DRINKING WATER STATE REVOLVING FUND

State Fiscal Year 2022 Intended Use Plan

COMMONWEALTH OF KENTUCKY

Prepared by the

KENTUCKY INFRASTRUCTURE AUTHORITY
&
ENERGY AND ENVIRONMENT CABINET

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INTRODUCTION

The 2022 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 2022 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 Further Consolidated Appropriations Act, 2020 (Pub. L. 116-94, December 20, 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. One hundred ten projects were considered for funding from the DWSRF. The total amount requested is approximately $237 million. The total project need from all funding sources is nearly $278 million. The requests are primarily to fund construction but include 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 these 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 2021 Capitalization Grant, which is the 2021 Federal Fiscal Year (FFY) of October 1, 2021 through September 30, 2022. This IUP identifies how the funds available to Kentucky's DWSRF will be used during the 2022 state fiscal year (SFY) of July 1, 2021 through June 30, 2022.

The IUP will identify how the funds available to Kentucky's DWSRF will be used during each SFY to support the goals of the DWSRF. The 2022 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 273 drinking water infrastructure projects (and increases), totaling more than $617 million (through April, 2021).

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 2021 Capitalization Grant requires that at least 6 percent, or $1,087,620, up to a maximum of 35 percent, $6,344,450 be provided as additional subsidization for state-defined disadvantaged communities.

An additional Congressional subsidization amount of 14 percent, $2,540,160 is required to be provided as authorized by the 2021 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 2022 the total amount of additional subsidization is approximately twenty-nine percent or $5,229,210.

Fifty percent of the loan amount, up to a maximum of $1.0 million, may be offered as principal forgiveness to projects that qualify for the lowest non-standard interest rate and have an affordability index greater than 1.00. 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 8 projects being invited to submit a loan application that includes principal forgiveness in order of their affordability index.

KIA Loan Number	Applicant	Invited Loan Amount	Last Rate Adjustment	Principal Forgiveness Amount	Affordability Index
F22-002	Grayson County Water District	$7,231,000	7/4/2015	$1,000,000	1.20%
F22-008	Estill County Water District #1	$2,000,000	11/17/2019	$1,000,000	1.66%
F22-010	Monroe County Water District	$200,000	10/1/2017	$100,000	1.34%
F22-017	Knox County Utility Commission	$1,193,000	7/22/2020	$596,500	2.47%
F22-020	Letcher County Water & Sewer District	$3,045,000	3/23/2020	$1,000,000	1.76%
F22-021	Providence, City of	$3,196,000	7/1/2013	$1,000,000	1.01%
F22-024	La Center, City of	$250,000	1/1/2011	$125,000	1.13%
F22-027	Butler, City of	$615,420	7/1/2019	$307,710	1.42%
F22-029	La Center, City of	$200,000	1/1/2011	$100,000	1.13%

The last rate adjustment for two utilities is prior to 2014. 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, WRRDA amended the CWA to include permanent requirements for the use of American iron and steel products in Clean Water SRF projects. The America's Water Infrastructure Act of 2018 extends the provision for DWSRF projects through FFY 2023. 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*. This a the Federal requirement, however, KIA requires all borrowers to complete an annual audit for the life of the loan.

DRINKING WATER STATE REVOLVING FUND GOALS

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.
Goal #7: Increase inspection pace and achieve at least two inspections per project; one at 50% completion and the other at 100% completion.
Goal #8: Improve the pace of the program by identifying tasks to commit more available funds in the current fiscal year.

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.
Goal #4: Analyze and implement recommendations from the Infrastructure Task Force.
Goal #5: Establish a relationship with other funding agencies to coordinate project funding with multiple resources.
Goal #6: Identify priority watershed reach out to the municipalities for project development and funding assistance.

PROJECT PRIORITY LIST

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 are invited to submit DWSRF project information via the WRIS. The 2022 Call for Projects occurred September 15, 2020 through December 4, 2020. 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.

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 used 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 2022 Project Priority List (Appendix A) shows that Kentucky has sufficient eligible projects to meet the binding commitment requirements of the FFY 2021 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. (Noted in a separate table under Additional Subsidization above).
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 2023 IUP process will begin September 22, 2021 with the annual Call for Projects and will conclude in December 15, 2021 for projects to be considered in the SFY 2023 funding cycle. The following schedule is tentative:

2023 Call for Projects	September 22, 2021 – December 15, 2021
Creation of Project Priority List	January 1, 2022 - March 31, 2022
Public Notice Period for IUP	May 2, 2022 - June 1, 2022
Finalize 2023 IUP and send to USEPA	Prior to June 30, 2022

Email notifications will be sent in September 2021 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

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 projects for small systems of the total 30 projects invited in the first round.

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Utility Population
4	340	F22-004	WX21069038	Western Fleming County Water District	Western Fleming Water District-Phase 2 AC Line Replacement	$1,593,000	$843,000	2,867
6	315	F22-006	WX21169037	Edmonton, City of	Cast Iron Pipe Replacement and Hydrant Installation	$3,000,000	$3,000,000	7,192
8	270	F22-008	WX21065010	Estill County Water District #1	ECWD - Phase 12 System Improvements	$2,000,000	$2,000,000	9,378
9	260	F22-009	WX21107059	Nortonville, City of	Nortonville Waterline Replacement Project	$2,292,200	$2,292,200	2,130
10	255	F22-010	WX21171039	Monroe County Water District	Monroe County Water District Improvements - Water Storage Tanks	$200,000	$200,000	7,944
11	210	F22-011	WX21133065	Whitesburg, City of	Waterline Replacement Phase 1	$1,660,000	$1,660,000	3,203
13	200	F22-013	WX21213046	Simpson County Water District	Water System Improvements	$987,300	$987,300	6,710
15	185	F22-015	WX21125024	London Utility Commission	L.U.C. Water Treatment Plant Improvements	$2,353,800	$2,353,800	9,193
16	170	F22-016	WX21149005	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	$1,305,650	$1,305,650	1,139
17	165	F22-017	WX21121012	Knox County Utility Commission	Barbourville Connection - KY 225	$1,562,220	$1,193,000	7,853
21	150	F22-021	WX21233056	Providence, City of	Providence Cast Iron Pipe Rehab	$3,196,000	$3,196,000	3,610
23	135	F22-023	WX21041009	Carroll County Water District #1	Ghent Improvements	$489,300	$489,300	6,223
24	130	F22-024	WX21007002	La Center, City of	La Center Municipal Water- AC Line Replacement Phase II	$250,000	$250,000	1,068
25	120	F22-025	WX21183047	Fordsville, City of	Fordsville Water Tank Rehab Project	$240,000	$240,000	924
27	115	F22-027	WX21191008	Butler, City of	Tank Rehabilitation and Water Main Improvements	$615,420	$615,420	617
28	115	F22-028	WX21097028	Cynthiana, City of	Cynthiana - WTP Filter Gallery/UV Improvements	$1,330,000	$1,330,000	6,667
29	115	F22-029	WX21007019	La Center, City of	LaCenter Municipal Water-Ac Line Replacement Phase I	$200,000	$200,000	1,068
30	115	F22-030	WX21019057	Cannonsburg Water District	Phase II - Shoppes Road Water Line Replacement	$1,124,000	$1,124,000	8,985
					Total	$24,398,890	$23,279,670	

