FINAL
INTENDED USE PLAN
Including
PROJECT PRIORITY LIST

FOR THE

DRINKING WATER
STATE REVOLVING FUND

For
State Fiscal Year 2012

COMMONWEALTH OF KENTUCKY

August 8, 2011

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 2012 state funding cycle (SFC), July 1, 2011, to June 30, 2012 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 2012 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 2012 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 91 drinking water infrastructure projects, totaling more than $229 million.

Additional DWSRF Requirements Remain in 2012

The Federal Fiscal Year (FFY) 2011 budget, providing the 2011 appropriation for the DWSRF, contains three provisions, new in 2010, that were carried over for 2011 in the Continuing Resolution. These provisions address wage rate provisions, additional subsidization, and "green" projects.

With regard to wage rate provisions, all drinking water projects for which SRF assistance agreements are executed prior to October 1, 2011 must meet federal Davis Bacon wage

requirements. This Davis Bacon provision applies to all assistance agreements signed during the specified time frame.

For a second year, the budgetary authorization for the DWSRF capitalization grant provided for additional subsidization. At least 30% ($4,013,700) of the DWSRF capitalization grant must be provided as additional subsidy.

Congress continues to place emphasis on "green" projects. At least 20 percent of the 2011 capitalization grant ($2,675,800) must be used to fund green projects as defined by EPA.

A. DAVIS-BACON COMPLIANCE

As part of the FFY 2011 budget appropriation in the Continuing Resolution for the DWSRF, Congress mandated that 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. Any DWSRF financings made on or after October 30, 2009 and prior to October 1, 2011, 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.

B. ADDITIONAL SUBSIDIZATION

The FFY 2011 capitalization grant authorization also requires that at least $4,013,700 of the funds made available under that grant must be used by the State to provide additional subsidization to eligible recipients. Kentucky will make such additional subsidization in the form of loans with 35% principal forgiveness. To be eligible to receive principal forgiveness, the borrower's entire service area must have a median household income (MHI) at or below $32,958, or 80% of the State's MHI as determined by the Kentucky State Data Center for 2010. 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.

C. GREEN PROJECT RESERVE (GPR)

The FFY 2011 capitalization grant also requires that to the extent there are sufficient eligible project applications, not less than 20% ($2,675,800) of the funds made available under that grant must be used by the State for projects which address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities (collectively referred to as "green" projects). The priority list reflects green projects that are eligible under the GPR. Other projects on the priority list may be able to show, through a business case or other information, that they also are green projects; these projects too will be considered eligible for award under the GPR.

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 Questionnaire, Priority List, Environmental Review
Buddy Griffin - (502) 564-3410 Buddy.griffin@ky.gov	DOW	Loan Application, Procurement, Bidding Requirements
Greg Goode - (502) 564-3410 Greg.goode@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 facilities
- 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 2012 Funding Cycle

Short-Term Goals

1. Work with EPA Region IV, the Office of the State Budget Director and the Office of Financial Management in the Finance and Administration Cabinet to complete the steps necessary to issue leverage bonds.

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

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

4. Promote the green infrastructure initiative to potential DWSRF borrowers to solicit enough projects to meet the green project reserve requirement.

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

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

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

8. 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.

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

10. 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 2011 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 four 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 2012 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 2011. However, with the passage of the American Recovery and Reinvestment Act of 2009 (ARRA) and the 2010 Capitalization Grant appropriation, DWSRF allocations have more than doubled over the previous 4 years. The 2011 Capitalization Grant was reduced from 2010 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.

