

Priority System Guidance Document

For Eligible Infrastructure Projects
To Be Funded By The

**KENTUCKY DRINKING WATER STATE REVOLVING FUND
2025 Funding Cycle**



ENERGY AND
ENVIRONMENT CABINET

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Table of Contents

| | |
|--|----|
| INTRODUCTION | 1 |
| I. REGIONALIZATION | 3 |
| A. Elimination of a Public Water System Through Merger or Acquisition | 3 |
| B. Elimination of a Water Treatment Plant as a Result of an Interconnection | 3 |
| II. PUBLIC HEALTH CRITERIA – WATER SUPPLY | 4 |
| A. Acquisition of a New Raw Water Source | 4 |
| B. Acquisition of a New Potable Water Supply | 4 |
| C. Rehabilitation of a Dam or Reservoir | 5 |
| III. PUBLIC HEALTH CRITERIA – TREATMENT | 5 |
| A. Treatment Facilities | 5 |
| IV. PUBLIC HEALTH CRITERIA – DISTRIBUTION | 7 |
| A. Hydraulics/Storage | 7 |
| B. Finished Water Quality | 7 |
| C. Extension of Service | 8 |
| V. LEAD SERVICE LINE INVENTORY | 8 |
| A. Inventory Development | 8 |
| B. Incorporating GIS to Record Inventory | 8 |
| C. Integrating Service Line Inventory into Asset Management Planning | 8 |
| VI. REPLACEMENT OF LEAD SERVICE LINE AND LEAD COMPONENTS | 9 |
| A. Lead Service Line and/or Lead Components Replacement | 9 |
| VII. SECURITY | 9 |
| VIII. COMPLIANCE AND ENFORCEMENT | 9 |
| A. Entities with Executed Orders | 9 |
| B. Primary System Has Not Received any SWDA NOVs | 9 |
| IX. LEAD COMPLIANCE | 9 |
| A. Lead Action Level Exceedance | 9 |
| B. Lead Trigger Level Exceedance | 9 |
| X. DISADVANTAGED COMMUNITY FINANCIAL NEED | 10 |
| A. Borrowers with a MHI Below 80% of the Commonwealth’s MHI | 10 |
| B. Borrowers with a MHI Between 80% and 100% of the Commonwealth’s MHI | 10 |
| XI. PLANNING | 10 |
| A. Asset Management Plan | 10 |
| B. Wastewater Bill as a Percentage of MHI | 10 |
| C. Specifically Allocated Funds for Rehabilitation/Replacement of Infrastructure | 10 |
| D. System Financial Audits | 11 |
| XII. SUSTAINABLE INFRASTRUCTURE | 11 |
| A. Green Infrastructure | 11 |
| B. Water Efficiency | 11 |
| C. Energy Efficiency | 12 |

Kentucky Priority System Guidance Document for Drinking Water

D. Environmentally Innovative 13

XIII. PROJECT READINESS 14

XIV. PROJECT READINESS – LEAD INVENTORY and LEAD SERVICE LINE
REPLACEMENT 14

 A. Lead Service Line Inventory 14

 B. Lead Service Line Replacement 14

DWSRF Ranking Criteria 16

INTRODUCTION

PURPOSE

The priority system is designed 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 PWS 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.

Additions to the priority system include lead service line (LSL) inventory, LSL replacement, and projects that primarily address perfluoroalkyl and polyfluoroalkyl (PFAS) substances and other emerging contaminants. Projects utilizing the DWSRF for LSL replacement must replace the entire LSL, not just a portion. The EPA has expanded the eligible uses of the DWSRF for replacing LSL beyond the regulatory definition of a LSL in the Lead and Copper Rule Revisions of the SDWA. Eligible projects also include the replacement of lead goosenecks, pigtails, and connectors as eligible expenses, whether standalone or connected to a LSL.

