quantity and quality of potable water for all the citizens of the Commonwealth of Kentucky. Interagency coordination occurs with other state agencies including the Public Service Commission, Division of Plumbing, and Division of Public Health and Safety as well as technical assistance providers and professional organizations.

## Milestones

Surface water systems evaluated for optimization annually	Ongoing
Meet conditions of the USEPA Region 4 work plans allowing Kentucky to retain primacy for SDWA regulatory authority	Ongoing
Administer the Laboratory Certification Program	Ongoing
Evaluate the impact of implementing SDWIS Prime	Ongoing
Incorporate the Enforcement Referral Policy/Targeting Tool into capacity development and technical assistance activities	Ongoing
Evaluate/modify the Capacity Development Program to improve effectiveness and efficiency in the provision of TMF assistance	Ongoing

## Deliverables

Compliance monitoring, evaluation, and reporting for SDWA standards with inclusion in State regulations	Ongoing
Plans and specifications review and approval based on SDWA, Ten States Standards, approved technologies, and standard operational procedures	Ongoing
Water availability assessments	Ongoing
Maintain latest version of the SDWIS database while evaluating SDWIS Prime	Ongoing
Surface and groundwater treatment plant evaluations for optimizing treatment processes	Ongoing
Updating Standard Operating Procedures for the planning and coordination of Division of Water programs to effectively and efficiently implement the SDWA requirements	Ongoing
Training to all interested drinking water industry stakeholders regarding new rules, implementation issues, and other miscellaneous professional updates	Ongoing
Coordination with state agencies and external partners to resolve drinking water issues of common concerns	Ongoing
Oversee the Laboratory Certification Program	Ongoing

## Budget

The following funds were set-aside in the 2019 DWSRF Capitalization Grants to supplement the Public Water System Supervision Program under State Program Management.

<b>Category:</b>	<b>Amount:</b>
Personnel	\$ 1,323,445
Contractual	\$ 208,629
<b>Total Direct Charges</b>	<b>\$ 1,532,074</b>
Indirect Charges (42.76%)	\$ 281,126
<b>Total</b>	<b>\$ 1,813,200</b>

### Outlay Strategy:

#### Personnel:

\$1,323,445: The average monthly payroll for employees working on this initiative is \$300,000 per month. These funds are projected to be expended August 2019 through December 2019.

#### Contractual:

\$208,629: The MSU Microbiology Lab contract provides funding for the state microbiology primacy lab as well as emergency analysis. The Lab Auditor contract provides funding for a contract employee conducting drinking water microbiology audits.

## Small System Technical Assistance Funds

### Introduction

The Safe Drinking Water Act regulations continue to affect small systems serving less than 10,000 in population. These rules lowered the Maximum Contaminant Levels (MCL) for total trihalomethanes, added new MCLs for haloacetic acids, chlorite and bromate, added Maximum Residual Disinfectant Limits (MRDL) for free chlorine, total chlorine and chlorine dioxide, lowered the Treatment Technique (TT) limits for turbidity and added individual filter effluent monitoring requirements. The Groundwater Rule had an impact on Kentucky's small drinking water systems as the majority of the very small systems with treatment plants use groundwater sources. The Revised Total Coliform Rule (RTCR) also affects small systems as a result of the tiered assessment process.

Kentucky has approximately 308 Public Water Systems impacted by the Surface Water Treatment rules. There are 139 providers (two of which are ground water under direct influence of surface water), and 169 purchasers. There are also 126 groundwater systems (103 providers and 23 purchasers) that must comply with the Groundwater Rule. This has resulted in a total of 192 purchasing systems that must comply with the Disinfection Byproduct regulations, sanitary survey requirements, with limited options for resolving distribution issues. In addition, the Revised Total Coliform Rule also applies to all small water systems. The set-aside funding under this category will be used to provide compliance/based assistance by DOW staff to small systems throughout the state.

### Milestones

Utilize the Enforcement Targeting Tool (ETT) to prioritize technical assistance activities.	Ongoing
Provide training and guidance on disinfection by-products (DBP), turbidity, and the RTCR through one-on-one utility and group presentations.	Ongoing
Conduct on-site water plant and distribution evaluations for DBP, turbidity, and RTCR compliance and optimization.	Ongoing
Involve small water systems in the Area-Wide Optimization Program (AWOP) efforts toward turbidity optimization through Comprehensive Performance Evaluations (CPE).	Ongoing
Involve small water systems in the AWOP efforts toward turbidity optimization through Performance Based Training (PBT).	Ongoing
Involve small systems in the AWOP efforts towards disinfection by-product optimization.	Ongoing
Provide training to the DOW staff on treatment, regulations, and inspections.	Ongoing