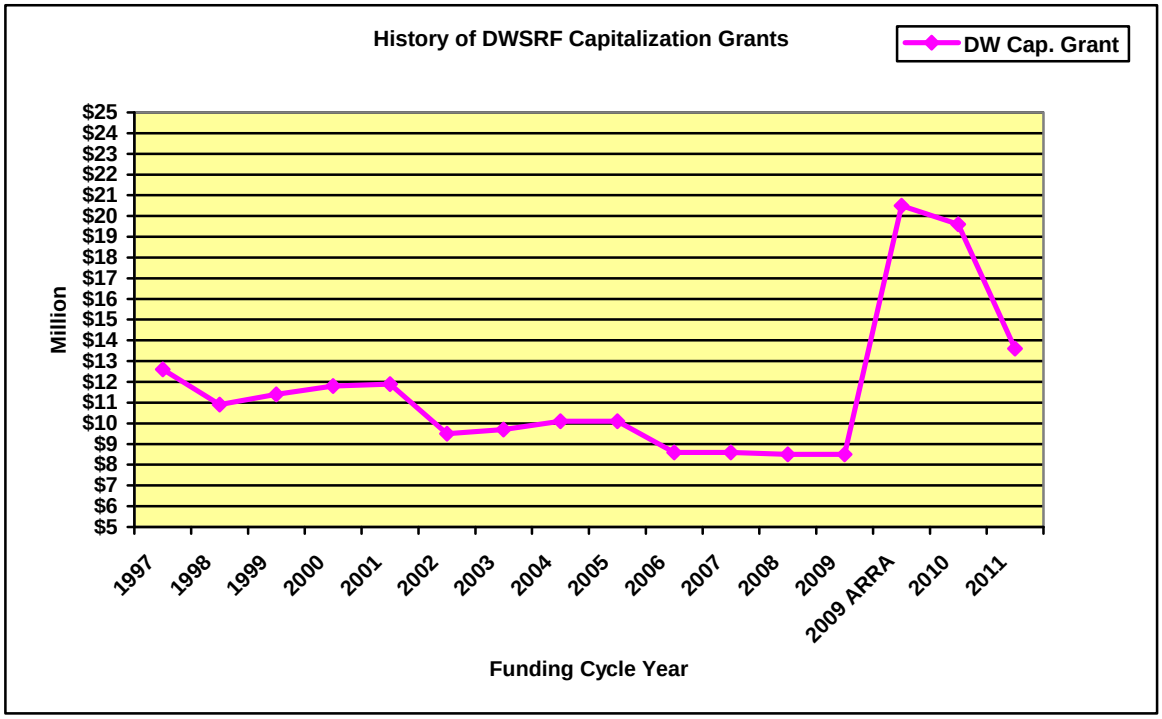

Figure 1

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 received authorization from the Kentucky General Assembly to issue 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 2012, 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 2012
July 1, 2011 through June 30, 2012

Funding Sources	**Federal Contribution**	**State Contribution**	**Other**	**Total**
Uncommitted (Overcommitted) Prior Year Loan Funds *			7,000,000	7,000,000
Loan Repayments *			7,465,842	7,465,842
Interest Earnings *			1,000,000	1,000,000
Leverage Bond Proceeds			12,500,000	12,500,000
Banked Prior Year Set-Aside Funds			8,896,036	8,896,036
Banked Prior Year ARRA Set-Aside Funds			537,149	537,149
2011 Capitalization Grant	13,379,000	2,675,800		16,054,800
State Program Management Expenditure Match**		1,337,900		1,337,900
Total Funding Sources	13,379,000	4,013,700	37,399,027	54,791,727
Funding Uses				
Financial Assistance ***	9,632,880	2,675,800	26,065,092	38,373,772
Leverage Bond Debt Service			1,900,750	1,900,750
Banked Prior Year Set-Aside Funds			8,896,036	8,896,036
Banked Prior Year ARRA Set-Aside Funds	-		537,149	537,149
2011 Administration (4%)	535,160			535,160
2011 State Program Management (10%)	1,337,900	1,337,900		2,675,800
2011 Technical Assistance (2%)	267,580			267,580
2011 Local and Other Assistance (12%)	1,605,480			1,605,480
Total Funding Uses	13,379,000	4,013,700	37,399,027	54,791,727

* Estimate as of July 5, 2011

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

*** An amount equal to 20% of the federal capitalization grant must be used for green projects to the extent that KIA receives sufficient applications. The green project reserve equals $2,675,800.

*** An amount no less than 30% of the federal capitalization grant must be used for additional subsidization. For 2012, the additional subsidization will be $4,013,700.

In SFY 2012, KIA will have up to $38,373,772 available to fund eligible DWSRF projects. This is comprised of the 2011 capitalization grant of $9,632,880 (after set-asides) *plus* state funds of $2,675,800, uncommitted prior-year loan funds of $7,000,000, estimated repayment funds *plus* estimated interest earnings (net of leverage bond debt service) of $6,565,092, and up to $12,500,000 from leverage bond proceeds. From the capitalization grants, KIA and DOW will have an additional $7,310,234 set-aside for environmental initiatives and $2,122,951 for administration.