METHODOLOGY

The structure of the priority system incorporates the rules and initiatives promulgated since the 1996 amendments to the SDWA, including America's Water Infrastructure Act of 2018, and the Bipartisan Infrastructure Law of 2021. The amendments encompass financial, managerial, and technical capacity; Surface Water Treatment Rule; Total Coliform Rule and Revised Total Coliform Rule; Lead and Copper Rule Revision; 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 the following categories: Regionalization; Public Health Criteria – Water Supply; Public Health Criteria – Treatment; Public Health Criteria – Distribution; Lead Service Line Inventory; Lead Service Line and Lead Components Replacement; Security; Compliance and Enforcement; Lead Compliance; Disadvantaged Community Financial Need; Planning; Sustainable Infrastructure; Project Readiness; and, Project Readiness – Lead Service Line and Lead Components Replacement (see Table 1, DWSRF Ranking Criteria). Points are based on information provided by PWS 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 and cannot be modified. The total score for a project is the sum of all points received for each of the fourteen categories.

Proposed PFAS, lead service line inventory, and lead service line replacement projects must be submitted as independent projects. Projects combining these components will be bypassed unless corrected by the water system and Area Development District.

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.

Kentucky Priority System Guidance Document for Drinking Water

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 must provide sufficient detail of the project and must exactly match the information provided in the components, impacts, and sustainable infrastructure tabs in the WRIS. Projects components must also be accurately represented in the mapping tab of the WRIS. Project profiles that contain inconsistent information may not be scored and automatically by-passed for funding.**

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.

i) PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|--------|
| >0 - 4 | 200 |
| 4.01 - 8 | 300 |
| 8.01 - 12 | 400 |
| >12 | 500 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 300 |
| 2.1 - 3 | 400 |
| >3 | 500 |

ii) No PFAS detected
Points Received: 150

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

i) PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|--------|
| >0 - 4 | 200 |
| 4.01 - 8 | 300 |
| 8.01 - 12 | 400 |
| >12 | 500 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 300 |
| 2.1 - 3 | 400 |
| >3 | 500 |

ii) No PFAS detected
Points Received: 150

II. PUBLIC HEALTH CRITERIA – WATER SUPPLY

A. Acquisition of a new raw water source

i) PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|--------|
| >0 - 4 | 200 |
| 4.01 - 8 | 300 |
| 8.01 - 12 | 400 |
| >12 | 500 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 300 |
| 2.1 - 3 | 400 |
| >3 | 500 |

ii) No PFAS detected
Points Received: 150

An analysis of a new water source to address PFAS must be conducted by a certified drinking water laboratory and submitted to the Division of Water prior to the Call for Projects in order to receive points in this category.

B. Acquisition of a new potable water supply

i) PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|--------|
| >0 - 4 | 200 |
| 4.01 - 8 | 300 |
| 8.01 - 12 | 400 |
| >12 | 500 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 300 |
| 2.1 - 3 | 400 |
| >3 | 500 |

ii) No PFAS detected
Points Received: 150

An analysis of a new water source to address PFAS must be conducted by a certified drinking water laboratory and submitted to the Division of Water prior to the Call for Projects in order to receive points in this category.

C. Rehabilitation of a dam or reservoir

The dam or reservoir's primary purpose must be for drinking water supply and must be owned by the public water system. Some examples of dam/reservoir rehabilitation projects could include, but is not limited to, spillway reconstruction or repair, dam resurfacing or repair, repair or replacement of drainage systems, and sedimentation dredging.

Points Received: 10

III. 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)

Construction of a new water treatment facility to address present contamination by PFAS is given greater priority than construction of a new treatment facility to preventatively address PFAS or other emerging contaminants. The DOW will determine evidence of current contamination by PFAS or other emerging contaminants based upon best available data.

PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|---------------|
| >0 - 4 | 200 |
| 4.01 - 8 | 300 |
| 8.01 - 12 | 400 |
| >12 | 500 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 300 |
| 2.1 - 3 | 400 |
| >3 | 500 |

No PFAS detected

Points Received: 10

Kentucky Priority System Guidance Document for Drinking Water

ii) Rehabilitation of the water treatment plant

Water treatment plant rehabilitation to address contamination by PFAS is given greater priority. The DOW will determine evidence of current contamination by PFAS or other emerging contaminants based upon best available data.