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 $50,589.

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 are scheduled to be brought to the KIA Board for this funding cycle:

Interest rate	MHI Threshold	Loan Type
2.00 (Standard)	> or = $50,589	Construction
1.00 (Non-standard)	$40,472 to $50,588	Construction
0.25 (Non-standard-DCR)	< or = $40,471	Construction
2.00	NA	Planning and Design

Because of the ongoing COVID pandemic, the KIA Board may choose to revisit the interest rates during the fiscal year.

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. No repayment term can 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 up to 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 the full amount of the construction loan for large projects during a single funding cycle. As such, large project funding may be restricted in the amount of funding provided each year. These amounts will be negotiated at the time of the loan approval and each year's availability will be detailed in the Assistance Agreement.

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. After the 2022 funding cycle, projects with an existing P&D loan through the DWSRF or any other KIA loan fund will not receive a priority funding position to apply for a construction loan in a subsequent year's Intended Use Plan and must go through the ranking process for the construction portion of their loan. 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.

One project, F22-001 (WX21113040), has a Planning & Design loan approved previously to the City of Nicholasville.

Loan Invitations

Bypass Process

Once the projects 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 (2018, 2019, and 2020);
- 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.

Six projects are being bypassed during the first round of invitations because they received funding in a prior funding cycle.

The following loan applications were not concluded by June 30, 2020, as a result of constraints in submitting additional materials in the COVID19 period, and were not bypassed:

Loan Number	WRIS PNum	Applicant	Requested Loan Amount	Invited Loan Amount
F21-022	WX21137707	Stanford Water Commission	$4,000,000	$4,000,000
F20-048	WX21095670	City of Cumberland	1,000,000	1,000,000
F20-046	WX21131006	Hyden-Leslie County Water District	655,000	655,000

Invitation Process

An invitation letter is emailed to potential borrowers with specific instructions.

Applicants that do not meet the deadline requirements may also be bypassed and subsequent eligible project(s) receive second round invitations. The Comprehensive Priority List in Appendix A reflects invitations for the first round. 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.

Invitation List

The table at Appendix A indicates the 30 projects that received a first round invitation to participate in the DWSRF for SFY 2022. One highlighted project has received KIA funding for a planning and design loan (blue).

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[1]. The following contacts can assist with DWSRF inquiries:

Contact	Agency	
Sandy Williams Executive Director (502) 892-3088 Sandy.Williams@ky.gov	KIA	Intended Use Plan, Loan Application, Financial Terms, Interest Rates, General Information
Don Schierer WRIS Data Manager (502) 892-3446 Don.Schierer@ky.gov	KIA	Project Profile Submittal
Jory Becker Environmental Control Branch Manager (502) 782-6887 Jory.Becker@ky.gov	DOW	Request for Proposals (RFPs), Set-Aside Activities
Russell Neal Environmental Control Supervisor (502) 782-7026 Russell.Neal@ky.gov	DOW	DW Priority List, Environmental Review,

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.

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.

[1] KRS Ch. 224A.1115 and 200 KAR 17:070 may be found on the Internet at https://kia.ky.gov/Information/Pages/Legislation-and-Regulations.aspx.

KIA has two 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 is as follows:

Regional Compliance Coordinator
Debbie Landrum (502) 892-3454 Debbie.Landrum@ky.gov
Julie Bickers (502) 892-3455 Julie.Bickers@ky.gov

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

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 2021 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:

Set-Aside Description	Maximum Allotment
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%
Total	31.0%

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 $181,270 to the KIA and three percent or $543,810 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 $362,540 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 $1,812,700 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 $2,719,050 to EEC as noted in the workplan located in Appendix D for the following programs:

- Capacity Development – TMF and Operator Certification 8% or $1,450,160
- Source Water Assessment 3% or $543,810
- Wellhead Protection 4% or $725,080

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, 2020 the DWSRF had a total net position of $275,677,000 and 157 active loans. During SFY 2022, 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 2022
July 1, 2021 through June 30, 2022

Funding Sources	Federal Contribution	State Contribution	DWSRF Fund	Total
Remaining Funds from 2021 IUP			25,163,000	25,163,000
Loan Repayments (P&I)			16,161,000	16,161,000
Investment Interest Earnings			100,000	100,000
Banked Prior Year Set-Aside Funds	3,061,000			3,061,000
FFY 2021 Capitalization Grant	18,127,000	3,625,000		21,752,000
Cap Grant Reallocation from Wyoming	167,000	33,000		200,000
Total Funding Sources	21,355,000	3,658,000	41,424,000	66,437,000
Funding Uses				
Financial Assistance	12,508,000	3,625,000	28,499,000	44,632,000
2021 Carried-Forward Projects			7,603,000	7,603,000
Cap Grant Reallocation from Wyoming	167,000	33,000		200,000
Leverage Bond Debt Service			5,322,000	5,322,000
Banked Prior Year Set-Aside Funds	3,061,000			3,061,000
FFY 2021 Administration (4%)	725,000			725,000
FFY 2021 State Program Management (10%)	1,813,000			1,813,000
FFY 2021 Technical Assistance (2%)	362,000			362,000
FFY 2021 Local and Other Assistance (15%)	2,719,000			2,719,000
Total Funding Uses	21,355,000	3,658,000	41,424,000	66,437,000