## Deliverables

Training and guidance for disinfection by-products (DBP) and turbidity	Ongoing
On-site water plant evaluations for DBPs and turbidity	Ongoing
Conduct 1 microbial/turbidity CPE per year	Ongoing
Performance Based Training (PBT) through the Area-Wide Optimization Program (AWOP) for microbial/turbidity	Ongoing
Performance Based Training (PBT) through the Area-Wide Optimization Program (AWOP) for DBPs	Ongoing
Conduct 1 DBP/CPE evaluation for small water system	Ongoing
Attend AWOP training and/or workshops	When Available

## Budget

The following funds were set aside in the 2019 DWSRF Capitalization Grant in support of the Small System Technical Assistance Program.

<b>Category:</b>	<b>Amount:</b>
Personnel	\$ 299,104
<b>Total Direct Charges</b>	<b>\$ 299,104</b>
Indirect Charges (42.76%)	\$ 63,536
<b>Total</b>	<b>\$ 362,640</b>

## Outlay Strategy:

Personnel:

\$299,104: The average monthly payroll for employees working on this initiative is \$58,000 per month. These funds are projected to be expended July 2019 through February 2020.

## Capacity Development Program

### Introduction

The Capacity Development Program is an initiative of the 1996 Amendments to the Safe Drinking Water Act (SDWA) that encompasses the technical, managerial, and financial (TMF) aspects of public water system (PWS) operation. The U.S. Congress recognized treatment and distribution of water for human consumption is an increasingly complex and expensive undertaking. Many PWSs do not have adequate TMF resources to continue to comply with requirements of the SDWA. Kentucky's Capacity Development Strategy is designed as a planning tool to identify PWSs with TMF related problems, address deficiencies, and determine how the drinking water needs of those systems' customers can best be met.

### Review of Capacity Development Strategy

Kentucky's current Capacity Development Strategy was accepted by USEPA in 2009. The major objectives addressed by the strategy are:

- Prioritize systems most in need of improving capacity;
- Identify the factors that encourage or impair the capacity of water systems;
- Use the authority and resources of the SDWA to enhance technical, managerial, and financial capacity;
- Establish a baseline and measure the capacity improvements of systems in the state; and
- Involve stakeholders in Kentucky's efforts to improve drinking water system capacity.

**Note:** The Safe Drinking Water Act was amended by the passage of the America's Water Infrastructure Act in October, 2018. Due to these changes, Kentucky's Capacity Development Strategy will need to be amended to include aspects of asset management.

### Milestones and Deliverables

Submit annual Capacity Development Report to USEPA Region 4	Annually
Continue to conduct TMF evaluation of PWSs through the Sanitary Survey process	Ongoing
Develop guidance documents and tools to assist small public water systems in maintaining TMF capacity	Ongoing
Continue the review of the Sanitary Survey process; revise as necessary to improve effectiveness and efficiency	Ongoing
Develop a tool to rate and prioritize PWSs as the basis for developing a Drinking Water Action Plan to enhance PWS compliance with the SDWA.	Spring 2020
Use the Drinking Water Action Plan to review and revise the DOW Capacity Development Strategy with submittal to USEPA EPA Region 4	Ongoing
Update and develop the Sanitary Survey form with the capability for data extraction	Ongoing

## Capacity Development Program Activities

Sanitary Survey and assistance activities continue to be a prime focus of the overall Capacity Development Program. The DOW staff has worked to develop a variety of guidance materials to assist PWSs in efforts to improve capacity.

A tool has been developed to rate and prioritize PWSs as a basis for implementing a Drinking Water Action Plan. Data obtained from the Sanitary Survey, compliance and field monitoring, infrastructure, and other stakeholders will be incorporated into the tool and used to assess the state of the industry. The rating index and plan will provide a basis for prioritizing and implementing future infrastructure, technical assistance, and training needs for PWSs.

## Budget

The following funds were set aside in the 2019 DWSRF Capitalization Grant in support of Capacity Development efforts.

<b>Category:</b>	<b>Amount:</b>
Personnel	\$ 1,022,914
Travel	\$ 30,000
Operator Certification*	\$ 297,000
Contractual	\$ 246,000
<b>Total Direct Charges</b>	<b>\$ 1,595,914</b>
Indirect Charges (42.76%)	\$ 217,286
<b>Total</b>	<b>\$ 1,813,200</b>

\*See Operator Certification workplan for details

## Outlay Strategy:

Personnel:

\$1,022,914: The average monthly payroll for employees working on this initiative is \$115,000 per month. These funds are projected to be expended December 2019 through September 2020.