PFAS detected

| PFOS or PFOA (ppt or ng/L) | Points |
|--|--------|
| >0 - 4 | 200 |
| 4.01 - 8 | 250 |
| 8.01 - 12 | 300 |
| >12 | 350 |
| Hazard Index (PFNA, PFHxS, PFBS, HFPO-DA) | Points |
| >0 - 1 | 200 |
| 1.1 - 2 | 250 |
| 2.1 - 3 | 300 |
| >3 | 350 |

No PFAS detected. Water treatment plant rehabilitation projects needed to acquire or maintain compliance with other National Drinking Water Standards of the SDWA. Points will be assigned to project components under Section B 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.

- **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.
- **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.
- **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.
- **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.
- **Modifications to address 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

iii) Redundant processes/emergency power generators

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

Points received: 2

- iv) Replacement of raw waterline
Points Received: 5

IV. 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 addressing excessive water loss and for projects replacing lead service lines.

- i) Replacement, cured-in-place, or in situ water line repair of inadequately sized water lines, lines with leaks, breaks, or restrictive flows due to age, or asbestos-cement pipe
Points Received: 20

- ii) Water loss

Additional points may be applied for projects replacing lines to address excessive water loss due to line leaks/breaks and unaccounted-for water loss. (Twelve months of water loss calculations must be provided to receive points for water loss):

- 16-30% water loss: 1 points
- 31-45% water loss: 2 points
- >45% water loss: 5 points

- iii) Rehabilitation of a water storage tank
Points Received: 2

- iv) New water storage tank

Significant increases of system storage capacity must include a detailed justification.

Points Received: 2

- v) New or rehabilitated pump station (not associated with a new tank)
Points Received: 2

- vi) Locating, exercising, installing, and/or replacing various distribution system appurtenances, such as meters, valves, backflow prevention devices, etc.

Points available for projects that are not associated with a waterline replacement project.

Points Received: 2 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.

- a) DBP violations within the last state fiscal year

Points Received: 5

- b) No DBP violations within the last state fiscal year

Points Received: 2

Kentucky Priority System Guidance Document for Drinking Water

ii) Redundant equipment/emergency power generators

Provide redundancy or emergency power within the distribution system

Points Received: 2

C. Extension of Service

This section applies points to waterline extension projects. Points for waterline extensions are only applicable for 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. The first 10 households will receive 2 points each. Every 10 households thereafter will accumulate two additional points, to be added to the total score.

Points Received: 10

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

V. SERVICE LINE INVENTORY

A. Inventory Development

Points can be applied in this category for improving or continuing work on service line inventories. Priority will be for systems that have already developed a list of service lines, including the geospatial location for each service line. The list must be in a digital/electronic format that includes all the fields required by the Lead and Copper Rule Revisions for a service line inventory (see below). To qualify for these points, water systems are not required to have data in the service line inventory except for the location information (address, geospatial location) for each service line.

| |
|---|
| Service line ID (SLID) |
| Street address |
| City |
| ZIP code |
| Latitude (decimal format) |
| Longitude (decimal format) |
| System-owned Service line material |
| System-owned SL material verification method (Final) |
| Customer-owned Service line material |
| Customer-owned SL material verification method |
| LCR Sampling point ID (aka Location Code) |
| Field verification date |
| Entire Service Line Material Classification (refers to both sections of SL) |

Points Received: 200

B. Incorporating GIS to record inventory

Water systems using GIS procedures or methods to record the service line inventory: **Points Received: 10**

C. Integrating service line inventory replacement into asset management planning

Points can be applied in this category for water systems that supply documentation detailing how service line inventory replacement will be incorporated into its asset management plan.

Points Received: 10

VI. REPLACEMENT OF LEAD SERVICE LINE AND LEAD COMPONENTS

A. Lead Service Line and/or Lead Components

Points can be applied in this category for the complete removal of LSL (public and privately-owned portions) and service lines made of galvanized iron or galvanized steel that are currently, or were previously, downstream of lead components*. A “lead service line” is defined in the Lead and Copper Rule Revisions as a service line which connects the water main to the building inlet.