During the 2022 IUP funding cycle, KIA will have an estimated $52,235,000 available to fund eligible 2022 DWSRF projects and 2021 DWSRF carried-forward projects. This is comprised of available funds of $25,163,000 that were carried over from fiscal 2021, the 2021 capitalization grant of $18,127,000, state match funds of $3,658,000, the reallocated cap grant of $167,000 from Wisconsin, estimated loan repayments of $16,161,000 and $100,000 interest earnings on existing cash balances. Funding is reduced by leverage bond debt service of $5,322,000, 2021 carried-forward projects of $7,603,000, administrative costs of $725,000 (4 percent) and other set-aside costs totaling $4,894,000 (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. KIA and DOW will have $3,061,000 in banked Set-Aside funds from prior capitalization grants for administration of the program.

The $3,658,000 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 2021 capitalization grant application is July 30, 2021, with the grant award being made available on October 1, 2021.

KIA received budgetary authorization to issue agency leverage bonds during the 2018-2020 biennium in an amount not to exceed $30 million which was reauthorized for fiscal year 2022. 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

The draft 2022 DWSRF IUP including the Project Priority List was available for public review and comment on the KIA website at www.kia.ky.gov from September 22, 2021 through October 22, 2021. A public meeting was be held Thursday, October 14, at 2:30 p.m. EST as a virtual Zoom meeting, which was accessible via link found on the KIA website, at kia.ky.gov. No written or verbal comments were received during the public comment period or during the public meeting. Written comments were to be submitted to Sandy Williams, Executive Director, by mail to 100 Airport Road, Frankfort, Kentucky 40601 or by email to sandy.williams@ky.gov or KIA.executivedirectors@ky.gov.

APPENDIX A

COMPREHENSIVE PROJECT PRIORITY LIST

2022 DWSRF Project Priority List

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite Round No. Bypassed	Cumulative Invited Loan Amount	System Population	System MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness
0		F19-018	WX21087022	Green-Taylor Water District	Green-Taylor Water District - Distribution Upgrades	$564,600	$564,000	$0	Bypassed	$0	11,307	$39,419	$0	$0
0		F21-016	WX21095014	Harlan, City of	Harlan Municipal Water Distribution System Improvements	1,463,000	1,463,000	0	Bypassed	0	4,286	23,410	0	0
0		F21-021	WX21095013	Harlan, City of	Harlan Municipal Water Treatment Plant and Raw Water Intake Impr	2,549,645	2,549,645	0	Bypassed	0	4,286	23,410	0	0
0		F21-026	WX21003023	Scottsville, City of	AMR and Smart Meter Water Meter Replacement	696,500	696,500	0	Bypassed	0	5,116	32,391	0	0
0		F21-040	WX21029166	Louisville Water Company	Roe Hill Road Area Water Main Extension & Pump Station Project	1,075,700	537,850	0	Bypassed	0	807,578	59,785	0	0
0		F21-060	WX21113037	Wilmore, City of	Wilmore Elevated Storage Tank Rehabilitation	994,648	944,648	0	Bypassed	0	6,428	52,604	0	0
1		F22-001	WX21113040	Nicholasville, City of	Nicholasville 24" Parallel Transmission Main	4,998,150	4,582,030	4,582,030	1	4,582,030	31,402	50,681	0	0
2	420	F22-002	WX21085037	Grayson County Water District	GCWD East - West Improvements II	7,231,000	7,231,000	7,231,000	1	11,813,030	14,246	39,371	1,000,000	1,000,000
3	370	F22-003	WX21193058	Hazard, City of	Buckhorn Middle Fork WTP to Chavies Transmission Line	4,752,600	1,000,000	1,000,000	1	12,813,030	23,684	38,666	0	1,000,000
4	340	F22-004	WX21069038	Western Fleming County Water District	Western Fleming Water District-Phase 2 AC Line Replacement	1,593,000	843,000	843,000	1	13,656,030	2,867	48,026	0	1,000,000
5	325	F22-005	WX21231018	Monticello, City of	New Powersburg BPS, Wray Hill BPS and Storage Tank Replacements, and Miscellaneous Water Line Improvements	3,087,000	3,087,000	3,087,000	1	16,743,030	17,517	34,810	0	1,000,000
6	315	F22-006	WX21169037	Edmonton, City of	Cast Iron Pipe Replacement and Hydrant Installation	3,000,000	3,000,000	3,000,000	1	19,743,030	7,192	35,553	0	1,000,000
7	295	F22-007	WX21061016	Edmonson County Water District	Edmonson County Water District - Edmonson, Hart, & Grayson System Improvements	2,173,503	2,173,503	2,173,503	1	21,916,533	17,594	42,190	0	1,000,000
8	270	F22-008	WX21065010	Estill County Water District #1	ECWD - Phase 12 System Improvements	2,000,000	2,000,000	2,000,000	1	23,916,533	9,378	30,870	1,000,000	2,000,000
9	260	F22-009	WX21107059	Nortonville, City of	Nortonville Waterline Replacement Project	2,292,200	2,292,200	2,292,200	1	26,208,733	2,130	39,816	0	2,000,000
10	255	F22-010	WX21171039	Monroe County Water District	Monroe County Water District Improvements - Water Storage Tanks	200,000	200,000	200,000	1	26,408,733	7,944	36,524	100,000	2,100,000
11	210	F22-011	WX21133065	Whitesburg, City of	Waterline Replacement Phase 1	1,660,000	1,660,000	1,660,000	1	28,068,733	3,203	35,253	0	2,100,000
12	205	F22-012	WX21193046	Hazard, City of	Lothair Waterline Replacement	1,950,000	1,950,000	1,950,000	1	30,018,733	23,684	38,666	0	2,100,000
13	200	F22-013	WX21213046	Simpson County Water District	Water System Improvements	987,300	987,300	987,300	1	31,006,033	6,710	51,536	0	2,100,000
14	200	F22-014	WX21107063	Madisonville Municipal Utilities	Madisonville - Water Loss and Asset Management Analysis	1,500,000	1,500,000	1,500,000	1	32,506,033	21,919	45,523	0	2,100,000
15	185	F22-015	WX21125024	London Utility Commission	L.U.C. Water Treatment Plant Improvements	2,353,800	2,353,800	2,353,800	1	34,859,833	9,193	39,910	0	2,100,000
16	170	F22-016	WX21149005	McLean County Fiscal Court	Beech Grove Water System Storage Tank Addition	1,305,650	1,305,650	1,305,650	1	36,165,483	1,139	47,897	0	2,100,000
17	165	F22-017	WX21121012	Knox County Utility Commission	Barbourville Connection - KY 225	1,562,220	1,193,000	1,193,000	1	37,358,483	7,853	22,335	596,500	2,696,500
18	165	F22-018	WX21193045	Hazard, City of	Christopher Waterline Replacement	1,215,000	1,215,000	1,215,000	1	38,573,483	23,684	38,666	0	2,696,500
19	160	F22-019	WX21017022	Paris, City of	Paris Water System Improvements	3,275,000	3,275,000	3,275,000	1	41,848,483	12,224	45,380	0	2,696,500
20	158	F22-020	WX21133016	Letcher County Water & Sewer District	Letcher - Hwy 510/Gordon Water Line Extensions	5,238,000	3,045,000	3,045,000	1	44,893,483	10,736	29,807	1,000,000	3,696,500

