FINAL
INTENDED USE PLAN
Including
PROJECT PRIORITY LIST

FOR THE

DRINKING WATER
STATE REVOLVING FUND

For
State Fiscal Year 2014

COMMONWEALTH OF KENTUCKY

May 10, 2013

PREPARED BY THE

ENERGY AND ENVIRONMENT CABINET
&
KENTUCKY INFRASTRUCTURE AUTHORITY

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INTRODUCTION

Kentucky's Intended Use Plan (IUP) for the Drinking Water State Revolving Fund (DWSRF) is prepared in accordance with the provisions of the Safe Drinking Water Act (SDWA) Amendments of 1996. The IUP describes the sources and uses of funds for the 2014 state funding cycle (SFC), July 1, 2013, to June 30, 2014 and provides specific details regarding the state's prioritization process for ranking projects, short-term and long-term goals, environmental benefits, set-aside activities and the listing of eligible projects. The purpose of this IUP is to communicate Kentucky's DWSRF plan for the 2014 funding cycle to the state's public water systems (PWSs), the public, the Environmental Protection Agency (EPA), and other state agencies.

An Intended Use Plan is required by Section 1452 of the SDWA, which identifies how the funds available to Kentucky's DWSRF will be used during each state fiscal year (SFY) to support the goals of the DWSRF. This 2014 IUP includes:

1. A description of the short and long term goals of the fund;
2. The criteria and methods established for selecting projects;
3. The public participation process;
4. The sources of available funds and the uses of those funds; and,
5. The project priority list-- a list of eligible projects and activities 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 Environmental Protection Agency (EPA) 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 drinking water infrastructure projects that promote the goals of the SDWA. Projects identified to receive funding are selected from the ranked group of Project Profiles submitted during the Annual Call for Projects. The ranking is based on the public health criteria outlined in the SDWA. Since its inception in 1997, Kentucky's DWSRF has committed funds to 117 drinking water infrastructure projects, totaling more than $276.9 million.

Additional DWSRF Requirements Remain in 2014

The Federal Fiscal Year 2013 Continuing Resolution (P.L. 112-175), providing the 2013 appropriation for the DWSRF, carries over two provisions provided under the Federal Fiscal Year 2012 Consolidated Appropriations Act (P.L. 112-74) that continue as a part of the DWSRF program. These provisions address wage rate provisions and additional subsidization.

With regard to wage rate provisions, all drinking water projects funded in whole or in part with SRF assistance must meet federal Davis Bacon wage requirements.

For a fourth year, the authorization for the DWSRF capitalization grant provided for additional subsidization. At least 20% and not more than 30% of the DWSRF capitalization grant must be provided as additional subsidy.

DAVIS-BACON COMPLIANCE

Federal labor laws regarding prevailing wages, hours of work, and rates of pay shall apply to construction carried out in whole or in part with assistance from DWSRFs. These requirements are collectively known as the Davis-Bacon laws. These requirements are in addition to the requirements of Kentucky prevailing wage laws. All DWSRF financings will be required to comply with the Davis-Bacon laws and incorporate these 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 FFY 2013 capitalization grant authorization also requires that at least 20% but not more than 30% of the funds made available under that grant must be used by the State to provide additional subsidization to eligible recipients. The State will make such additional subsidization in the form of loans with principal forgiveness based on the system's median household income (MHI). To be eligible to receive principal forgiveness, the borrower's entire service area must have a MHI at or below $33,798, 80% of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimates 2007-2011. If a borrower provides service to more than one jurisdiction, an average MHI will be calculated based on each jurisdiction's MHI. Should there be insufficient eligible project applications to meet the required subsidization level, KIA may invite additional project applications or may increase the percentage subsidization level to the existing qualifying participants. Since the amount of principal forgiveness is limited, KIA will offer principal forgiveness in rank order. Some projects that might be eligible for principal forgiveness may not receive an allotment if the maximum has been reached by the total of the higher ranking projects.

GREEN PROJECT RESERVE (GPR)

The FFY 2013 capitalization grant did not require that capitalization grant 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 did receive incentive points for components that could be identified as green.

Structure of the DWSRF…

The Kentucky Infrastructure Authority (KIA) and the Kentucky Energy and Environment Cabinet (EEC) through the Division of Water (DOW) jointly administer the program via a Memorandum of Agreement in accordance with Kentucky Revised Statute KRS 224A.1115 and Kentucky Administrative Regulation 200 KAR 17:070[1].

The following contacts can assist you with your DWSRF inquiries:

Contact	Agency	Subject
Sandy Williams - (502) 573-0260 sandy.williams@ky.gov	KIA	Loan Application, Financial Terms, Rates
Amanda Yeary - (502) 564-3410 amanda.yeary@ky.gov	DOW	Project Profile Submittal, Priority List, Environmental Review
Buddy Griffin - (502) 564-3410 buddy.griffin@ky.gov	DOW	Loan Application, Procurement, Bidding Requirements
Mark Rasche - (502) 564-3410 mark.rasche@ky.gov	DOW	Plans and Specifications
Shafiq Amawi, Water Infrastructure Branch Mgr. - (502) 564-3410 shafiq.amawi@ky.gov	DOW	General Information, Set-Asides Activities, RFPs

Who is Eligible?

An eligible borrower must be a public water system that is also a governmental agency. Some examples include:

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

An eligible borrower must also demonstrate the technical, financial and managerial capability to ensure compliance with the requirements of the SDWA, 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. If you need assistance determining if your utility is eligible, contact Sandy Williams, KIA for help.

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

What is Eligible?

Some 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
- 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 of facility that the DOW considers necessary to the efficient and sanitary operation of a public water system

If you need assistance determining if your project is eligible for funding, contact Amanda Yeary at the DOW for more information.

I. DWSRF GOALS AND ACCOMPLISHMENTS

The primary goal of the DWSRF program is to assist PWSs in providing safe drinking water at an affordable cost to their customers. The 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 protection 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 EPA.

A. Goals for the 2014 Funding Cycle

Short-Term Goals

1. Continue to define and develop specific environmental outcomes and measures that will demonstrate the protection of public health by category type through DWSRF funding.

2. Continue to issue and evaluate contracts associated with set-aside initiatives.

3. Train borrowers to assure compliance with Davis Bacon requirements.

4. Provide the benefits of DWSRF-funded projects by updating the online DWSRF Benefits Reporting System.

5. Fund projects designed to remediate risk to human health, or are necessary to ensure compliance with the requirements of the SDWA.

6. Support components of the state drinking water and groundwater programs by directing the necessary resources toward the state's most pressing compliance and health needs.

7. Continue to refine the integration of the SRF Call for Projects into the Water Resource Information System (WRIS).

8. Comply with the Federal Funding Accountability and Transparency Act (FFATA).

Long-Term Goals

1. Support protection of public health by ensuring drinking water state revolving funds are used to finance only those projects necessary to remediate serious risk to human health or are necessary to ensure compliance with the requirements of the SDWA.

2. Maintain the fiscal integrity of the DWSRF and preserve the fund to ensure funding availability in perpetuity. Progress toward this goal will be documented via the annually audited financial statements, loan monitoring activities and KIA Board changes to the lending rate policy.

3. Conduct the loan process with timely and consistent timeframes and deadlines each year.

4. Ensure that all public water systems have the necessary technical, financial and magerial capacity to maintain compliance with the current and foreseeable SDWA requirements and provide safe drinking water to their customers.

5. Work with the Energy and Environment Cabinet to explore solutions to increase energy efficiency for drinking water utilities.

B. Accomplishments During the 2013 Funding Cycle

1. Improved Communication: Much of the recent success of the program is due to the improved working relationship between the KIA (grantee) and the DOW. Joint monthly meetings between the KIA and DOW have been conducted since the summer of 2007, to discuss projects status and processes refinement. The meetings are now vital to the functionality of the program.

2. Improved Marketing: The DWSRF program is becoming increasingly popular among public water systems and consultants seeking funding for infrastructure projects. We believe this is in part due to the annual "call for projects" that is distributed to all public water systems, local officials, area development districts, and the engineering community, advertising the DWSRF program and its benefits.

3. Consistency: It is our accomplishment and our goal to provide consistency throughout the program for our applicants. For the last five funding cycles, we have conducted a "call for projects" that the utilities have come to expect. We have attempted to streamline as many processes as possible to make the loan process easier for applicants and more efficient for administrators.

II. SFY 2014 PLAN OF ACTION

A. Financial Status of the DWSRF

Sources and Uses of Funds

Capitalization grants are received each year through EPA. Figure 1, below, demonstrates a declining trend from the inception of the program in 1997 through 2009. However, with the passage of the American Recovery and Reinvestment Act of 2009 (ARRA) and the 2010 Capitalization Grant appropriation, DWSRF allocations more than doubled over the next 3 years. The 2012 Capitalization Grant was reduced from 2011 levels but was not decreased to 2008 levels. State allocations are based on the nation-wide Needs Survey and yearly congressional appropriations. The Needs Survey is conducted every four years.