For the purposes of the DWSRF, the federal definition of “lead service line” is expanded to include the replacement of lead goosenecks, pigtails, and connectors as eligible expenses, whether they are connected to a “lead service line” or stand-alone. Points can be applied in this category for the removal of lead or galvanized goosenecks, pigtails, and connectors.

- 1 up to 100 LSL and/or lead components replacements **Points Received: 200**
- 101 to 500 LSL and/or components replacements **Points Received: 210**
- Greater than 500 LSL and/or components replacement **Points Received: 220**

VII. 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 water treatment plant facilities or within the distribution system to prevent, deter, and/or readily respond to theft, trespassing, vandalism, or terroristic acts. Examples include, but are not limited to, the installation of fencing, video surveillance of treatment and/or storage facilities, alarms, signs, lock gates, radio intercom systems, and cyber security to protect against the unauthorized use of systems, networks, programs, and devices.

Points Received: 2

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

VIII. COMPLIANCE AND ENFORCEMENT

A. Entities with executed Orders

Project must achieve full or partial compliance with an active Order (i.e., Court Order, Agreed Order or PSC Order) or other enforcement action by addressing terms of the Order.

Points Received: 5

B. Primary system has not received any SWDA Notices of Violation within the previous state fiscal year (July through June)

Points Received: 2

IX. LEAD COMPLIANCE

A. Lead Action Level Exceedance

Primary system has had an action level exceedance (lead concentrations exceed an action level of 15 ppb in more than 10% of customer taps sampled) within the last compliance period.

Points Received: 5

B. Lead Trigger Level Exceedance

Primary system has received a lead trigger level exceedance (lead concentrations exceed a trigger level of 10 ppb in more than 10% of customer taps sampled) within the last compliance period.

Points Received: 2

X. DISADVANTAGED COMMUNITY FINANCIAL NEED

System-wide census data or project-based census data may be used to determine financial need.

- A. **Median Household Income (MHI) below 80 percent of the Commonwealth's MHI.**
(Determined by the current American Community Survey (ACS) 5-Year Estimate.)
Points Received: 15
- B. **MHI between 80 and 100 percent of the Commonwealth's MHI.**
(Determined by the current American Community Survey (ACS) 5-Year Estimate.)
Points Received: 8

XI. PLANNING

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

The DOW must verify documentation of an asset management plan implemented by the public water system in order to receive points in this category. The asset management plan or a letter verifying implementation of an asset management plan are both acceptable and may be uploaded into the WRIS or sent to the DOW.

A. Asset Management Plan

- **Asset Inventory:** a list of above and belowground assets, which, includes as available the date constructed/installed, identifying information, location, remaining useful life, condition, estimated cost to replace, and priority rating, based on criticality.
Points Received: 2
- **Strategic Plan:** at a minimum, must include a mission statement, level of service goals for the system that are SMART (Specific, Measurable, Attainable, Realistic, and Time-bound), and preventive maintenance program.
Points Received: 2
- **Capital Improvement Plan:** a list of capital projects for the next five (5) or more years which includes project title, anticipated year of construction, cost estimate, and sources of potential funding).
Points Received: 2

B. Monthly bill, based on 4,000 gallons, as a percentage of system-wide or project-based Median Household Income is:

- Greater than or equal to 2% **Points Received: 5**
- Between 1 and 1.99% **Points Received: 2**
- 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, with pertinent information highlighted, must be uploaded into the WRIS. To qualify for points under this category, the funds *cannot* be a requirement of a current loan.
Points Received: 5

D. System financial audits

System has a completed financial audit for each of the last three years proposed projects not meeting this requirement may be ineligible for the DWSRF. System must submit verification that audits have been conducted.

Points Received: 1

XII. 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: 1 each with a maximum of 5

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*

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: 1 each with a maximum of 5

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.*

Kentucky Priority System Guidance Document for Drinking Water

- *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: 1 each with a maximum 5

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. **

Kentucky Priority System Guidance Document for Drinking Water

- *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: 1 each with a maximum of 5

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.*
- *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 storm water, 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.*
- *Source Water Protection Implementation projects such as voluntary, incentive based source water protection measures, that are specifically detailed in a DOW approved source water or wellhead protection plan.*
- *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.**

Kentucky Priority System Guidance Document for Drinking Water

- *Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).**

*Business case may be required – see EPA’s [DWSRF Green Project Reserve Example Business Cases](#)

XIII. 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.

1. Borrower has submitted complete technical plans to the Division of Water; and,
2. 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,
3. Borrower has received funding commitments from other funding sources; or the DWSRF is the sole source of funding.