Travel:

\$30,000: The Division of Water staff will need to remain current with regard to the technical, managerial, and financial aspects of public water systems. Our staff plans to attend:

- KRWA Annual and Management Conferences
- Council of Infrastructure Financing Authorities Conference
- USEPA Data Management Conference
- Association of Safe Drinking Water Administrators
- KY-TN Water Professionals Conference
- USEPA State Water Directors meetings

- USEPA Drinking Water Lab Auditor Training/Refresher Training
- TNI Auditor Training
- NELAC Conference
- USEPA Region 4 State Laboratory Manager/Assessor Meeting
- Area-Wide Optimization Program Meetings
- Area-Wide Optimization Program Annual Meeting
- Kentucky Water & Wastewater Operators' Association Conference and meetings
- Kentucky Water Resources Research Institute
- Out-of-state CPEs/PBTs
- Groundwater Protection Council
- National Groundwater Association
- Midwest Groundwater Council
- Geological Society of America
- American Institute of Professional Geologists/KY Society for Professional Geologists
- Drinking Water Infrastructure Needs Survey meetings

All travel requests will include registration, lodging, per diem, and transportation costs.

Contractual:

\$246,000: Assistance for Small Water Systems program will go toward providing managerial, financial, and technical assistance.

## Operator Certification Program

### Introduction

The Operator Certification Program was developed and implemented in accordance with KRS223.160 through 223.220. KRS 224.10-110 directs the Cabinet to enforce administrative regulations adopted by the Secretary for the regulation and control of the purification of water for public and semipublic use and for the certification of water plant operators. The USEPA approved the state's program in February of 2001.

There are approximately 439 public water systems in Kentucky. The public water systems are classified into a primary series of I, II, III, and IV according to design capacity of the treatment plant and into a secondary series of A and B based on the type of filtration used in the treatment process. A primary series of I, II, III, and IV is also used for classification of the distribution portion of the system and is based on the number of people served. All public water systems must be operated with a minimal number of state certified operators in direct responsible charge. Such individuals must possess a current drinking water treatment, distribution, and/or bottled water certification for the classification level of the system under their charge, or possess one of a higher level in the appropriate series. Operators acquire these certifications by demonstrating fulfillment of specific minimum education and experience requirements and by passing a state administered examination. Once acquired, certifications must be renewed every two years. In order to renew these certificates, a specified number of continuing education hours must be completed by the certified operator.

The Division of Compliance Assistance (DCA) will use these funds to fund a portion of the costs to administer the drinking water operator certification program in the DCA. These moneys will fund administrative and technical staff within DCA, who will provide drinking water certification related services to operators of these public water systems.

### Operator Certification Program Activities

The Operator Certification Program staff processes all applications and other forms related to registration of drinking water operators for certification exams and for renewal of previously earned certifications. They develop exams for each classification, administer the exams around the state, score the exams, and issue the certificates and/or letters with the results of the test. Classroom instruction is provided around the state to aid operators in preparation for exams and to help them acquire continued education credits necessary for certification renewal. Records are maintained on each operator. Certification efforts are designed to help protect public safety and health.

### Deliverables

Review and process operator applications for certification testing.	On-going
Develop new questions for the exam question banks	On-going
Track operator training hours for continuing education credit toward certificate renewal	On-going

Update operator information in the department's database.	On-going
Produce and distribute operator certificates and wallet cards.	On-going
Provide certification training and administer certification exams.	On-going
Develop training materials and/or update existing materials.	On-going

Provide administrative support to the Kentucky Board of Certification of Water Treatment and Distribution System Operators	Monthly
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Update existing certification exams as needed.	Annually
Develop new certification exams as needed.	Annually
Develop a testing and training schedule for operators.	Annually

## Budget

The following funds were set aside in the 2019 DWSRF Capitalization grant in support of the Operator Certification Program.

Category:	Amount:
Personnel	\$ 244,965
<b>Total Direct Charges</b>	<b>\$ 244,965</b>
Indirect Charges (36.21%)	\$ 52,035
<b>Total</b>	<b>\$ 297,000</b>

## Source Water Assessment Program

### Introduction

Kentucky has approximately 450 public water systems with 30% served by groundwater sources and 70% by surface water sources. Wellhead assessments are developed using a community-based planning team attached to the public water system. Surface water source water assessments are developed by regional planning agencies (Area Development Districts) with oversight by planning councils that include county, city, and water system representatives.