2022 DWSRF Project Priority List

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite Round No. Bypassed	Cumulative Invited Loan Amount	System Population	System MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness
21	150	F22-021	WX21233056	Providence, City of	Providence Cast Iron Pipe Rehab	3,196,000	3,196,000	3,196,000	1	48,089,483	3,610	26,772	1,000,000	4,696,500
22	145	F22-022	WX21145090	Paducah Water Works	Midtown Area Water Main Replacement	4,890,109	4,890,109	4,890,109	1	52,979,592	59,173	46,128	0	4,696,500
23	135	F22-023	WX21041009	Carroll County Water District #1	Ghent Improvements	489,300	489,300	489,300	1	53,468,892	6,223	43,531	0	4,696,500
24	130	F22-024	WX21007002	La Center, City of	La Center Municipal Water- AC Line Replacement Phase II	250,000	250,000	250,000	1	53,718,892	1,068	40,283	125,000	4,821,500
25	120	F22-025	WX21183047	Fordsville, City of	Fordsville Water Tank Rehab Project	240,000	240,000	240,000	1	53,958,892	924	41,843	0	4,821,500
26	120	F22-026	WX21089102	Greenup, City of	City of Greenup new Water Treatment Plant	14,599,000	14,599,000	14,599,000	1	68,557,892	10,226	47,821	0	4,821,500
27	115	F22-027	WX21191008	Butler, City of	Tank Rehabilitation and Water Main Improvements	615,420	615,420	615,420	1	69,173,312	617	32,732	307,710	5,129,210
28	115	F22-028	WX21097028	Cynthiana, City of	Cynthiana - Industrial Park Water Tank and WTP Upgrade	4,640,000	1,330,000	1,330,000	1	70,503,312	6,667	34,389	0	5,129,210
29	115	F22-029	WX21007019	La Center, City of	LaCenter Municipal Water-Ac Line Replacement Phase I	200,000	200,000	200,000	1	70,703,312	1,068	40,283	100,000	5,229,210
30	115	F22-030	WX21019057	Cannonsburg Water District	Phase II - Shoppes Road Water Line Replacement	1,124,000	1,124,000	1,124,000	1	71,827,312	8,985	59,718	0	5,229,210
31	115	F22-031	WX21089011	Russell, City of	Russell: Upgrade Water Treatment Plant and System Improvements	16,500,000	16,500,000	0		71,827,312	4,912	70,230	0	5,229,210
32	110	F22-032	WX21153012	Salyersville Water Works	Salyersville Water Aging Water Main Phase III	755,000	1,138,900	0		71,827,312	2,268	26,251	0	5,229,210
33	110	F22-033	WX21019047	Ashland, City of	Ashland: Debord Hill Water Tank Upgrade	900,000	900,000	0		71,827,312	35,813	43,056	0	5,229,210
34	105	F22-034	WX21129004	Beattyville, City of	Beattyville - Bear Track Waterline Replacement	700,000	700,000	0		71,827,312	7,290	22,995	0	5,229,210
35	105	F22-035	WX21089093	Flatwoods, City of	City of Flatwoods Water Tank Rehab Project	180,000	130,000	0		71,827,312	8,012	50,120	0	5,229,210
36	100	F22-036	WX21195009	Elkhorn City, City of	City of Elkhorn City - Water Improvements - Radio Read Meters	380,000	380,000	0		71,827,312	1,445	25,216	0	5,229,210
37	100	F22-037	WX21189011	Booneville, City of	Booneville Water Treatment Plant Rehabilitation	1,739,000	1,739,000	0		71,827,312	4,787	30,982	0	5,229,210
38	100	F22-038	WX21157038	Benton, City of	Water Tank Rehabilitation	780,000	780,000	0		71,827,312	6,560	51,700	0	5,229,210
39	95	F22-039	WX21239030	Versailles, City of	Automatic Meter Reading (AMR) System	2,859,800	2,859,800	0		71,827,312	14,584	50,906	0	5,229,210
40	90	F22-040	WX21071011	Martin, City of	City of Martin Radio Read	167,925	167,925	0		71,827,312	628	22,277	0	5,229,210
41	90	F22-041	WX21025053	Jackson, City of	North Jackson Water Improvement Project	1,000,000	1,000,000	0		71,827,312	4,801	29,546	0	5,229,210
42	90	F22-042	WX21035030	Dexter-Almo Heights Water District	Dexter-Almo Heights Water District- Boggess Drive Loop	180,000	180,000	0		71,827,312	2,130	47,478	0	5,229,210
43	90	F22-043	WX21081010	Bullock Pen Water District	Bullock Pen Water Treatment Plant Replacement - Design Loan	13,500,000	517,900	0		71,827,312	19,245	55,730	0	5,229,210
44	85	F22-044	WX21025051	Jackson, City of	Jackson Water Treatment Plant Upgrade	1,994,812	1,994,812	0		71,827,312	4,801	29,546	0	5,229,210
45	85	F22-045	WX21065008	Irvine Municipal Utilities Commission	ECWD/IMU - Master Meter Relocation and River Crossing	861,000	688,512	0		71,827,312	9,378	30,870	0	5,229,210
46	82	F22-046	WX21037007	Pendleton County Water District	Campbell County Water Line Extension	1,276,500	1,276,500	0		71,827,312	6,211	65,981	0	5,229,210
47	80	F22-047	WX21225048	Uniontown, City of	Uniontown New Booster Pump Station Project	314,350	314,350	0		71,827,312	1,131	33,316	0	5,229,210
48	80	F22-048	WX21099024	Horse Cave, City of	Horse Cave - Water Line Improvements	950,000	925,000	0		71,827,312	2,289	34,151	0	5,229,210