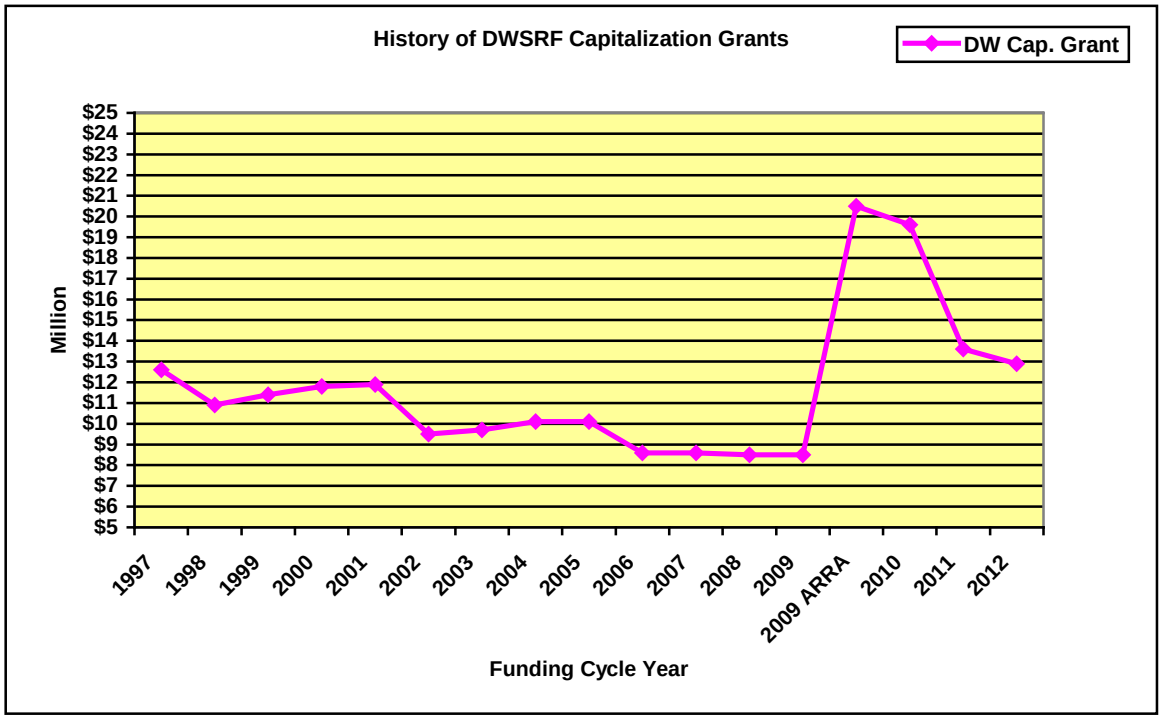

Figure 1

Kentucky's DWSRF is capitalized by appropriations by the United States Congress with the Kentucky General Assembly providing the required 20% state match funding. Additional funding during the 2008-2010 biennium was provided from the issuance of $30 million in leverage bonds. KIA issued an additional $25 million in leverage bonds during the 2010-2012 biennium. The DWSRF fund provides, in perpetuity, financial assistance to Kentucky's PWSs. During 2014, Kentucky will rely on funding as outlined in Table 1 to

provide financial assistance to communities, support operations in KIA and DOW, and support related program activities.

Table 1 - DRAFT
Kentucky DWSRF Sources and Uses of Funds for 2014
July 1, 2013 through June 30, 2014

Funding Sources	Federal Contribution	State Contribution	Other	Total
Uncommitted (Overcommitted) Prior Yr Loan Funds *			-	-
Loan Repayments *			11,059,482	11,059,482
Interest Earnings *			60,970	60,970
Banked Prior Year Set-Aside Funds			8,479,833	8,479,833
2013 Capitalization Grant	12,612,666	2,522,533		15,135,199
State Program Management Expenditure Match**		1,261,267		1,261,267
Total Funding Sources	12,612,666	3,783,800	19,600,285	35,996,751
Funding Uses				
Financial Assistance ***	9,213,553	2,522,533	6,739,665	18,475,750
Leverage Bond Debt Service			4,380,788	4,380,788
Banked Prior Year Set-Aside Funds			8,479,833	8,479,833
2013 Administration (3%)	378,380			378,380
2013 State Program Management (10%)	1,261,267	1,261,267		2,522,533
2013 Technical Assistance (2%)	252,253			252,253
2012 Local and Other Assistance (11.95%)	1,507,214			1,507,214
Total Funding Uses	12,612,666	3,783,800	19,600,285	35,996,751

* Estimate as of April 5, 2013

** The State Program Management Expenditure Match is an in kind match and does not represent funds available for construction projects.

*** An amount no less than 20% and no more than 30% of the federal capitalization grant must be used for additional subsidization.

In SFY 2014, KIA will have up to $18,475,750 available to fund eligible DWSRF projects. This is comprised of the 2013 capitalization grant of $12,612,666 *plus* state funds of $2,522,533, and estimated repayment funds *plus* estimated interest earnings (net of leverage bond debt service) of $6,739,664. Construction funding is reduced by administrative costs of $378,380 and other set-aside costs totaling $3,020,734. Any set-aside funds that are not taken in one year or are transferred into the construction account will be reserved for use in a future year.

The $2,522,533 state match will consist of proceeds from the sale of tax-exempt revenue bonds with debt service provided by the Commonwealth. KIA will coordinate with the Finance and Administration Cabinet regarding the anticipated sale date of the bonds. The anticipated submission dates for the 2013 capitalization grant application is February 27, 2013. Grant awards are typically made within 90 days but delays are expected due to complications at the federal level. The approximate federal to state cash draw ratio for the DWSRF for the FFY 2013 capitalization grant is anticipated to be 79:21.

Transfers between the Clean Water State Revolving Fund and the Drinking Water State Revolving Fund programs are allowed up to a maximum of 33 percent of the total DWSRF capitalization grants received. While KIA reserves the right to transfer available funds, a transfer is not expected during the SFY 2014.

KIA did not receive budgetary authorization to issue agency leverage bonds during the 2012-2014 biennium.

Financial Terms of Loans

1. Funding Limit

Kentucky's DWSRF has a $4,000,000 annual limit on the amount of funds that will be available to any one borrower from a specific capitalization grant. A funding limit was implemented to allow greater access to low-interest SRF funds to more projects and to maintain an acceptable risk level on the long-term viability of the DWSRF loan fund account. This limit is reviewed annually to assure the most equitable allocation of funds for potential borrowers.

2. Interest Rates

The KIA Board must establish interest rates at least annually. Staff intends to present rates for Board consideration at the August 1, 2013 KIA Board meeting. The rates are based on prevailing market conditions, availability of funds, and funding demand. Staff intends to recommend a standard rate of 2.75 percent with two non-standard rates at 1.75 percent and 0.75 percent to start off the 2013 funding cycle.

The standard rate will apply to all borrowers at or above the ACS 5 Year Estimate 2007-2011 State Median Household Income (MHI) of $42,248. To qualify for the non-standard rate of 1.75%, the project must assist the system to achieve compliance with an order or judgment addressing environmental noncompliance, or the borrower must have a MHI between $42,248 and $33,798 (80% of the State MHI) or be considered regional. To qualify for the non-standard rate of 0.75%, a borrower must have a MHI at or below $33,798. Qualifications for rates are subject to 200 KAR 17:070.

Planning and design loans will be made at the standard rate during the planning and design phase of the project. Should the planning and design loan be rolled into a construction

loan, the rate on the planning and design loan amount will revert to the rate approved for the construction loan.

3. Repayment Terms

Planning and design loans will have a five-year repayment term. Should the planning and design loan be rolled into a construction loan, the term for the planning and design loan amount will revert to the term approved for the construction loan.

Construction loans will have a 20-year repayment term. At the KIA Board's discretion, the repayment term for a construction loan for disadvantaged communities may be extended to 30 years, but not beyond the expected design life of the project. At no time will an amount exceeding 30 percent of the capitalization grant be provided as subsidy to disadvantaged communities (except as required by Capitalization Grants received).

Principal and interest payments on each loan will commence not later than one year after initiation of operation of the project for which the loan was made. The recipient of each loan must establish a dedicated source of revenue for the repayment of the loan.

4. 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.

5. Financial Options of the Fund

The SDWA provides guidelines under which the DWSRF program is to be operated. However, the specific implementation of those guidelines affects the long-term financial viability of the fund. The following are allowable options within the DWSRF and Kentucky's treatment of each.

a. Loan Subsidies – The FFY 2013 capitalization grant appropriation requires that at least 20% but not more than 30% of the DWSRF capitalization must be provided as additional subsidy. The State will make such additional subsidization in the form of loans with principal forgiveness based on the system's median household income (MHI). To be eligible to receive principal forgiveness, the borrower's entire service area must have a MHI at or below $33,798, 80% of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimates 2007-2011. If a borrower provides service to more than one jurisdiction, an average MHI will be calculated based on each jurisdiction's MHI. Should there be insufficient eligible project applications to meet the required subsidization level, KIA may invite additional project applications or may increase the percentage subsidization level to the existing qualifying participants. Since the amount of principal forgiveness is limited, KIA will offer principal forgiveness in rank order. Some projects that might be eligible for

principal forgiveness may not receive an allotment if the maximum has been reached by the total of the higher ranking projects.

b. Set-Asides – The SDWA allows up to 31 percent of the fund to be used as set-asides. However, fund dollars used as set-asides, other than set-asides dedicated for loans for land acquisition and conservation easements for source water protection, are not available for loans. EEC and KIA use a team approach to carefully plan and monitor the set-asides. In 2014, twenty-six percent (26.95%) of the 2013 capitalization grant will be used for set-aside activities.

c. Borrower Repayment – The borrower's ability to repay has a direct effect on the amount of funds available. A thorough credit analysis is performed for each borrower. Loan monitoring is performed throughout the life of the loan. All loan repayments begin within one year of the initiation of operations of the project.

d. Leveraging – KIA did not receive budgetary authorization to issue agency leverage bonds during the 2012-2014 biennium.

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 Clean Water SRF to the Drinking Water repayment fund as loan demand arises. This decision will be evaluated annually by DOW and KIA. 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.