### Source Water Assessment Activities

Integral to source water protection is the knowledge of stream flow. Knowledge of flow, both current and historical, provides the necessary information for permitted withdrawals and projecting future availability. The network also provides flow data that can be used for water withdrawals, TMDLs, waste load allocations, drought and flood mitigation and other source water protection activities. The United States Geological Survey (USGS) maintains flow gages on the major rivers and lakes in Kentucky but has not been able to fully support them in needed locations.

The Division of Water will use 2019 Source Water Assessment (SWA) set-aside funds for a contract to operate and maintain forty two (42) current gaging stations and one (1) water quality station.

### Milestones

Physical site location and construction of gaging platform	
Installation of equipment;	
Development of gage rating curves; and	
Full on-line service.	

### Deliverables

Implementation of routine stream gage operations and maintenance (such as rating curve calibrations and equipment and satellite uplink)	Ongoing
Stream flow data and associated products available on the USGS website.	Ongoing

## Budget

The 2019 Source Water Assessment Program funds were set-aside from the State and Local Assistance Program.

<b>Category:</b>	<b>Amount:</b>
Personnel	\$ 117,649
Contractual	\$ 220,000
<b>Total Direct Charges</b>	<b>\$ 337,649</b>
Indirect Charges (42.76%)	\$ 24,991
<b>Total</b>	<b>\$ 362,640</b>

## Outlay Strategy

Personnel:

\$117,649: The average monthly payroll for employees working on this initiative is \$10,000 per month. These funds are projected to be expended July 2019 through June 2020.

Contractual:

\$220,000: The Division of Water has entered into an agreement with the United States Geological Survey (USGS). The USGS will maintain forty-two (42) gauging stations and one (1) water quality station. These funds will be expended by June 2021.

## **Wellhead Protection Program**

### **Introduction**

The Division of Water (DOW) implemented the Wellhead Protection (WHP) program in 1993 after its approval by the U.S. Environmental Protection Agency. This program is administered through Kentucky's water supply planning regulations (401 KAR 4:220). The Kentucky WHP program is a community-based pollution prevention program designed to protect the quality of groundwater utilized for public drinking water supplies. The WHP plans are to be incorporated in the applicable County Water Supply Plan. The Division's Watershed Management Branch is responsible for providing information and assistance to public water systems (PWS) and communities conducting wellhead protection, and for the review and approval of WHP plans.

There are currently 114 PWSs in Kentucky reliant wholly or in part on groundwater that are required to have a WHP plan. These WHP plans will be completed by PWSs and the local communities, with assistance from the Division, local and regional planning agencies (e.g. Area Development Districts), and the Kentucky Rural Water Association (KRWA).

The Division will use money set-aside from the Drinking Water Supply Revolving Fund (DWSRF) to provide technical assistance, programmatic guidance, and data management assistance to communities developing WHP plans. The Division will assist in development of each WHP plan, and will review all WHP plans submitted for incorporation in the county water supply plan.

### **Wellhead Protection Program Activities**

The Kentucky WHP program intends to complete Phase I & II WHP plans for all new PWSs using groundwater and to complete 5-year WHP plan updates for all PWSs scheduled to update their plans. The Kentucky WHP program will assist PWSs in completing required 5-year updates to the WHP plans with an emphasis on developing and implementing management and protection strategies within the WHP areas. In addition, groundwater under the direct influence (GUDI) determinations will be conducted and/or reviewed.

The Division provides technical and programmatic assistance to communities, water suppliers, and regional planners involved in developing WHP plans. This assistance includes: providing written guidance to communities; conducting community outreach program coordination; providing individual consultation to water suppliers and local and regional planners; delineating WHP areas; conducting limited monitoring of groundwater sources, sponsoring technical workshops for wellhead protection; and providing maps, technical documents, educational information, and data to be included in WHP plans. The Division will also review all implementation schedules and WHP plans for approval.

The Division will provide technical assistance and programmatic guidance to public water suppliers. The Division will assist in coordinating the WHP activities between local communities

and water systems, regulatory agencies, technical assistance outlets, volunteer organizations (including local citizens), local planning councils, and regional planning agencies.

The Division will provide technical assistance and programmatic guidance to public water suppliers conducting WHP plan 5-year updates, including updating the plan to incorporate changes such as delineation of new source areas, updating contaminant source inventories, and updating the susceptibility analysis. The Division will focus on the development and implementation of management and protection strategies in the 5-year updates.

Delineations of WHP areas and Contaminant Source Inventory data for all WHP areas in Kentucky will be maintained in GIS format for use as tool a for internal DEP programs (e.g. UST, RCRA, Solid Waste, KPDES, etc.), and will be made available to USEPA, regional field offices, emergency response officials, local community officials and PWSs, and the general public on the Kentucky Geography Network.