Points Received: 10

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.

XIV. PROJECT READINESS – LEAD INVENTORY AND LEAD SERVICE LINE REPLACEMENT

Points can be applied if the following elements of a LSL inventory or replacement plan are submitted to the DOW or uploaded into the WRIS. Documents must be submitted to the Division of Water in order to receive points in this category.

A. Service Line Inventory

The following documents must be submitted to the DOW for proposed lead service line inventory projects:

1. Information demonstrating that some accomplishments have already been made toward completion of the initial service line inventory, including requests for proposals or bids from contractors, data management system to be used, customer engagement efforts, records review efforts, percent of service lines already identified, etc.

Points Received: 10

B. Lead Service Line Replacement

The following documents must be submitted to the DOW for proposed lead service line replacement projects:

1. A strategy for informing customers before a LSLR and a template for an agreement with the private property owner to replace the LSL; and,
2. A process for documenting all property owners declining replacement of privately owned portion of LSL; and,
3. A procedure for customers to flush service lines and premise plumbing of particulate lead; and

Kentucky Priority System Guidance Document for Drinking Water

4. A proposed plan for conducting LSL replacement utilizing all requested funding; and,
5. A funding strategy for conducting LSLRs utilizing all requested funding.

Points Received: 10

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

Kentucky Priority System Guidance Document for Drinking Water

DWSRF Ranking Criteria

| I | Regionalization | General DWSRF Points | PFAS Points |
|---|--|----------------------|-------------|
| A | Elimination of a public water system (PWS) through a merger or acquisition (<i>Elimination of a PWSID</i>) | 150 | 200 - 500 |
| B | Elimination of a water treatment plant through an interconnection | 150 | 200 - 500 |

| II | Public Health Criteria – Water Supply | General DWSRF Points | PFAS Points |
|----|---|----------------------|-------------|
| A | Acquisition of a new raw water supply | 150 | 200 - 500 |
| B | Acquisition of a new potable water supply | 150 | 200 - 500 |
| C | Rehabilitation of a dam or reservoir | 10 | NA |

| III | Public Health Criteria – Treatment | General DWSRF Points | PFAS Points |
|-----|---|----------------------|-------------|
| A | <u>Treatment Facilities</u> | | |
| | (i) Construction of a new water treatment plant | 10 | 200 - 500 |
| | (ii) Rehabilitation of the water treatment plant | 10 | 200 - 500 |
| | <ul style="list-style-type: none"> ▪ Infrastructure options to meet Cryptosporidium removal/ inactivation requirements ▪ Modifications to meet CT inactivation requirement ▪ Modifications to address disinfection byproducts requirements ▪ Modifications to address VOC, IOC, SOC, radionuclide requirements ▪ Modifications to address secondary contaminants | | |
| | (iii) Redundant processes/emergency power generators | 2 | |
| | (iv) Replacement of raw waterline | 5 | |

| IV | Public Health Criteria – Distribution | General DWSRF Points |
|---|---|----------------------|
| A | <u>Hydraulics/Storage</u> | |
| | (i) Replacement, cured-in-place, or in situ repair of inadequately sized waterlines, lines with leaks, breaks, or restrictive flows due to age, or lead or asbestos-cement pipe | 20 |
| | (ii) Water loss | |
| | 16-30% | 1 |
| | 31-45% | 2 |
| | >45% | 5 |
| | (iii) Rehabilitation of a water storage tank | 2 |
| (iv) New water storage tank | 2 | |
| (v) New or rehabilitated pump station (not associated with a new tank) | 2 | |
| (vi) Locating, exercising, installing, and/or replacing various distribution system appurtenances | 2 | |
| B | <u>Finished Water Quality</u> | |
| | (i) Infrastructure to address inadequate turnover and disinfection byproducts | 2 or 5 |
| | (ii) Redundant equipment/emergency power generators | 2 |
| C | <u>Extension of Service</u> Waterline extensions to serve existing households with inadequate domestic water supplies such as contaminated wells or cisterns | 10 |

| V | Service Line Inventory | Lead Points |
|---|---|-------------|
| A | Inventory Development | 200 |
| B | Incorporation GIS to record inventory | 20 |
| C | Integrating service line inventory into asset management planning | 20 |