B. Method for Distribution of Funds

Project Prioritization- How the 2014 project priority list was created…

A project priority ranking system was established to determine the order in which projects are evaluated for funding. Kentucky's priority ranking formula was designed by DOW and is 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. A Project Priority List is produced annually based on this ranking system. 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 for the SFY 2014. 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.

The Project Priority List is developed through an annual call for projects distributed to all PWSs, area development districts, mayors, county judges executive, and the engineering community. Only those applications submitted through the call for projects process were considered for funding and placement on the Project Priority List. Additionally, the applicant must develop a project profile, receive endorsement by the Area Water Management Council, and be included in the Water Resource Information System (WRIS) to be considered eligible for funding. Projects listed on the 2014 Project Priority List were evaluated and assigned a score based upon established ranking criteria. A table of the ranking categories and point system can be found under Appendix A of this document. The 2014 Project Priority List is located in Appendix B. All applicants will be notified of their ranking and funding status eligibility on the 2014 Project Priority List.

Projects that received a conditional commitment of funding from KIA during a prior funding cycle but have not completed the requirements necessary to enter into an Assistance Agreement have been re-ranked at the request of the Project Administrator. In the event they do not complete the requirements by the funding commitment expiration, they may be invited to re-apply if funding is available.

As required by the SDWA, to the maximum extent practicable, the highest priority projects are funded first. The projects chosen for funding are based on their readiness to proceed. In the event of a tie, the following factors were utilized to priority rank each project: (1) service of a small system as defined by population; (2) projects with existing enforcement actions (i.e. Agreed Orders) and (3) financial need as evidenced by the median household income of the applicant. More information on tie breakers can be found in the priority ranking guidance attached in Appendix A.

Loan Process Deadlines

During the Call for Projects, beginning October 1, 2012 and continuing through December 15, 2012, KIA and DOW invited all eligible borrowers to submit DWSRF project information via the Water Resource Information System (WRIS). An email invitation was sent to all public water systems, area development districts, mayors, county judges executive, and the engineering community. A sample of the Call for Projects letter is attached in Appendix C. Only projects designated through the Call for Projects process were considered for funding and placement on the Project Priority List. Each project was scored and a ranked list of projects was created for inclusion in this 2014 IUP.

Applicants ranking high on the 2014 Project Priority List will be notified of their status on the list and be invited to submit a complete loan application package, including all supporting documentation required for consideration for financial assistance from the DWSRF. Applicants will be given 45 days from the date of the request to meet the application deadline. Those applicants that do not submit a loan application, complete with Kentucky e-Clearinghouse comments, by the 45-day deadline will be bypassed and the next eligible project will be invited with 45 days to submit a loan application.

Upon submittal of a complete loan application, the documents will be reviewed and a credit analysis performed. For those qualifying applicants, a loan request will be taken before the KIA Board for financial review and conditional approval. Upon board approval, a conditional binding commitment letter will assure that funding will be dedicated to that project for a period of 12 months provided all of the conditions of the loan are met.

Within three months of receipt of the conditional binding commitment letter, the applicant is encouraged to have performed the following:

1. Meet with DWSRF personnel to discuss the environmental and technical requirements; and

2. Submit environmental information that conforms to the DOW's environmental review process, which includes:
    a. Submission of the Environmental Information Document (EID) or Project Narrative for Categorical Exclusion (CE)
    b. Federal cross-cutting agency scoping letters and responses.

Within nine months of receipt of the conditional binding commitment letter, the applicant is encouraged to have accomplished the following:

1. Meet the environmental review requirement of the DWSRF;

2. Receive DOW approval for plans and specifications, including authorization to advertise the project to bid; and

3. Conduct bid opening and tentative award.

All DWSRF program requirements must be met by the term outlined in the conditional binding commitment letter. A one-time extension of up to six months for approved applicants that experience extenuating circumstances may be granted. Those applicants not approved for an extension are no longer eligible for funding out of the current funding cycle and must re-apply during the next call for projects.

The 2015 IUP process will begin in October 2013. The call for projects will be open during October, November and December 2013, at which time project project profile forms can be created or updated in the WRIS and will be accepted for the SFY 2015 funding cycle. The following tentative schedule will apply:

2015 Call for Projects	**October 1, 2013- December 31, 2013**
Creation of Project Priority List and Capacity Development Review	**January 1, 2014- March 31, 2014**
Public Notice Period for IUP	**May 1, 2014- June 1, 2014**
Finalize 2015 IUP and send to EPA	**Prior to June 30, 2014**

Email notifications will be sent in September 2013 to all water utilities, area development districts, mayors, county judges executive, economic development professionals, and the Kentucky Society of Professional Engineers, announcing the call for projects.

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.

Bypass Process

A high-priority project that does not demonstrate capacity or is not ready to proceed within the given timeframe will be bypassed. A bypassed project will become ineligible for DWSRF funding in the current funding year and will have to reapply through the annual call for projects process to be re-ranked for future funding cycles.

Emergency Projects

The IUP Project Priority List may be amended during the year for declarations of emergencies designated by the governor. 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

Refinancing of existing projects will be allowed only for debt incurred after July 1993. Any project requesting to refinance existing debt must be on the project priority list in a position high enough to be eligible to receive funding and meet all program requirements. Refinancing will only be offered for terms up to 20 years from the original debt issuance or the remaining useful life of the equipment, whichever is less.

III. 2014 SET-ASIDE ACTIVITIES

The federal authority to establish assistance priorities and to carry out oversight and related activities of the DWSRF program, other than financial administration of the fund, resides with the EEC after consultation with other appropriate state agencies. Federal regulations allow states to "set aside" up to 31 percent of each capitalization grant for various programs, aside from project loans, that support the act. Kentucky will set aside 26.95 percent of the 2013 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.The following is a list of Kentucky's set-aside allotments:

	KY's 2013 Allotment
DWSRF Program Administration (4% maximum)	3%
State Program Management (10% maximum)	10%
Small Systems Technical Assistance (2% maximum)	2%
State and Local Assistance (15% maximum)	11.95%
Total	26.95%

A. DWSRF Program Administration - Sect. 1452(g)(2)- four percent maximum

Section 1452(g)(2) of the SDWA allows up to four percent of the DWSRF capitalization grant to be set aside for administration of the DWSRF program. Kentucky will set aside three percent from the 2013 capitalization grant for administration.

The EEC will set-aside two percent and the KIA will set aside one percent of the 2013 capitalization grant, as agreed upon in Memorandum of Agreement between the two parties. The EEC and KIA conduct regular activities to develop and maintain the DWSRF program. These include reporting activities, payment processing, pre-application activities, travel, application review, engineering review, environmental review, project management, program coordination, construction progress inspection, training, evaluating infrastructure needs for the Needs Survey; portfolio management, audit management, cash management, securities management, financial management, financial analysis and capacity review.

B. State Program Management – Sect. 1452(g)(2)(A) - 10 percent maximum

Section 1452(g)(2)(A) allows a state to set aside 10 percent of its annual capitalization grant to support other program initiatives of the SDWA. Set-asides under this authorization require an additional one-to-one state match. Thus, money diverted to these set-asides will demand a heavier investment of state funds. Kentucky will set-aside 10 percent of the 2013 capitalization grant under this category to support the following:

1. Compliance activities associated with the drinking water program, including receipt and review of data, issuing and tracking public notifications and Consumer Confidence Reports and violations, database management and revisions, drinking water laboratory certification; implementation of the Enforcement Referral Policy, providing technical and compliance assistance and conducting inspections and sanitary surveys.

2. Other activities include: revising and developing regulations, preparing primacy applications, preparing and issuing annual compliance reports; coordinating enforcement activities; conducting training events for drinking water personnel, assisting with engineering reviews, assessing the impacts of Clean Water Act decisions and permit action on drinking water systems; assessing drinking water security and emergency response activities; and strengthening inter-agency relationships as they relate to the program.

Funds may be used for travel and equipment as specified in work plans.

C. Technical Assistance – Sect. 1452(g)(2)(D) - two percent maximum

Section 1452 (g)(2)(D) of the SDWA allows a state to set aside a maximum of two percent of its annual capitalization grant to support technical assistance initiatives. Kentucky will set-aside two percent of the 2013 capitalization grant to provide small systems technical assistance to include the following: compliance with the Stage 2 and LT2 and groundwater requirements; groundwater under the direct influence of surface water determinations; small and private system applicability under the SDWA; source, treatment and distribution optimization; evaluating the impact of future regulations such as the revised Total Coliform Rule; and sanitary survey implementation for very small public water systems.

Funds may be used for travel and equipment as specified in work plans.

D. State/Local Assistance – Section 1452(k) - 15 percent total, 10 percent maximum for any one activity.

Section 1452(k) of the SDWA allows up to 15 percent of the DWSRF capitalization grant to be set aside to support local assistance and other program initiatives of the SDWA with a 10 percent maximum allotment for the individual program areas as outlined below:

- Loans for source water protection through land acquisition or conservation easements
- Loans for Source Water Quality Protection
- Technical, managerial, or financial assistance via the Capacity Development Program
- Source Water Protection Program
- Wellhead Protection Program

Kentucky will set aside 11.95 percent from the 2013 capitalization grant under the State and Local Assistance category, as follows:

	KY's 2013 Allotment
Capacity Development	10.00%
Source Water Assessment	1.95%
Total	11.95%

Capacity Development, 10 percent

- Activities may include, but are not limited to, identification of PWSs that may need assistance obtaining or maintaining financial, managerial, or technical capacity to operate in compliance with the SDWA; developing water loss/unaccounted-for water documents; capital improvement and asset management planning; developing and assisting with water system management training events and enhanced tracking of technical, managerial, and financial information. Continuation of the Capacity Development Assistance Program (CDAP).