Scheduled public meetings are a required element of the WHP plan. Technical and programmatic assistance will be provided by the DOW at public meetings as requested by local communities, PWSs, and planning agencies. Programmatic focus will be on the completion of all five-year updates that will be due in 2019, as well as placement of Water Supply Protection Area signs in key areas around WHP areas.

## **Activities**

- Develop WHP plans with new PWSs, or those systems newly using groundwater in the 5-year update cycle
- Develop WHP plans with PWSs in the 5-year update cycle
- Work with communities to develop and implement management strategies for the WHP area
- Work with Kentucky Rural Water Association (KRWA) to coordinate their WHP activities and align these activities with the programmatic goals of the Division.
- Review wellhead plans submitted by KRWA
- Conduct fieldwork to assist PWSs with problems and issues related to groundwater quality and quantity
- Update GIS coverage of WHP areas, as delineated, and any changes which may occur in the 5-year update cycle
- Update contaminant source inventory (CSI) coverage for WHP areas in a GIS format to be used in education and planning processes.
- Work with the Groundwater Protection Plan (GPP) program to identify sites in WHP areas that are required to have a GPP

- Conduct GPP program inspections in WHP areas and provide technical assistance to businesses and individuals in developing and implementing effective GPPs
- Work with PWSs and the DOW's drinking water program to determine GUDI status on systems using groundwater, as necessary
- Report to USEPA on WHP activities
- Conduct public education regarding groundwater protection and WHP issues at public meetings, science fairs, schools, and other venues
- Participate in local, regional, and national meetings dealing with wellhead protection and other source water protection issues
- Sample raw water quality at several PWSs reliant on groundwater and developing or implementing WHP plans
- Interpret analytical results and discuss with operators, especially regarding naturally-occurring and nonpoint source pollution threats to groundwater quality
- Interpret water quality in regard to current and potential land use, as well as zone-of-influence and time-of-travel studies
- Incorporate water quality results into appropriate statewide reports
- Forward analytical data to the Groundwater Data Repository at UK

### **Deliverables**

- All PWSs dependent on groundwater will have an approved WHP plan. For those systems scheduled to revisit their WHP plan, a 5-year update will be completed and approved by the Division.
- All WHP areas in Kentucky will be delineated, digitally mapped, and will reside in a GIS-compatible database, and will be available to USEPA, internal DEP programs (e.g. UST, RCRA, solid Waste), regional field offices, emergency response officials, local community officials and PWSs, and the general public through the Kentucky Geography Network.
- All significant potential contaminant sources within delineated WHP areas will be identified and this information will reside in a GIS-compatible database.

## Budget

The following funds are set-aside in the 2019 DWSRF Capitalization Grant in support of the Wellhead Protection Program.

<b>Category:</b>	<b>Amount:</b>
Personnel	\$ 448,657
<b>Total Direct Charges</b>	<b>\$ 448,657</b>
Indirect Charges (42.76%)	\$ 95,303
<b>Total</b>	<b>\$ 543,960</b>

## Outlay Strategy

Personnel:

\$448,657: The average monthly payroll for employees working on this initiative is \$45,000 per month. These funds are projected to be expended August 2019 through August 2020.

# APPENDIX E

## PUBLIC COMMENT

## Comment:

Mayor Edward Bryant submitted the following email:

Cave Run Water Commission has been invited to apply for a 2020 DWSRF loan; however in the 2020 DWSRF Project Priority List the Service Area MHI is not listed. We understand that this is because Cave Run Water Commission serves wholesale water to the City of Frenchburg, the City of Jeffersonville, and Morgan County Water District and does not have distribution lines to residential, commercial, institution, or industrial customers. We would like for Kentucky Infrastructure Authority to consider the MHI of the systems served by Cave Run Water Commission to determine the financial terms of the loan for the proposed project (F20-21; WX21165025).

## Response:

Staff of the Kentucky Infrastructure Authority reviewed the service area Median Household Income for the Cave Run Water Commission as requested. It was determined that the Cave Run Water Commission project qualifies for the Disadvantaged Community Rate of 0.5% because the weighted MHI is determined to be \$35,325.08 for this funding cycle. The analysis is as follows:

Water Utility	MHI	Direct Service (households)	Weight	Weighted MHI
City of Frenchburg	\$36,132	3,387	122,379,084	
City of Jeffersonville	\$38,957	2,021	78,732,097	
Morgan County Water District	\$32,970	4,109	134,865,610	
TOTAL:		9,511	335,976,791	\$35,325.08

Mayor Bryant was sent an email on July 22, 2019.