The $2,675,800 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 2011 capitalization grant application is July 15, 2011. Grant awards are typically made within 90 days. The approximate federal to state cash draw ratio for the DWSRF for FY 2012 is anticipated to be 78:22.

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 2012.

KIA requested budgetary authorization to issue agency leverage bonds during the 2010-2012 biennium in an amount not to exceed $25 million. Bond proceeds would be deposited into the fund and would be used to make eligible DWSRF loans. This authorization was granted in the 2010-2012 biennial budget. For this authorization to become effective, KIA must obtain approval from EPA Region IV. Next, KIA must acquire approval from the KIA Board, the Office of the State Budget Director and the Office of Financial Management in the Finance and Administration Cabinet as to the timing and amount of the leverage bonds issuance. KIA anticipates that approximately one-half of the authorization will be used in each state fiscal year.

Additionally, KIA reserves the right to defer the issuance of bonds based on conditions in the financial markets. Unstable market conditions could negatively impact the amount of funds available for loans. It is KIA's intention to maximize the amount of funding available for eligible projects.

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 July 7, 2011 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 3 percent with two non-standard rates at 2 percent and 1 percent to start off the 2012 fiscal year.

The standard rate will apply to all borrowers at or above the 2010 Census State Median Household Income (MHI) of $41,197. To qualify for the non-standard rate of 2%, 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 $41,197 and $32,958 (80% of the State MHI) or be considered regional. To qualify for the non-standard rate of 1%, a borrower must have a MHI at or below $32,958. 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 2011 Capitalization Grant appropriation required that at least 30% ($4,013,700) of the DWSRF capitalization grant must be provided as additional subsidy. The State will make such additional subsidization in the form of loans with 35% principal forgiveness. To be eligible for principal forgiveness, the borrower's entire service area must have a median household income (MHI) at or below $32,958, or 80% of the State's MHI as determined by the 2010 U.S. Census. 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.

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 2011, twenty-eight percent (28%) of the 2011 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 has received an authorization to issue up to $25 million in leverage bonds during the 2010-2012 biennium. Bonds will only be issued if there is sufficient demand for financial assistance.

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 2012 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 2012. 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 2012 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 2012 Project Priority List is located in Appendix B. All applicants will be notified of their ranking and funding status eligibility on the 2012 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, 2010 and continuing through January 6, 2011, 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 2012 IUP.

Applicants ranking high on the 2012 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 2013 IUP process will begin in October 2011. The call for projects will be open during October, November and December 2011, at which time project project profile forms can be created or updated in the WRIS and will be accepted for the SFY 2013 funding cycle. The following schedule will apply:

2013 Call for Projects	**October 1, 2011- December 31, 2011**
Creation of Project Priority List and Capacity Development Review	**January 1, 2012- March 31, 2012**
Public Notice Period for IUP	**May 1, 2012- June 1, 2012**
Finalize 2013 IUP and send to EPA	**Prior to June 30, 2012**

Email notifications will be sent in September 2011 to all water utilities, area development districts, mayors, county judge executives, 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. If, after the receipt of the first round applications, KIA does not have sufficient applications to meet the GPR or additional subsidization requirements, the project will be bypassed until a qualifying GPR or additional subsidization project is reached.

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. 2012 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 twenty eight percent (28%) of the 2011 capitalization grant. The following is a list of Kentucky's set-aside allotments:

	KY's 2011 Allotment
DWSRF Program Administration (4% maximum)	4%
State Program Management (10% maximum)	10%
Small Systems Technical Assistance (2% maximum)	2%
State and Local Assistance (15% maximum)	12%
Total	28%

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

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

Kentucky will set aside four percent from the 2011 capitalization grant for administration. The percent of each grant designated for the DOW and designated for the KIA is 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.

Funds may be used for travel and equipment as specified in work plans. Funds not obligated within one fiscal year of receipt of a capitalization grant award shall be reserved for use in future years.