2022 DWSRF Project Priority List

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite Round No. Bypassed	Cumulative Invited Loan Amount	System Population	System MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness
49	75	F22-049	WX21181004	Carlisle, City of	City of Carlisle Raw Water Intake Improvements	4,264,000	4,264,000	0		71,827,312	2,064	32,263	0	5,229,210
50	75	F22-050	WX21197020	Stanton, City of	Stanton - Water Improvements Project	700,000	700,000	0		71,827,312	5,398	39,559	0	5,229,210
51	75	F22-051	WX21141058	Auburn, City of	Auburn Water Meter, Remote Read Project	225,000	225,000	0		71,827,312	1,334	42,404	0	5,229,210
52	75	F22-052	WX21233023	Dixon, City of	Dixon Water Line Upgrade	377,500	377,500	0		71,827,312	771	43,697	0	5,229,210
53	75	F22-053	WX21033016	Caldwell County Water District	Caldwell County WD - Leak Detection Meter Installation Project	400,000	400,000	0		71,827,312	5,103	44,171	0	5,229,210
54	75	F22-054	WX21183049	Ohio County Water District	Ohio County Water District Intake Line Rebuilding Project	2,200,000	1,680,000	0		71,827,312	14,891	47,647	0	5,229,210
55	71	F22-055	WX21027028	Hardinsburg, City of	City of Hardinsburg - Extension Area A	1,379,590	1,379,590	0		71,827,312	12,468	47,979	0	5,229,210
56	70	F22-056	WX21031042	Morgantown, City of	Morgantown - Water Plant Improvements	500,000	500,000	0		71,827,312	2,220	26,695	0	5,229,210
57	70	F22-057	WX21083053	Mayfield, City of	HIGHWAY 1276 / KEY BOTTOM ROAD WATER MAIN REPLACEMENT	421,800	421,800	0		71,827,312	10,709	32,949	0	5,229,210
58	70	F22-058	WX21193034	Hazard, City of	Buckhorn Water Treatment Plant	8,963,700	1,000,000	0		71,827,312	23,684	38,666	0	5,229,210
59	70	F22-059	WX21047040	Hopkinsville Water Environment Authority	HWEA SRF Phase V Water System Improvements	22,527,000	22,527,000	0		71,827,312	36,222	41,304	0	5,229,210
60	70	F22-060	WX21199143	Western Pulaski County Water District	WPCWD-Water System Improvements Radio Read Meter System	2,500,000	2,500,000	0		71,827,312	16,894	41,924	0	5,229,210
61	65	F22-061	WX21183048	Hartford, City of	Hartford Water Tank Reduction Project	492,941	492,941	0		71,827,312	2,656	44,653	0	5,229,210
62	60	F22-062	WX21127026	Louisa, City of	Louisa Lock Ave. Water Line Replacement	150,000	150,000	0		71,827,312	5,551	30,915	0	5,229,210
63	60	F22-063	WX21041003	Carroll County Water District #1	500K Carroll and Gallatin County Hwy. 42 Elevated Industrial Tan	1,861,400	1,861,400	0		71,827,312	6,223	43,531	0	5,229,210
64	60	F22-064	WX21121010	Barbourville Utility Commission	Barbourville Utilities Sampson Hill Water Tank Replacement	665,500	665,500	0		71,827,312	15,826	33,400	0	5,229,210
65	60	F22-065	WX21121011	Barbourville Utility Commission	Barbourville Utilities RECC Water Tank Replacement	536,500	536,500	0		71,827,312	15,826	33,400	0	5,229,210
66	60	F22-066	WX21239033	Versailles, City of	Versailles - Water Distribution System Improvements Phase 2	1,520,000	1,520,000	0		71,827,312	14,584	50,906	0	5,229,210
67	60	F22-067	WX21239034	Versailles, City of	Versailles - Water Distribution System Improvements - Low Pressu	1,342,000	1,342,000	0		71,827,312	14,584	50,906	0	5,229,210
68	55	F22-068	WX21171037	Fountain Run Water District #1	Fountain Run Water District #1 - Repaint/Rehab Existing Tank	123,000	123,000	0		71,827,312	878	38,047	0	5,229,210
69	55	F22-069	WX21199051	Burnside, City of	Burnside – Tank Cleaning & Painting Project	175,000	175,000	0		71,827,312	1,388	38,078	0	5,229,210
70	55	F22-070	WX21095008	Lynch, City of	Lynch - Backwash at WTP	392,650	392,650	0		71,827,312	829	38,392	0	5,229,210
71	55	F22-071	WX21095638	Lynch, City of	City of Lynch - Water Treatment Plant Rehabilitation	1,000,000	1,000,000	0		71,827,312	829	38,392	0	5,229,210
72	55	F22-072	WX21141061	Lewisburg, City of	Coating Inside/Outside of Downtown Water Tower	171,000	171,000	0		71,827,312	2,495	39,353	0	5,229,210
73	55	F22-073	WX21199142	Western Pulaski County Water District	WPCWD-Water System Improvements Master Meter Installation	1,300,000	1,300,000	0		71,827,312	16,894	41,924	0	5,229,210
74	55	F22-074	WX21145080	Paducah Water Works	Paducah Water Work-Mayfield Road	865,000	865,000	0		71,827,312	59,173	46,128	0	5,229,210
75	55	F22-075	WX21239035	Versailles, City of	Versailles - Water Treatment Plant Improvements - Generators	3,408,000	3,408,000	0		71,827,312	14,584	50,906	0	5,229,210