- Providing training and certification exam opportunities to operators and potential operators. Auditing existing exam questions and developing new exams and training material to ensure that that the testing process is up-to-date with current trends and regulations.
- Contractual services may also be acquired to assist PWSs with emergency response planning.

Source Water Assessment Program, 1.95 percent

- Additional assistance may be provided to support U.S. Geological Survey stream gauging activities for source water assessment and protection purposes.

Funds may be used for travel and equipment as specified in work plans.

IV. PUBLIC REVIEW AND COMMENT

The draft 2014 DWSRF IUP including the project priority list was available for public review and comment on the Division of Water website at water.ky.gov and on the Kentucky Infrastructure Authority website at www.kia.ky.gov from March 13, 2013 through April 25, 2013.

A public meeting to discuss the plan contents was held on April 9, 2013, at 1:30 p.m. at the offices of the Kentucky Infrastructure Authority located at 1024 Capital Center Drive, Suite 340, Frankfort, Kentucky. John Covington, Executive Director of KIA, stated the purpose of the meeting and explained to the audience the process for making oral and written comments. Shafiq Amawi, manager of the Water Infrastructure Branch, gave an overview of the draft 2014 CWSRF IUP and the Project Priority Ranking System.

No written or verbal comments were received during the public meeting. One written comment was received From the City of Danville during the public comment period. The city's Water Treatment Plant and Raw Water Improvement project was listed on the IUP as "Funded 2013", ranked Number 10 on the list, and was not identified as eligible for principal forgiveness. The City is requesting that their project be revaluated. A summary of the comments follows.

1. Comment: The City commented that their project should have been identified as requesting additional project funding in the amount of $4,000,000 instead of being identified as previously funded in a prior year.

   Response: This correction was made to the IUP.

2. Comment: The City commented that they were “confident that our high ranking in 2013 and the importance of our regional WTP would again make us eligible for a DWSRF loan”.

   Response: The project is an eligible project, but was not ranked high enough to receive a funding invitation. The funding invitation is given in priority order taking into consideration any capitalization grant requirements that must be met such as additional subsidization.

3. Comment: The City commented that the same project was eligible for principal forgiveness in 2013 but was not listed as eligible for principal forgiveness in 2014.

   Response: The criteria to receive principal forgiveness has been based on a factor of MHI each year that additional subsidization has been a capitalization grant requirement. This year, based on the specific MHI cut-off for eligiblity, the City of Danville was not eligible to receive principal forgiveness.

4. Comment: The City has requested that KIA reevaluate the project and “consider the Danville WTP among the projects that will receive an invitation for 2014 DWSRF loan funds”.

   Response: The Danville Water Treatment Plant and Raw Water Intake Project is the project that is ranked next for a funding invitation.

APPENDIX A

PRIORITY SYSTEM GUIDANCE

KENTUCKY
Priority System Guidance Document

For Drinking Water Projects
Eligible To Be Funded By The

KENTUCKY DRINKING WATER STATE REVOLVING FUND

2014 Funding Cycle

ENERGY AND ENVIRONMENT CABINET
Department for Environmental Protection
Division of Water

200 Fair Oaks Lane – 4th Floor
Frankfort, Kentucky 40601
Phone: (502) 564-3410
Fax: (502) 564-0111
www.water.ky.gov

PRIORITY SYSTEM GUIDANCE

PURPOSE

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

METHODOLOGY

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

PRIORITY FORMULA

Violations of drinking water standards occur primarily as a result of inadequate infrastructure or poor operation. A proactive approach was developed to set priority based on infrastructure needs to achieve and maintain compliance with National Drinking Water Standards or otherwise promote the public health objectives of the SDWA.

APPLYING THE PRIORITY SYSTEM TO PROJECTS

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

TIE BREAKER

The tie breaker was developed to consider 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 that serve a population of 10,000 people or less are prioritized over those serving populations over 10,000. Consideration is then given to those projects with existing enforcement actions (i.e. Agreed Orders). Lastly, the financial need as evidenced by the median household income (American Community Survey 5-Year Estimates 2007-2011) of the applicant is taken into consideration.

I. REGIONALIZATION

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

(a) Elimination of a Public Water System (PWS) through a merger or acquisition (elimination of a PWSID).	***E 50 pts.***

Under this category, points will be provided to projects that promote regionalization. Section (a) applies points to water systems that are absorbing another water system, that may not be financially, managerially, or technically capable of complying with the SDWA. 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 entities 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.)

(b) Elimination of a water treatment plant as a result of an interconnection	***25 pts.***

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.)

(c) Acquisition of a supplemental potable water supply	***15 pts.***
(d) Replacement or supplemental raw water supply	***15 pts.***
(e) Acquisition of an emergency potable water supply	***15 pts.***

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

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

II. PUBLIC HEALTH CRITERIA- TREATMENT

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

(a) <u>Treatment Facilities</u>	
(i) Construction of a new water treatment plant (where one does not presently exist) or expansion	***20 pts.***

New water treatment facilities or water treatment plant expansions are limited to 20 points under II(a)(i), 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 II(b), II(c), or II(d) for such cases.

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

(ii) Rehabilitation and/or upgrade of the water treatment plant 10 pts.

Water treatment plant rehabilitation projects are limited to 10 points under II(a)(ii), 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 II(b), II(c), II(d).

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

(iii) Redundant processes/emergency power generators 10 pts.

Redundant processes and/or emergency power generators at the treatment facilities will receive 10 pts. per unit.

(b) Treatment- Acute Public Health Risk

(i) Infrastructure options to meet Cryptosporidium removal/inactivation requirements 25 pts.

Examples of treatment projects under II(b)(i) 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.

(ii) Modifications to meet CT inactivation requirement 20 pts.

Section II(b)(ii) refers to disinfection techniques needed to comply with CT inactivation requirements of the Surface Water Treatment Rule and the Groundwater Rule. Examples of treatment projects under II(b)(ii) include, but are not limited to, alternate disinfection feed points, baffling of clearwells, etc.

(c) Treatment- Chronic Public Health Risk

(i) Modifications to address disinfection byproducts requirements 25 pts.

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

(ii) Modifications to address VOC, IOC, SOC, radionuclide requirements 15 pts.

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

(d) Treatment- Infrastructure to address Secondary Contaminants 10 pts.

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

RESTRICTIONS: Points will be assigned to project components under II(b), (c), and (d) where a need for the project can be adequately demonstrated. A history of non-compliance may be required for certain treatment applications in order to receive points. In some cases, specific monitoring must warrant the need for the project in order to receive points.

III. PUBLIC HEALTH CRITERIA- DISTRIBUTION

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

(a) <u>Hydraulics/Storage</u>

(i) Replacement of inadequately sized, age deteriorated, or lead/ asbestos-cement waterlines	***10 pts.***
(ii) Rehabilitation or replacement of a water storage tank	***30 pts.***
(iii) New water storage tank	***20 pts.***
(iv) New or rehabilitated pump station (not associated with a new tank)	***10 pts.***

Examples of projects under this category include waterline replacements (see examples below), new water storage tank/s or pump stations, and rehabilitation of existing storage tanks or pump stations. The applicant must be prepared to demonstrate the need for the project whether it be loss of pressure, inadequate storage, or significant water loss to support the need for the project. For waterline replacement projects, scores are applied based upon the number of roads that are affected. ***It is imperative*** that the roads are listed in the Project Profile form in order to receive points.

(b) <u>Finished Water Quality</u>

(i) Infrastructure to address inadequate turnover and disinfection byproducts (DBPs)	***20 pts.***

Examples include the installation of a water storage tank mixing system to address a DBP issue, or looping of waterlines to improve flow. If unable to comply with the DBP Rule, Lead and Copper Rule, or the Asbestos Standard please provide this information in the project profile to support the need for the project.

(ii) Redundant equipment/emergency power generators	***10 pts.***

Projects to provide redundancy or emergency power within the distribution system will receive 10 pts. per unit.

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

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

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

30 pts.

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

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

10 pts.

(c) <u>Extension of Service</u>

Waterline extensions to serve existing households with inadequate domestic water supplies such as contaminated wells or cisterns (up to 10 existing homes) receive 20 pts. and 2 additional points for every additional 10 households thereafter.

2 pts./10 homes thereafter

2 0 pts./first 10 homes

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

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

- *First 10 households* *20 pts.*
- *<u>140 remaining households (14*2pts=28pts)</u>* *<u>28 pts.</u>*

Total: 48 pts.

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

IV. SECURITY

(a) Measures taken at the water treatment plant facilities or within the distribution system ***5 pts.***

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. Each security component will receive 5 points.

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

V. COMPLIANCE AND ENFORCEMENT

(a) Entities with executed Agreed Orders or Court Orders ***50 pts.***

(Project must address the terms of the Agreed Order)

A project will receive 50 pts. if it is necessary for achieving full or partial compliance with an Agreed Order or other enforcement action.

(b) Projects with violations that achieve voluntary compliance before being referred for an enforcement case ***25 pts.***

To receive points under V(b), a system must address a compliance issue with a history of multiple violations.

VI. PUBLIC WATER SYSTEM FINANCIAL NEED

(a) Borrowers with a median household income (MHI) at or below 80 percent of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimate (2007-2011) ***20 pts.***

(b) Borrowers with a MHI between 80 percent of the State's MHI and the State's MHI as determined by the ACS 5 Year Estimate (2007-2011) ***10 pts.***

Median household income figures for the 2014 funding cycle will be released by the ACS December 2012.

VII. ASSET MANAGEMENT

(a) System has a Capital Improvement Plan or similar planning document ***20 pts.***

The system must have mapped its treatment, distribution, and storage infrastructure and analyzed condition, including risks of failure, expected dates of renewals and ultimate replacements, and sources and amounts of revenues needed to finance operations, maintenance, and capital needs.