Kentucky Priority System Guidance Document for Drinking Water

| VI | Replacement of Lead Service Line and Lead Components | Lead Points |
|------|--|---|
| A | Lead Service Lines and/or Lead Components 1. 1 up to 100 line replacements and/or lead components 2. 101 to 500 line replacements and/or lead components 3. Greater than 500 line replacements and/or lead components | 200 210 220 |
| VII | Security | General DWSRF, PFAS Points |
| A | Measures taken at the water treatment plant facilities or within the distribution system | 2 |
| VIII | Compliance and Enforcement | General DWSRF, PFAS Points |
| A | Entities with executed Orders <i>(Project must address the terms of the Order)</i> | 5 |
| B | System has not received any Notices of Violation within the previous state fiscal year (July – June) | 2 |
| IX | Lead Compliance | Lead Points |
| A | Lead Action Level Exceedance | 5 |
| B | Lead Trigger Level Exceedance | 2 |
| X | Disadvantaged Community Financial Need | General DWSRF, Lead, PFAS 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 | 5 |
| B | Borrowers with a MHI between 80 and 100 percent of the Commonwealth’s MHI as determined by the current ACS 5-Year Estimate | 2 |
| XI | Planning | General DWSRF, Lead, PFAS Points |
| A | Asset Inventory | 2 |
| | Strategic Plan | 2 |
| | Capital Improvement Plan | 2 |
| 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% | 5 |
| | Between 1 and 1.99% | 2 |
| | Below 1% | 0 |
| C | System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure | 5 |
| D | System financial audits | 1 |

Kentucky Priority System Guidance Document for Drinking Water

| XII | Sustainable Infrastructure | General, DWSRF, Lead, PFAS Points |
|-----|--|-----------------------------------|
| A | <p><u>Green Infrastructure:</u> Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as:</p> <ul style="list-style-type: none"> • Bioretention • Green streets • Green roofs • Permeable pavement • Cisterns | 1 each (5max) |
| B | <p><u>Water Efficiency:</u> The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include:</p> <ul style="list-style-type: none"> • 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* | 1 each (5 max) |
| C | <p><u>Energy Efficiency:</u> Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include:</p> <ul style="list-style-type: none"> • 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* | 1 each (5 max) |

Kentucky Priority System Guidance Document for Drinking Water

| | | |
|---|---|----------------|
| D | <p>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:</p> <ul style="list-style-type: none"> • 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* | 1 each (5 max) |
|---|---|----------------|

**Business case may be required – see EPA’s [DWSRF Green Project Reserve Example Business Cases](#)*

| XIII | Project Readiness | General DWSRF, PFAS Points |
|------|--|----------------------------|
| A. | Borrower has submitted complete technical plans and specifications to the Division of Water; and | 10 |
| 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. | |

| XIV | Lead Project Readiness | Lead Points |
|-----|---|-------------|
| A | <p>Lead Service Line Inventory</p> <ol style="list-style-type: none"> 1. A description of goals to be achieved and products to be created (e.g., electronic or GIS database; customer communication tools) when creating a lead service line inventory procedure, including a proposed timeline for achieving each goal. | 20 |
| B | <p>Lead Service Line Replacement</p> <ol style="list-style-type: none"> 1. A strategy for informing customers before a LSLR and a template for an agreement with the private property owner to replace the LSL; and, 2. A process for documenting all property owners declining replacement of privately owned portion of LSL; and, 3. A procedure for customers to flush service lines and premise plumbing of particulate lead; and, 4. A proposed plan for conducting LSL replacement utilizing all requested funding; and, 5. A funding strategy for conducting LSLRs utilizing all requested funding. | 20 |