2022 DWSRF Project Priority List

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite Round No. Bypassed	Cumulative Invited Loan Amount	System Population	System MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness
76	50	F22-076	WX21169025	Edmonton, City of	Edmonton - Joe Fields and Lone Star Line Replacement	150,000	150,000	0		71,827,312	7,192	35,553	0	5,229,210
77	50	F22-077	WX21035043	Murray, City of	Murray WTP Electrical Upgrade	2,156,615	2,156,615	0		71,827,312	21,763	33,523	0	5,229,210
78	50	F22-078	WX21043048	Grayson Utilities Commission	WTP Lagoons and Sludge Handling	1,750,000	1,750,000	0		71,827,312	10,817	34,449	0	5,229,210
79	50	F22-079	WX21009033	Glasgow Water and Sewer Commission	Glasgow Water Improvement - 24-Inch Transmission Line Pritchardsville to Old Cavalry Drive (Phase 5 of 6)	3,900,000	2,600,000	0		71,827,312	36,792	42,651	0	5,229,210
80	50	F22-080	WX21027044	Hardinsburg, City of	Hardinsburg Water Treatment Plant Expansion Phase I	5,700,000	5,700,000	0		71,827,312	12,468	47,979	0	5,229,210
81	45	F22-081	WX21157041	Calvert City, City of	City of Calvert City-Meter Replacement Program	813,000	813,000	0		71,827,312	3,564	52,078	0	5,229,210
82	45	F22-082	WX21101127	Henderson County Water District	Spottsville Bridge Crossing Project	553,694	553,694	0		71,827,312	16,018	59,390	0	5,229,210
83	40	F22-083	WX21061014	Edmonson County Water District	Edmonson County Water Improvement - Treatment Plant Expansion	5,000,000	5,000,000	0		71,827,312	17,594	42,190	0	5,229,210
84	40	F22-084	WX21227044	Bowling Green Municipal Utilities	New South Pressure Zone 1.0 Million Gallon Tank	4,944,760	4,944,760	0		71,827,312	46,599	42,266	0	5,229,210
85	40	F22-085	WX21213029	Franklin, City of	City of Franklin - Morgantown Rd Water Line	772,000	336,000	0		71,827,312	10,453	43,218	0	5,229,210
86	36	F22-086	WX21061020	Edmonson County Water District	Edmonson County Water District - Edmonson and Hart Extensions #2	1,061,585	1,061,585	0		71,827,312	17,594	42,190	0	5,229,210
87	35	F22-087	WX21065011	Irvine Municipal Utilities Commission	IMU - East Irvine Redundant Water Supply	358,000	186,000	0		71,827,312	4,642	30,424	0	5,229,210
88	35	F22-088	WX21199048	Burnside, City of	Burnside – Phase IV Elevated Water Tank	611,000	611,000	0		71,827,312	1,388	38,078	0	5,229,210
89	30	F22-089	WX21149004	Sacramento, City of	Sacramento Tank Repainting	200,000	200,000	0		71,827,312	1,828	50,704	0	5,229,210
90	30	F22-090	WX21009031	Glasgow Water and Sewer Commission	Glasgow Water Improvement - 1 Million Gallon Tank-Grandview	2,000,000	250,000	0		71,827,312	36,792	42,651	0	5,229,210
91	25	F22-091	WX21091101	Lewisport, City of	County Booster Station Improvement	135,500	135,500	0		71,827,312	2,604	51,429	0	5,229,210
92	25	F22-092	WX21107054	Nebo Water District	Nebo - Pump Station Rehabilitation and AMR Project	1,152,700	1,200,000	0		71,827,312	3,774	59,932	0	5,229,210
93	25	F22-093	WX21073024	Peaks Mill Water District	Sulfur Lick Booster Pump Station	260,408	198,000	0		71,827,312	2,879	67,994	0	5,229,210
94	20	F22-094	WX21089104	Raceland, City of	System Loop along US 23 from Caroline Road to Legion Drive	180,500	180,500	0		71,827,312	3,201	49,378	0	5,229,210
95	15	F22-095	WX21157037	Calvert City, City of	City of Calvert City-Relocating Water Treatment Plant	20,680,000	20,680,000	0		71,827,312	3,564	52,078	0	5,229,210
96	10	F22-096	WX21157044	Jonathan Creek Water District	Jonathan Creek-Phase III Expansion (Near KY-402)	2,198,500	2,198,500	0		71,827,312	4,525	50,042	0	5,229,210
97	0	F22-097	WX21085038	Leitchfield, City of	Leitchfield Bypass Development Waterline	207,040	207,400	0	Yes	71,827,312	6,547	31,633	0	5,229,210
98	0	F22-098	WX21141060	Russellville, City of	Russellville City Park Tank	1,300,000	175,000	0	Yes	71,827,312	7,172	37,461	0	5,229,210
99	0	F22-099	WX21081009	Williamstown, City of	Humes Ridge Water Tank Replacement	2,998,720	2,659,305	0	Yes	71,827,312	4,620	41,732	0	5,229,210
100	0	F22-100	WX21199138	Western Pulaski County Water District	Faubush/Nancy Area Water Transmission Main	4,750,000	4,750,000	0	Yes	71,827,312	16,894	41,924	0	5,229,210
101	0	F22-101	WX21199141	Western Pulaski County Water District	WPCWD-Bourbon Water Storage Tank Replacement	3,000,000	3,000,000	0	Yes	71,827,312	16,894	41,924	0	5,229,210
102	0	F22-102	WX21151040	Berea, City of	Berea Utilities - Owsley Fork Reservior (Red Lick Creek MPS No. 1) Rehabilitation	13,259,000	11,528,000	0	Yes	71,827,312	10,522	44,786	0	5,229,210
103	0	F22-103	WX21145091	Paducah Water Works	Noble Road Transmission Improvements	3,394,169	3,394,169	0	Yes	71,827,312	59,173	46,128	0	5,229,210