(b) System has developed appropriate rate structures to build, operate, and maintain the water works ***10 pts.***

(c) System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure ***10 pts.***

To obtain points under this category, supporting documents (CIP, rate structure, etc.) should be submitted to Amanda Yeary via email at Amanda.yeary@ky.gov or mailed to the Division of Water, 200 Fair Oaks Dr., Frankfort, KY 40601.

VIII. SUSTAINABLE INFRASTRUCTURE

(a) Green Infrastructure ***5 pts. each/10 pts. max***

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

Examples:

- Pervious or porous pavement
- Biorentention
- 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 dirt lined detention basins.
- In-line and end-of-pipe treatment systems that only filter or detain stormwater.
- Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal/floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
- Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels. Green infrastructure projects that include pipes to collect stormwater may be justified as innovative environmental projects.

(b) <u>Water Efficiency</u> ***5 pts. each/10 pts. max***

Definition: 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.

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

Projects That Do Not Meet the Definition of Water Efficiency:

- Covering open finished water reservoirs

(c) Energy Efficiency ***5 pts. each/10 pts. max***

Definition: 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:

- 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.

(d) Environmentally Innovative ***5 pts. each/10 pts. max***

Definition: 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:

- 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.*

Projects That Do Not Meet the Definition of Environmentally Innovative:

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

IX. PROJECT READINESS

(a) Borrower has submitted complete technical plans to the Division of Water and; ***30 pts.***

(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, and State Historic Preservation Office reviews) and;

(c) Borrower has received funding commitments from other funding sources; or the DWSRF is the sole source of funding.

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.

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 potable water supply	15
(d)	Replacement or supplemental raw water source	15
(e)	Acquisition of an emergency potable water supply	15

	II. Public Health Criteria, Treatment	Possible Points
(a)	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- Acute Public Health Risk (i) Infrastructure options to meet Cryptosporidium removal/ inactivation requirements (ii) Modifications to meet CT inactivation requirement	 25 20
(c)	Treatment- Chronic Public Health Risk (i) Modifications to address disinfection byproducts requirements (ii) Modifications to address VOC, IOC, SOC, radionuclide requirements	 25 15
(d)	Treatment- Infrastructure to address 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 or replacement of a water storage tank (iii) New water storage tank (iv) New or rehabilitated pump station (not an appurtenance to a new tank)	 10 30 20 10
(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
	Two additional points for every additional 10 households thereafter	2

	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 Court Orders or Agreed Orders (*Project must address the terms of the Agreed Order*)	50
(b)	Projects with violations that achieve voluntary compliance before being referred for an enforcement case	25

	VI. Public Water System Financial Need	Possible Points
(a)	Borrowers with a median household income (MHI) at or below 80 percent of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimate (2007-2011)	20
(b)	Borrowers with a MHI between 80 percent of the State's MHI and the State's MHI as determined by the ACS 5 Year Estimate (2007-2011)	10

	VII. Asset Management	Possible Points
(a)	System has a Capital Improvement Plan or similar planning document	20
(b)	System has developed appropriate rate structures to build, operate, and maintain the water works	10
(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 • Trees • Green roofs • Permeable pavement • Cisterns	5 pts. each/10 pts. maximum
(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*	5 pts. each/10 pts. maximum

(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*	5 pts. each/10 pts. maximum
(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 affects 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 pts. each/10 pts. maximum

*Denotes that a business case may be required.

	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 SHPO reviews) and; (c) Borrower has received funding commitments from other funding sources, or the DWSRF is the sole source of funding	30

APPENDIX B

2014 FUNDING CYCLE

PROJECT PRIORITY LIST

2014 DRINKING WATER SRF RANKED PROJECT PRIORITY LIST

Rank	Final Project Score	Notes	DWSRF#	WRIS#	Apply Entity	Project Title	Total Project Cost	Requested Loan Amount	Invited Amount	Cumulative Invited	MHI	Qualifies for Principal Forgiveness of:	Cumulative Principal Forgiveness Invited	Population
1	375		F14-001	WX21051003	City of Manchester	Downtown Waterline Replacement	$1,264,500	$1,264,500	$1,264,500	$1,264,500	18,239	$632,250	$632,250	12,386
2	270		F14-002	WX21111163	Louisville Water Company	Water Main Rehabilitation	$7,455,000	$4,175,000	$4,000,000	$5,264,500	43,680		$632,250	730,611
3	220	Funded 2012	F14-003	WX21225034	City of Sturgis	Sturgis Water System/Union Co. Water Dist. Interconnection	$4,470,571	$3,000,000		$5,264,500	32,263		$632,250	3,677
4	195	Funded 2013	F14-004	WX21233108	City of Sebree	Sebree Scattered Waterline Rehabilitation Project	$1,900,000	$900,000		$5,264,500	39,141		$632,250	1,886
5	175		F14-005	WX21133043	City of Jenkins	Jenkins Waterline Improvement Phase IV	$2,400,000	$2,400,000	$2,400,000	$7,664,500	24,700	$1,200,000	$1,832,250	2,881
6	175		F14-006	WX21149042	McLean County Fiscal Court	McLean County DAWN Water Treatment Plant	$8,276,000	$8,276,000	$4,000,000	$11,664,500	40,183		$1,832,250	n/a
7	170		F14-007	WX21081003	Bullock Pen Water District	Bullock Pen Improvements Phase 13	$1,585,200	$1,585,200	$1,585,200	$13,249,700	43,755		$1,832,250	19,715
8	140		F14-008	WX21081006	Bullock Pen Water District	Bullock Pen Looped Waterlines Phase 14	$1,064,800	$1,039,800	$1,039,800	$14,289,500	43,755		$1,832,250	19,715
9	135	Funded 2012	F14-009	WX21183030	City of Centertown	Centertown Water System Improvements Phase III	$302,500	$302,500		$14,289,500	35,000		$1,832,250	1,485
10	135		F14-010	WX21021017	City of Danville	Danville Water Treatment Plant and Raw Water Improvement	$28,608,171	$4,000,000		$14,289,500	38,333		$1,832,250	29,459
11	115	Funded 2012	F14-011	WX21183020	City of Hartford	Hartford Pretreatment Basin & System Improvements	$564,150	$564,150		$14,289,500	31,946		$1,832,250	3,119
12	105	Funded 2012	F14-012	WX21203523	City of Mount Vernon	Phase 2, Potable Water Storage Tanks and Lines	$2,600,000	$2,600,000		$14,289,500	21,181		$1,832,250	5,931

Rank	Final Project Score	Notes	DWSRF#	WRIS#	Apply Entity	Project Title	Total Project Cost	Requested Loan Amount	Invited Amount	Cumulative Invited	MHI	Qualifies for Principal Forgiveness of:	Cumulative Principal Forgiveness Invited	Population
13	105		F14-013	WX21041002	Carrollton Utilities	Carrollton Utilities Core Mission & Infrastructure Project	$963,931	$938,931	$938,931	$15,228,431	31,365	$469,466	$2,301,716	5,729
14	100		F14-014	WX21027014	City of Hardinsburg	City of Hardinsburg Water Storage Tank Improvements	$1,190,000	$1,190,000	$1,190,000	$16,418,431	29,423	$595,000	$2,896,716	13,312
15	90		F14-015	WX21037004	Northern Kentucky Water District	Campbell County Water Main Rehab and Treatment Plant Project	$5,644,000	$4,000,000		$16,418,431	53,375			201,663
16	78		F14-016	WX21025032 WX21025033 WX21025034 WX21025035 WX21025036	Breathitt County Water District	Various Waterline Extensions "B"	$2,162,000	$2,162,000		$16,418,431	22,304	$1,081,000		1,316
17	75		F14-017	WX21017019	City of North Middletown	North Middletown Water Tank Rehabilitation & SCADA	$680,000	$680,000		$16,418,431	60,547			1,143
18	75		F14-018	WX21109722	Jackson Co. Water Association	Transmission Main From McKee	$3,612,436	$3,212,436		$16,418,431	21,448	$1,606,218		13,423
19	75		F14-019	WX21025006	Bullock Pen Water District	Boone County Master Meter and Improvements	$1,549,600	$1,549,600		$16,418,431	43,755			19,715
20	70		F14-020	WX21065005	City of Irvine	Irvine Water Treatment Plant Upgrade & Expansion	$4,537,500	$3,037,500		$16,418,431	24,071	$1,518,750		6,386
21	70		F14-021	WX21217023	City of Campbellsville	Campbellsville Regional Water System Improvements	$5,951,000	$5,951,000		$16,418,431	24,274	$2,975,500		26,640
22	65		F14-022	WX21133029	City of Fleming-Neon	Water Treatment Plant Upgrade Project	$3,000,000	$3,000,000		$16,418,431	26,027	$1,500,000		3,546

Rank	Final Project Score	Notes	DWSRF#	WRIS#	Apply Entity	Project Title	Total Project Cost	Requested Loan Amount	Invited Amount	Cumulative Invited	MHI	Qualifies for Principal Forgiveness of:	Cumulative Principal Forgiveness Invited	Population
23	65		F14-023	WX21161037	Western Mason Water District	Augusta Dover Road Waterline Upgrade	$385,000	$385,000		$16,418,431	40,678			2,994
24	65		F14-024	WX21089046	City of Greenup	AA Highway System Loop	$919,000	$919,000		$16,418,431	42,102			12,193
25	60		F14-025	WX21025511	City of Jackson	Jackson WalMart Shopping Center Water Improvement Project	$490,000	$210,000		$16,418,431	23,421	$105,000		6,950
26	60		F14-026	WX21211068	Shelby County Fiscal Court	I-64 Transmission Pipeline	$6,000,000	$6,000,000		$16,418,431	56,417			23,499
27	58		F14-027	WX21025026 WX21025027 WX21025029 WX21025030	Breathitt County Water District	Various Waterline Extensions Project "A"	$800,000	$500,000		$16,418,431	22,304	$250,000		1,316
28	55		F14-028	WX21137045	City of Crab Orchard	Radio Read Conversion Project	$315,000	$315,000		$16,418,431	19,850	$157,500		1,719
29	55		F14-029	WX21183033	City of Fordsville	Fordsville Water Loss project	$246,550	$246,550		$16,418,431	21,354	$123,275		1,167
30	55		F14-030	WX21071009	Prestonsburg City Utilities Commission	Storage Facility Security Project	$140,615	$140,615		$16,418,431	25,711	$70,308		20,368
31	55		F14-031	WX21151053	City of Berea	Raw Water and High Service Pumping and Controls Modification	$680,000	$650,000		$16,418,431	39,090			11,969
32	40		F14-032	WX21127005	Louisa Water & Sewer Commission	WTP Water Intake Improvements Phase 1	$265,200	$265,200		$16,418,431	21,162	$132,600		7,511
33	40		F14-034	WX21223030	City of Milton	Meter Replacement	$400,000	$350,000		$16,418,431	31,776	$175,000		3,861
34	40		F14-035	WX21191003	City of Falmouth	Water Storage Reservoir Repair and Roof Replacement	$396,703	$396,703		$16,418,431	36,842			3,861

Rank	Final Project Score	Notes	DWSRF#	WRIS#	Apply Entity	Project Title	Total Project Cost	Requested Loan Amount	Invited Amount	Cumulative Invited	MHI	Qualifies for Principal Forgiveness of:	Cumulative Principal Forgiveness Invited	Population
35	40		F14-036	WX21051007	City of Manchester	Big Creek Booster Pump Station Replacement	$285,000	$285,000		$16,418,431	18,239	$142,500		12,386
36	35		F14-037	WX21155039	Lebanon Water Works Company	Marion County and Taylor County Interconnect	$3,230,000	$3,230,000		$16,418,431	26,317	$1,615,000		7,470
37	35		F14-038	WX21089013	City of Greenup	New Water Intake Structure	$1,100,000	$1,060,000		$16,418,431	42,102			12,193
38	30		F14-039	WX21051004	City of Manchester	High Service Line Replacement	$1,510,000	$1,510,000		$16,418,431	18,239	$755,000		12,386
39	30		F14-040	WX21013912	Pineville Utility Commission	A/C Waterline Replacement	$1,854,948	$1,529,948		$16,418,431	24,030	$764,974		16,573
40	30		F14-041	WX21089047	City of Greenup	Industrial Parkway System Loop	$600,000	$600,000		$16,418,431	42,102			12,193
41	30		F14-042	WX21239028	City of Versailles	Milner Road Waterine	$207,160	$207,160		$16,418,431	43,086			17,822
42	25		F14-043	WX21013926	Pineville Utility Commission	Radio Read Meter Metering System	$1,380,000	$895,725		$16,418,431	24,030	$447,863		16,573
43	25		F14-044	WX21111164	Louisville Water Company	Hardin County/Ft. Knox Transmission	$19,492,000	$14,992,000		$16,418,431	43,680			730,611
44	20		F14-045	WX21089064	City of Flatwoods	Jones Street Waterline Upgrade	$294,750	$294,750		$16,418,431	39,900			7,605
45	20		F14-046	WX21089042	City of Greenup	Greenup Water Treatment Plant Upgrades	$919,000	$919,000		$16,418,431	42,102			12,193
46	20		F14-047	WX21111168	Louisville Water Company	North Shelby Regional Storage	$2,500,000	$2,500,000		$16,418,431	43,680			730,611
47	20		F14-048	WX21111169	Louisville Water Company	English Station Storage	$10,700,000	$10,700,000		$16,418,431	43,680			730,611

Rank	Final Project Score	Notes	DWSRF#	WRIS#	Apply Entity	Project Title	Total Project Cost	Requested Loan Amount	Invited Amount	Cumulative Invited	MHI	Qualifies for Principal Forgiveness of:	Cumulative Principal Forgiveness Invited	Population
48	20		F14-049	WX21111172	Louisville Water Company	Vernetta way Water Main Extension	$210,000	$160,950		$16,418,431	43,680			730,611
49	20		F14-050	WX21111173	Louisville Water Company	Buttermilk Ridge Road Main Extension	$165,000	$126,850		$16,418,431	43,680			730,611
50	20		F14-051	WX21111186	Louisville Water Company	Harrod's Old Trace Main Extension	$362,000	$307,500		$16,418,431	43,680			730,611
51	15		F14-052	WX21073020	Farmdale Water District	Green Wilson Road Water Line Upgrade	$740,000	$740,000		$16,418,431	47,062			8,203
52	15		F14-053	WX21239027	City of Midway	Midway Waterline Replacement E. & W. Higgins St.	$198,000	$198,000		$16,418,431	55,903			2,168
53	10		F14-054	WX21239026	City of Versailles	Versailles Raw Water Main Replacement	$1,003,200	$1,003,200		$16,418,431	43,086			17,822
						Total Requested		$107,466,768						

2014 DRINKING WATER SRF RANKED PROJECT PRIORITY LIST

INTEREST RATE STRUCTURE

A 2.75% interest rate will be offered to borrowers with an MHI at or above the state MHI of $42,248.
A 1.75% interest rate will be offered to borrowers with an MHI between $42,248 and $33,798 (80% of the state MHI).
A 0.75% interest rate will be offered to borrowers with an MHI at or below $33,798.

PRINCIPAL FORGIVENESS PARAMETERS

The FFY2013 Capitalization Grant requires additional subsidization (principal forgiveness) of at least 20%, not to exceed 30%.
Minimum Amount that must be provided as Additional Subsidization is $2,522,533 (20% of the FFY 2013 DWSRF Capitalization Grant of 12,612,666.)
Maximum Amount that may be provided as Additional Subsidization $3,783,800 (30% of the FFY 2013 DWSRF Capitalization Grant of $12,612,666.)

Principal Forgiveness of 50% will be offered to those utilities whose entire service area has an MHI at or below $33,798 (80% of the state MHI of $42,248).

MEDIAN HOUSEHOLD INCOME

The MHI number provided on this priority list will be used to determine interest rate and principal forgiveness eligibility for all projects approved under the SFY 2014 Intended Use Plan.
The MHI data was obtained from the American Community Survey 2007-2011 5 Year Estimates

APPENDIX C

CALL FOR PROJECTS LETTER

KENTUCKY INFRASTRUCTURE AUTHORITY

Steven L. Beshear
Governor

1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
Phone (502) 573-0260
Fax (502) 573-0157
http://kia.ky.gov

John E. Covington, III
Executive Director

October 1, 2012

To Whom It May Concern:

The Kentucky Infrastructure Authority and the Kentucky Division of Water are announcing the 2014 Drinking Water State Revolving Fund Call for Projects.

The Drinking Water State Revolving Fund Call for Projects
Will Be Open from October 1, 2012 to December 15, 2012

If you have a drinking water project that will need funding during the 2014 state fiscal year (July 1, 2013 thru June 30, 2014), we want to hear from you as your project may be eligible to receive funding from the Drinking Water State Revolving Fund (DWSRF). The DWSRF is a competitive program. To be qualified to apply for a low interest DWSRF loan, your project MUST be ranked and listed on the 2014 DWSRF Priority List developed by the Division of Water (DOW). Projects will not be carried forward from the 2013 project priority list to the 2014 project priority list.

You Will Need a Project Profile for Your Project

To submit a project for inclusion on the DWSRF Priority List you must work with your local Area Water Management Council (AWMC) through the Area Development District (ADD) to complete or update a Project Profile (and related mapping) in the Water Resource Information System (WRIS). All information needed by DOW to review and rank potential DWSRF projects has been incorporated into the Project Profile template. Complete the fill in template and then send the information to your AWMC before their next meeting.

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

For your project to be included in the DWSRF Priority List your Project Profile must have AWMC approval. The Project Profile includes the information necessary to evaluate potential DWSRF projects. The ADD staff may have already contacted you to start providing additional information for your existing project profiles to be updated. To give the ADD staff time to get your profile approved by the AWMC, you must get the profile information to your AWMC before their next meeting.

DOW strongly encourages you to read the Priority System Guidance Document before you begin submitting your Project Profile as you might acquire some useful ideas for improving your project's overall score. **Additionally, only those projects that can start construction by March 31, 2015 will be considered for funding.**

Current Interest Rates

Projected interest rates for the program will be identified in the 2014 DWSRF Intended Use Plan (IUP) which will be available late spring, 2013. Rates identified in the IUP are subject to change by approval of the KIA Board. Currently, KIA offers three interest rates for the DWSRF program. The standard rate of 2.75% is available for borrowers with a median household income (MHI) at or above $41,576, the MHI of the Commonwealth according to U.S. Census estimates from American Factfinder. A 1.75% rate is offered to borrowers whose MHI is between $41,576 and $33,261 (80% of the Commonwealth MHI). The 1.75% rate also applies to those projects that facilitate compliance with an order or judgment addressing environmental non-compliance or those systems that are considered regional. To qualify for the 0.75% rate, the borrower must have an MHI at or below $33,261.

Sustainable Infrastructure Initiative

Available on KIA's and DOW's websites is a brochure highlighting the Sustainable Infrastructure (SI) initiative launched by EPA and the Kentucky Division of Water in 2008. Projects that incorporate some of the practices and recommendations described in the SI brochure might receive additional points, resulting in a higher ranking on the DWSRF Project Priority List. The DOW encourages you to contact them with any questions or feedback regarding the SI initiative.