2022 DWSRF Project Priority List

Rank	Score	KIA Loan Number	WRIS #	Applicant	Project Title	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Invite Round No. Bypassed	Cumulative Invited Loan Amount	System Population	System MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness
104	0	F22-104	WX21227055	Warren County Water District	WCWD - Smiths Grove / Little Knob Improvements	1,046,000	1,046,000	0	Yes	71,827,312	61,636	60,412	0	5,229,210
					Totals	$277,995,504	$238,418,563	$71,827,312					$5,229,210	

APPENDIX B

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

2021 Funding Cycle

ENERGY AND ENVIRONMENT CABINET
Department for Environmental Protection
Division of Water

300 Sower Boulevard – 3rd Floor
Frankfort, Kentucky 40601
Phone: (502) 564-3410
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water.ky.gov

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INTRODUCTION

PURPOSE

The priority system was developed to prioritize eligible projects for funding through the Drinking Water State Revolving Fund (DWSRF). The DWSRF is intended to facilitate Public Water Systems (PWS) in achieving and maintaining technical, managerial, and financial (TMF) capacity, enabling PWSs to consistently maintain compliance with the Safe Drinking Water Act (SDWA). This includes compliance with existing and future national drinking water standards, as well as other activities that significantly further the health protection objectives of the SDWA.

METHODOLOGY

The structure of the priority system incorporates the 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 and Revised 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. A proactive approach has been developed to determine priority based on infrastructure needs to address the goals of the SDWA. Projects are prioritized based on scores derived from a comprehensive review of each project using the DWSRF ranking criteria described in this document.

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, 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. During the annual call for projects, project profiles are submitted for review by the local area development districts through the Water Resources Information System (WRIS). No additional projects may be submitted after the call for projects deadline. Project profiles must be complete with all pertinent information. Once the project review process begins, project profiles will be locked. (Any profiles edited during the review process will result in a disqualification of the project for that funding cycle.) The total score for a project is the sum of all points received for each of the nine categories.

TIE BREAKER

It is possible the ranking process could result in two or more projects having the same total score. A tie breaker method 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 of the applicant, as evidenced by the median household income (MHI) according to the current American Community Survey 5-Year Estimates, is taken into consideration.

PROJECT PROFILES

The project profile must have sufficient detail to ensure the proposed project receives the maximum amount of points and is scored properly. The Project Description within the Narrative tab should provide a clear and detailed explanation of the proposed project. The Need for Project must describe how the proposed project promotes public health or achieves/maintains compliance with the SDWA. Any major changes to system capacity (i.e., storage volume, line replacements due to size, water treatment plant design capacity, etc.) must include a detailed justification. The information provided in the Narrative tab must match exactly the information provided in the Components tab, and all project components must be accurately represented on the map within the Map tab. Additionally, there are check boxes in the Impacts, Components, and Sustainable Infrastructure tabs. In order to receive all eligible points, each pertinent box must be checked. Some of the check boxes require supporting documentation. Failure to check applicable boxes and/or upload required documentation in WRIS will result in a loss of potential points.

I. REGIONALIZATION

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

A. Elimination of a 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 or emergency potable water supply
Points Received: 15 per new connection

D. Replacement or supplemental raw water supply
Points Received: 15

RESTRICTIONS: Projects consisting of construction or rehabilitation of reservoirs and dams and purchase of water rights are ineligible for funding through 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 or C 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 or C below.

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 – Public Health Risks

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

iii) 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

iv) 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

C. Treatment – Secondary Contaminants

Examples of treatment projects 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 and C only 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. For waterline replacement projects, scores are applied based upon the total linear feet of line to be replaced. Additional points may be applied for projects replacing lead service lines.

i) Replacement of inadequately sized waterlines, lines with leaks, breaks, or restrictive flows due to age, or lead or asbestos-cement pipe
Points Received: 20 points for up to the first 1,000 linear feet plus 5 points for each additional 1,000 linear feet (rounded to the nearest 1,000).

ii) Replacement of lead service line
Additional points may be applied for projects replacing lead service lines. Please contact the Division of Water for additional information and requirements.

iii) Rehabilitation of a water storage tank
Points Received: 30 for each tank

iv) New water storage tank
Significant increases of system storage capacity must include a detailed justification.
Points Received: 20 for each tank

v) New or rehabilitated pump station (not associated with a new tank)
Points Received: 10 for each pump station

vi) Locating, exercising, installing, and/or replacing various distribution system appurtenances, such as meters, valves, backflow prevention devices, etc.
Points Received: 15 applied once

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 1-10 households. Every 10 households thereafter will accumulate two additional points, to be added to the total score.
Points Received: 20 points for up to the first 10 existing homes plus 2 points for every additional 10 existing homes

Example:
Project A is extending waterline to 55 existing homes.

- *First 10 homes* — *20 pts.*
- *45 remaining homes (4*2pts=8pts)* — *8 pts.*

Total: *28 pts.*

RESTRICTIONS: The DWSRF cannot fund waterline extension projects to primarily serve future population growth, nor can it fund projects needed primarily for fire protection.

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 per location

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

V. COMPLIANCE AND ENFORCEMENT

A. Entities with executed Orders

Project must achieve full or partial compliance with an Order (i.e., Court Order, Agreed Order or PSC 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)
Points Received: 25

VI. 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. 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.
Points Received: 20

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%	**Points Received: 10**
Between 1 and 1.99%	**Points Received: 5**
Below 1%	**Points Received: 0**

C. System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure

To obtain points under this category, supporting documents such as official budget or relevant pages of financial audits must be uploaded into the WRIS.
Points Received: 10

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)*
- *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

**Business case may be required – see EPA's DWSRF Green Project Reserve Example Business Cases*

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.*
- *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).**

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.