Questions?

If you have questions about completing the questionnaire or project eligibility for priority list inclusion, please contact Amanda Yeary or Shafiq Amawi of the Water Infrastructure Branch at amanda.yeary@ky.gov or shafiq.amawi@ky.gov or at (502) 564-3410. For more information on loan requirements, terms or eligibility contact Sandy Williams (sandy.williams@ky.gov), Jeff Abshire (jeff.abshire@ky.gov), John LeFevre (john.lefevre@ky.gov), or Tammy McCall (temmy.mccall@ky.gov) of KIA or call (502) 573-0260.

Sincerely,

John E. Covington, III, Executive Director
Kentucky Infrastructure Authority

Sandra L. Gruzesky, Director
Division of Water

APPENDIX D

DWSRF PROJECT DEFINITIONS AND

EXAMPLES FOR GREEN INFRASTRUCTURE RESERVE

2012 Clean Water and Drinking Water State Revolving Fund 20% Green Project Reserve: Guidance for Determining Project Eligibility

I. Introduction: The Fiscal Year (FY) 2011 Full-Year Continuing Appropriation Act (P.L. 112-10) included additional requirements affecting both the Clean Water and the Drinking Water State Revolving Fund (SRF) programs. This attachment is included in the *Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2011 Full-Year Continuing Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs.* Because of differences in project eligibility for each program, the Clean and Drinking Water SRFs have separate guidance documents that identify specific goals and eligibilities for green infrastructure, water and energy efficient improvements, and environmentally innovative activities. Part A includes the details for the Clean Water SRF program, and Part B the Drinking Water SRF program.

Public Law 112-10 carries forward language from the FY 2010 Appropriation that states: "Provided, that for fiscal year 2010, to the extent there are sufficient eligible project applications, not less than 20 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants and not less than 20 percent of the funds made available under this title to each State for Drinking Water State Revolving Fund capitalization grants shall be used by the State for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities." These four categories of projects are the components of the Green Project Reserve (GPR).

II. GPR Goals: Congress' intent in enacting the GPR is to direct State investment practices in the water sector to guide funding toward projects that utilize green or soft-path practices to complement and augment hard or gray infrastructure, adopt practices that reduce the environmental footprint of water and wastewater treatment, collection, and distribution, help utilities adapt to climate change, enhance water and energy conservation, adopt more sustainable solutions to wet weather flows, and promote innovative approaches to water management problems. Over time, GPR projects could enable utilities to take savings derived from reducing water losses and energy consumption, and use them for public health and environmental enhancement projects. Additionally, EPA expects that green projects will help the water sector improve the quality of water services without putting additional strain on the energy grid, and by reducing the volume of water lost every year.

III. Background: For the FY 2010 GPR Guidance, EPA used an inclusive approach to determine what is and is not a 'green' water project. Wherever possible, this guidance references existing consensus-based industry practices to provide assistance in developing green projects. Input was solicited from State-EPA and EPA-Regional workgroups and the water sector. EPA staff also reviewed approaches promoted by green practice advocacy groups and water associations, and green infrastructure implemented by engineers and managers in the water sector. EPA also assessed existing 'green' policies within
EPA and received input from staff in those programs to determine how EPA funds could be used to achieve shared goals.

The FY 2011 SRF GPR Guidance provides States with information needed to determine which projects count toward the GPR requirement. The intent of the GPR Guidance is to describe projects and activities that fit within the four specific categories listed in the FY 2010 Appropriations Act which also apply to the FY 2011 Full-Year Continuing Appropriation. This guidance defines each category of GPR projects and lists projects that are clearly eligible for GPR, heretofore known as categorically eligible projects. For projects that do not appear on the list of categorically projects, they may be evaluated for their eligibility within one of the four targeted types of GPR eligible projects based upon a business case that provides clear documentation (see the *Business Case Development* sections in Parts A & B below).

GPR may be used for planning, design, and/or building activities. Entire projects, or the appropriate discrete components of projects, may be eligible for GPR. Projects do not have to be part of a larger capital project to be eligible. All projects or project components counted toward the GPR requirement must clearly advance one or more of the objectives articulated in the four categories of GPR discussed below.

The Green Project Reserve sets a new precedent for the SRFs by targeting funding towards projects that States may not have funded in prior years. Water quality benefits from GPR projects rely on proper operation and maintenance to achieve the intended benefits of the projects and to achieve optimal performance of the project. EPA encourages states and funding recipients to thoroughly plan for proper operation and maintenance of the projects funded by the SRFs, including training in proper operation of the project. It is noted, however, that the SRFs cannot provide funding for operation and maintenance costs, including training, in the SRF assistance agreements. Some of these costs may, however, be funded through appropriate DWSRF set-asides under limited conditions.

PART B – DWSRF GPR SPECIFIC GUIDANCE

DWSRF Eligibility Principles

State SRF programs are responsible for identifying projects that count toward GPR. The following overarching principles, or decision criteria, apply to all projects that count toward GPR and will help states identify projects.

0.1 All GPR projects and activities must otherwise be eligible for DWSRF funding. The GPR requirement does not create new funding authority beyond that described in Section 1452 of the SDWA.

0.2 GPR projects and activities must meet the definition of one of the four GPR categories. The individual GPR categories do not create new eligibility for the DWSRF. The projects that count toward GPR must otherwise be eligible for DWSRF funding.

0.3 GPR projects and activities must further the goals stated in Section 1452 of the Safe Drinking Water Act.

0.4 Projects and activities that utilize the DWSRF set-asides can also be eligible for GPR. Planning and assessment activities, such as conducting water or energy audits, are eligible, as well as green-oriented capacity development, source water protection, and total/integrated water resources management planning activities. Where applicable, the pertinent set-asides that can be used are noted in the next section.

DWSRF Technical Guidance

The following sections outline the technical aspects for the DWSRF Green Project Reserve. It is organized by the four categories of green projects: green infrastructure, water efficiency, energy efficiency, and environmentally innovative activities. Categorically green projects are listed, as well as projects that are ineligible. Design criteria for business cases and example projects that would require a business case are also provided.

1.0 GREEN INFRASTRUCTURE

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

1.2 Categorical Projects The following types of projects, done at a utility-owned facility or as part of a water infrastructure project, can be counted toward the GPR if they are a part of an eligible DWSRF project:

1.2-1 Pervious or porous pavement
1.2-2 Biorentention
1.2-3 Green roofs
1.2-4 Rainwater harvesting/cisterns
1.2-5 Gray water use
1.2-6 Xeriscape
1.2-7 Landscape conversion programs
1.2-8 Retrofitting or replacing existing irrigation systems with moisture and rain sensing equipment

1.3 Projects That Do Not Meet the Definition of Green Infrastructure

1.3-1 Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
1.3-2 Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins.
1.3-3 In-line and end-of-pipe treatment systems that only filter or detain stormwater.
1.3-4 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.
1.3-5 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 pursuant to Section 4.4 of this guidance.

1.4 Decision Criteria for Business Cases

1.4-1 Green infrastructure projects are designed to mimic the natural hydrologic conditions of the site or watershed.
1.4-2 Projects capture, treat, infiltrate, or evapotranspire stormwater on the parcels where it falls and does not include inter basin transfers of water.
1.4-3 GPR project is in lieu of or to supplement municipal hard/gray infrastructure.
1.4-4 Projects considering both landscape and site scale will be most successful at protecting water quality.
1.4-5 Design criteria is available at http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm and http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm

2.0 WATER EFFICIENCY

2.1 Definition: 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.

2.2 Categorical Projects

2.2-1 Installing or retrofitting water efficient devices such as plumbing fixtures and appliances

2.2-1a For example – showerheads, toilets, urinals, and other plumbing devices

2.2-1b Implementation of incentive programs to conserve water such as rebates

2.2-1c WaterSense labeled products (http://www.epa.gov/watersense/index.html)

2.2-2 Installing any type of water meter in previously unmetered areas:

2.2-2a If rate structures are based on metered use,

2.2-2b Can include backflow prevention devices if installed in conjunction with water meter.

2.2-3 Replacing existing broken/malfunctioning water meters with:

2.2-3a Automatic meter reading systems (AMR), for example:

2.2-3a(i) Advanced metering infrastructure (AMI).

2.2-3a(ii) Smart meters.

2.2-3b Meters with built in leak detection,

2.2-3c Can include backflow prevention devices if installed in conjunction with water meter replacement.

2.2-4 Retrofitting/adding AMR capabilities or leak equipment to existing meters (not replacing the meter itself).

2.2-5 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.

2.2-5a Funded through set-asides: Small Systems Technical Assistance, State Program Management – Capacity Development, or Local Assistance & Other State Programs – Capacity Development; where consistent with the state capacity development strategy

2.2-5b For standard practices, see AWWA M36 *Water Audits and Loss Control Programs.*

2.2-5c Free Water Audit Software, Version 4.1 (2010) (http://www.awwa.org/Resources/WaterLossControl.cfm?ItemNumber=47846&navItemNumber=48155)

2.2-6 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.

2.2-6a Funded through set-asides: Small Systems Technical Assistance, State Program Management – Capacity Development, or Local Assistance & Other State Programs – Capacity Development; where consistent with the state capacity development strategy

2.2-6b For standard practices, see AWWA M52 *Water Conservation Programs – A Planning Manual*

2.2-7 Recycling and water reuse projects that replace potable sources with non-potable sources,

2.2-7a Gray water, condensate, and wastewater effluent reuse systems (where local codes allow the practice).

2.2-7b Extra treatment costs and distribution pipes associated with water reuse.

2.2-8 Retrofit or replacement of existing landscape irrigation systems to more efficient landscape irrigation systems, including moisture and rain sensing controllers.
2.2-9 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.
2.2-10 Distribution system leak detection equipment, portable or permanent.
2.2-11 Automatic flushing systems (portable or permanent).
2.2-12 Pressure reducing valves (PRVs).
2.2-13 Internal plant water reuse (such as backwash water recycling).

2.3 Projects That Do Not Meet the Definition of Water Efficiency
2.3-1 Covering open finished water reservoirs – Federally mandated, so not considered "above and beyond."

2.4 Decision Criteria For Business Cases
2.4-1 Water efficiency can be accomplished through water saving elements or reducing water consumption. This will reduce the amount of water taken out of rivers, lakes, streams, groundwater, or from other sources.
2.4-2 Water efficiency projects should deliver equal or better services with less net water use as compared to traditional or standard technologies and practices.
2.4-3 Efficient water use often has the added benefit of reducing the amount of energy required by a drinking water system, since less water would need to be treated and transported; therefore, there are also energy and financial savings.
2.4-4 Proper water infrastructure management should address where water losses could be occurring in the system and fix or avert them. This could be achieved, for example, by making operational changes or replacing aging infrastructure.

2.5 Example Projects Requiring a Business Case
2.5-1 Water meter replacement with traditional water meters (see AWWA M6 *Water Meters – Selection, Installation, Testing, and Maintenance*).
2.5-2 Distribution pipe replacement or rehabilitation to reduce water loss and prevent water main breaks (see AWWA M28 Rehabilitation of Water Mains).
2.5-3 Storage tank replacement/rehabilitation to reduce water loss.
2.5-4 New water efficient landscape irrigation system (where there currently is not one).

3.0ENERGY EFFICIENCY

3.1 Definition: 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.

3.2 Categorical Projects[2]

[2] EPA has concluded that existing literature does not support a 20% energy efficiency improvement threshold for drinking water systems; therefore, there is no categorical 20% threshold for pumping/treatment systems for the DWSRF. A business case is required.

3.2-1 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.

3.2-1a Utility-owned renewable energy projects can be located on-site or off-site.

3.2-1b Includes the portion of a publicly owned renewable energy project that serves the utility's energy needs.

3.2-1c Must feed into the grid that the utility draws from and/or there is a direct connection.

3.2-2 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.

3.2-2a Funded through set-asides: Small Systems Technical Assistance, State Program Management – Capacity Development, or Local Assistance & Other State Programs – Capacity Development; where consistent with the state capacity development strategy

3.2-2b For standard energy management practices, see *Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities*, located at http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf

3.2-2c Energy Efficiency Step-By-Step Guide: http://www.epa.gov/region09/waterinfrastructure/howto.html

3.2-3 National Electric Manufacturers Association (NEMA) Premium energy efficiency motors (http://www.nema.org/gov/energy/efficiency/premium/)

3.3 Projects That Do Not Meet the Definition of Energy Efficiency

3.3-1 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)

3.3-2 Hydroelectric facilities, except micro-hydroelectric projects. Micro-hydroelectric projects involve capturing the energy from pipe flow.

3.4 Decision Criteria for Business Cases

3.4-1 Projects should include products and practices which will decrease environmental impacts, such as reducing greenhouse gas emissions, and provide financial savings.

3.4-2 Projects should include approaches to integrate energy efficient practices into daily management and long-term planning (http://water.epa.gov/infrastructure/sustain/energyefficiency.cfm).

3.4-3 Operator training in conjunction with any energy savings project is strongly encouraged in order to maximize the energy savings potential.

3.4-4 Using existing tools such as Energy Star‟ s Portfolio Manager (http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager) or Check Up Program for Small Systems (CUPSS) (http://www.epa.gov/cupss/) to document current energy usage and track anticipated savings.

3.5 Example Projects Requiring a Business Case

3.5-1 Energy efficient retrofits, upgrades, or new pumping systems and treatment processes (including variable frequency drives (VFDs)).

3.5-2 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.).

3.5-3 Projects that result from an energy efficiency related assessments (such as energy audits, energy assessment studies, etc), that are not otherwise designated as categorical.

3.5-4 Projects that cost effectively eliminate pumps or pumping stations.

3.5-5 Projects that achieve the remaining increments of energy efficiency in a system that is already very efficient.

3.5-6 Upgrade of lighting to energy efficient sources (such as metal halide pulse start technologies, compact fluorescent, light emitting diode, etc).

3.5-7 Automated and remote control systems (SCADA) that achieve substantial energy savings (see AWWA M2 *Instrumentation and Control*).

4.0 ENVIRONMENTALLY INNOVATIVE

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

4.2 Categorical Projects

4.2-1 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.

4.2-1a Funded through set-asides: Small Systems Technical Assistance, State Program Management, or Local Assistance & Other State Programs.

4.2-1b Plans to improve water quantity and quality associated with water system technical, financial, and managerial capacity.

4.2-1c Eligible source water protection planning.

4.2-1c(i) Periodic, updated, or more detailed source water delineation or assessment as part of a more comprehensive source water protection program.

4.2-1c(ii) Source water monitoring (not compliance monitoring) and modeling as part of a more comprehensive source water protection program.

4.2-1c(iii) http://www.epa.gov/safewater/dwsrf/pdfs/source.pdf

4.2-1d Planning activities by a utility to prepare for adaptation to the long-term affects of climate change and/or extreme weather.
4.2-1d(i) Office of Water – Climate Change and Water website: http://www.epa.gov/water/climatechange/

4.2-2 Utility Sustainability Plan consistent with EPA" s SRF sustainability policy.

4.2-3 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.
4.2-3a EPA Climate Leaders: http://www.epa.gov/climateleaders/basic/index.html
4.2-3b Climate Registry – http://www.theclimateregistry.org/

4.2-4 Source Water Protection Implementation Projects
4.2-4a Voluntary, incentive based source water protection measures pursuant to Section 1452(k)(1)(A)(ii), where the state primacy agency has determined that the use of such measures will reduce or preclude the need for treatment. Under the FY 2010 appropriation, additional subsidization for these measures may be provided in the form of principal forgiveness or negative interest rate loans.

4.2-5 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.
4.2-5a Any level of certification (Platinum, Gold, Silver, Certified).
4.2-5b 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.
4.2-5c http://www.usgbc.org/DisplayPage.aspx?CategoryID=19

4.3 Projects That Do Not Meet the Definition of Environmentally Innovative

4.3-1 Higher sea walls to protect water infrastructure facilities from sea level rise.

4.3-2 Reflective roofs at water infrastructure facilities to combat heat island effect.

4.4 Decision Criteria for Business Cases

4.4-1 State programs are allowed flexibility in determining what projects qualify as innovative in their state based on unique geographical and climatological conditions.
4.4-1a Technology or approach whose performance is expected to address water quality but the actual performance has not been demonstrated in the state; or
4.4-1b Technology or approach that is not widely used in the state, but does perform as well or better than conventional technology/approaches at lower cost; or
4.4-1c Conventional technology or approaches that are used in a new application in the state.

4.5 Example Projects Requiring A Business Case

4.5-1 Projects, or components of projects, that result from total/integrated water resources management planning (including climate change) consistent with the Decision Criteria for environmentally innovative projects and that are DWSRF eligible.

4.5-2 Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects, such as:

4.5-2a Projects that significantly reduce or eliminate the use of chemicals in water treatment.

4.5-2b 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 (Cornwell, 2009; *Water Treatment Residuals Engineering*; Water Research Foundation).

4.5-2c Trenchless or low impact construction technology.

4.5-2d Using recycled materials or re-using materials on-site.

4.5-3 Educational activities and demonstration projects for water or energy efficiency (such as rain gardens).

4.5-4 Projects that achieve the goals/objectives of utility asset management plans (http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf; http://www.epa.gov/owm/assetmanage/index.htm).

DWSRF Business Case Development

This guidance is intended to be comprehensive; however, EPA understands our examples projects requiring a business case may not be all inclusive. A business case is a due diligence document. For those projects, or portions of projects, which are not included in the categorical projects lists provided above, a business case will be required to demonstrate that an assistance recipient has thoroughly researched anticipated 'green' benefits of a project. Business cases will be approved by the State (see Section III.A. in the *Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2011 Full-Year Continuing Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs*). An approved business case must be included in the State's project files and contain clear documentation that the project achieves identifiable and substantial benefits. The following sections provide guidelines for business case development.

5.0 Length of a Business Case

5.0-1 Business cases should be adequate but not exhaustive.

5.0-1a There are many formats and approaches. EPA does not require any specific one.

5.0-1b Some projects will require detailed analysis and calculations, while others many not require more than one page.

5.0-1c Limit the information contained in the business case to only the pertinent 'green' information needed to justify the project.

5.0-2 A business case can simply summarize results from, and then cite, existing documentation – such as engineering reports, water or energy audits, results of water system tests, etc.

5.1 Content of a Business Case

5.1-1 Business cases must address the decision criteria for the category of project.

5.1-2 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.

5.1-3 The cost and financial benefit of the project should be included, along with the payback time period, where applicable.

5.2 Items Which Strengthen Business Case, but Are Not Required

5.2-1 Showing that the project was designed to enable equipment to operate most efficiently.

5.2-2 Demonstrating that equipment will meet or exceed standards set by professional associations.

5.2-3 Including operator training or committing to utilizing existing tools such as Energy Star's Portfolio Manager or CUPSS for energy efficiency projects.

5.3 Example Business Cases Are Available at http://www.srfbusinesscases.net/.