**Business case may be required – see EPA's DWSRF Green Project Reserve Example Business Cases*

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.*
- *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.**

**Business case may be required – see EPA's DWSRF Green Project Reserve Example Business Cases*

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.**

DWSRF Ranking Criteria

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

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

III	Public Health Criteria – Distribution	Possible Points
A	Hydraulics/Storage (i) Replacement of inadequately sized waterlines, lines with leaks, breaks, or restrictive flows due to age, or lead or asbestos-cement pipe (ii) Rehabilitation of a water storage tank (iii) New water storage tank (iv) New or rehabilitated pump station (not associated with a new tank) (v) Locating, exercising, installing, and/or replacing various distribution system appurtenances	 20 (first 1000') +5 (per add'l 1000') 30 20 10 15
B	Finished Water Quality (i) Infrastructure to address inadequate turnover and disinfection byproducts (ii) Redundant equipment/emergency power generators	 20 10
C	Extension of Service Waterline extensions to serve existing households with inadequate domestic water supplies such as contaminated wells or cisterns (Up to 10 existing homes)	 20 (first 10) +2 (per add'l 10)

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

V	Compliance and Enforcement	Possible Points
A	Entities with executed Orders (*Project must address the terms of the Order*)	50
B	System has not received any Notices of Violation within the previous state fiscal year (July – June)	25

VI	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 wastewater 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	Green Infrastructure : Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as: • Bioretention • Green streets • Green roofs • Permeable pavement • Cisterns	5 each (10 max)
B	Water Efficiency: The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include: • Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals) • Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement) • Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention • Retrofitting/adding AMR capabilities or leak equipment to existing meters • 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 reasonable expected to result in a water conserving capital project or in a reduction in demand to alleviate the need for capital investment • Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse) • Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems • 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*	15 each (no max)

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. Examples include: • 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 • Utility-owned or publically-owned renewable energy projects • Utility energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas • Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)* • Pump refurbishment to optimize pump efficiency* • Projects that result from an energy efficient related assessment* • 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* • Automated and remote control systems (SCADA) that achieve substantial energy savings*	15 each (no max)
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. Examples include: • 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 • Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity • Source water protection planning (delineation, monitoring, modeling) • Planning activities to prepare for adaptation to the long-term effects of climate change and/or extreme weather • Utility sustainability plan consistent with EPA's sustainability policy • 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 • Construction of US Building Council LEED certified buildings, or renovation of an existing building • 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*	5 each/10 maximum

**Business case may be required – see EPA's DWSRF Green Project Reserve Example Business Cases*

IX	Project Readiness	Possible Points
	A. Borrower has submitted complete technical plans and specifications 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, USFWS, NRCS, and USACE); and C. Borrower has received funding commitments from other funding sources, or the DWSRF is the sole source of funding.	30

APPENDIX C

SET-ASIDE WORK PLANS

KENTUCKY DIVISION OF WATER
ENERGY AND ENVIRONMENT CABINET

2021 WORKPLANS

	%	FFY 2021	Expended by:
Grant Amount $:		$ 18,127,000	
DWSRF Program Admin(4% max available):		$725,080	
DOW (max 3%)	**3**	$543,810	**January 2022**
KIA (1%)	**1**	$181,270	
Subtotal Amount:		**$725,080**	
State Program Mgt. (10% max available):		$1,812,700	
Supplement PWSS Program	**10**	$1,812,700	
DOW Personnel			
Contractual			
Subtotal Amount:		**$1,812,700**	**December 2021**
Small Systems Tech. Assist (2% max):		$362,540	
DOW Personnel	**2**	$362,540	
Subtotal Amount:		**$362,540**	**January 2022**
State/Local Assist (up to 15%-10% max):		$2,719,050	
Capacity Development - TMF Assistance	**10**	**$1,812,700**	**September 2022**
DOW Personnel			
Travel			
Contracts			
Dev/Implement Operator Cert Program			**September 2022**
Source Water Assessment Program:	**2**	**$362,540**	**June 2022**
DOW Personnel			
Contracts			
Wellhead Protection Program	**3**	**$543,810**	**August 2022**
DOW Personnel		$543,810	
Equipment		$ -	
Travel		$ -	
Contracts		$ -	
Subtotal Amount:		**$2,719,050**	
Total Set Aside Amount:	**31**	**$5,619,370**	
Total DOW Set Aside Amount:	30	$5,438,100	
Total KIA Set Aside Amount:	1	$181,270	

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 2020 DWSRF Capitalization Grants to supplement the Public Water System Supervision Program under State Program Management.

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

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 2020 through December 2020.

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 2020 DWSRF Capitalization Grant in support of the Small System Technical Assistance Program.

Category:	**Amount:**
Personnel	$ 299,104
Total Direct Charges	**$ 299,104**
Indirect Charges (42.76%)	$ 63,536
Total	**$ 362,640**

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 2020 through February 2021.

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 2021
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 2020 DWSRF Capitalization Grant in support of Capacity Development efforts.

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

*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 2020 through September 2021.

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 2020 DWSRF Capitalization grant in support of the Operator Certification Program.

Category:	**Amount:**
Personnel	$ 244,965
Total Direct Charges	**$ 244,965**
Indirect Charges (36.21%)	$ 52,035
Total	**$ 297,000**

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 2020 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 2020 Source Water Assessment Program funds were set-aside from the State and Local Assistance Program.

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

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 2020 through June 2021.

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 2020, 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 2020 DWSRF Capitalization Grant in support of the Wellhead Protection Program.

Category:	**Amount:**
Personnel	$ 448,657
Total Direct Charges	**$ 448,657**
Indirect Charges (42.76%)	$ 95,303
Total	**$ 543,960**

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 2020 through August 2021.

APPENDIX D

PUBLIC COMMENT

2022 Drinking Water State Revolving Fund Intended Use Plan Public Comments

No verbal or written comments were received at the public meeting held on Thursday, October 14, 2021 at 2:30 p.m. EST via zoom or during the public comment period.