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

Kentucky will set-aside 10 percent for PWSS

The act allows a state to set aside 10 percent of its annual capitalization grant to support other program initiatives of the SDWA, which include:

- Supplementing the Public Water System Supervision (PWSS) Program
- Providing Technical Assistance through Source Water Protection
- Development/Implementation of a Capacity Development Program
- Development/Implementation of an Operator Certification Program

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 from the 2011 capitalization grant to supplement the DOW PWSS program and to support the Division of Compliance Assistance and Operator Certification Program, to include:

1. Supporting the 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.

3. 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.

Funds may be used for travel and equipment as specified in work plans. Funds not obligated within one fiscal year of receipt of a capitalization grant award shall be reserved for use in future years.

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

Kentucky will set-aside two percent for Technical Assistance

The act allows a state to set aside two percent of its annual capitalization grant to support technical assistance initiatives of the SDWA such as 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.

Kentucky will set aside two percent from the 2011 capitalization grant to provide technical assistance to small systems. Funds may be used for travel and equipment as specified in work plans. Funds not obligated within one fiscal year of receipt of a capitalization grant award shall be reserved for use in future years.

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

Kentucky will set-aside 10 percent for Capacity Development and 2 percent for the Wellhead Protection

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 10 percent from the 2011 capitalization grant to support technical, managerial or financial assistance for the Capacity Development Program as allowed under 1452(k)(2)(C).

- 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. EEC may limit the amount of participation for contracts funded by these activities.

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

- Contractual services may also be acquired for the (1) continuation of a targeted Utility Optimization Program providing on-site assistance to utilities with technical issues, operating training and instruction and (2) small systems compliance assistance.

Kentucky will set aside 2 percent from the 2011 capitalization grant to support Wellhead Protection Program as allowed under 1452(k)(2)(E).

Activities may include, but are not limited to, set up and maintain contact with PWSs to establish wellhead protection programs; assist with technical delineation of wellhead protection areas including performing pumping tests, geological and hydro-geologic write-ups, modeling and dye tracking; assist with development of management strategies to be used in wellhead protection; and provide public education assistance.

Funds may be used for travel and equipment as specified in work plans. State/Local Assistance Program funds for Capacity Development and Wellhead Programs not obligated within four fiscal years of receipt of the capitalization grant shall be transferred to the construction loan account.

IV. PUBLIC REVIEW AND COMMENT

The draft 2012 DWSRF IUP including the 2012 project priority list was available for public review and comment on the Division of Water website at water.ky.gov/Funding/Pages/DrinkingWaterStateRevolvingFund.aspx and on the Kentucky Infrastructure Authority website at kia.ky.gov from July 7, 2011 through August 5, 2011.

The public meeting was held at 1:30 p.m. on August 5, 2011 in the board room of KIA. 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 2012 DWSRF IUP and the Project Priority Ranking System.

No verbal or written comments were received. This document is considered final and will be submitted to the US EPA Region IV Office.

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

2012 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
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www.water.ky.gov

PRIORITY SYSTEM GUIDANCE

PURPOSE

The 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 a priority formula.

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 DOW Water Infrastructure Branch assigns points in each of eight categories: Regionalization, Public Health Criteria-Treatment, Public Health Criteria-Distribution, Extension of Service, Security, Compliance with Enforcement Action, Public Water System Financial Need, Sustainable/Green Infrastructure Incentives (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 eight categories.

TIE BREAKER

The tie breaker was developed to consider the following three 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.

The tie breaker first considers the size of the PWS. PWSs that serve less than 10,000 people are prioritized higher than those serving populations of 10,000 or more. Next, consideration is given to those projects who have existing enforcement actions (i.e. Agreed Orders). Lastly, the financial need as evidenced by the median household income 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). ***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 water 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) Treatment Facilities

(i) Construction of a new water treatment plant 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 gross 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 20 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) Hydraulics/Storage

(i) Replacement of inadequately sized waterlines	***10 pts.***
(ii) Replacement of lines with leaks, breaks, or restrictive flows due to age	***10 pts.***
(iii) Construction of a new water storage tank	***10 pts.***
(iv) Rehabilitation of a water storage tank or pump station	***10 pts.***

Examples of projects under this category include waterline replacements, new water storage tank/s, rehabilitation of a storage tank or pump station, etc. The applicant must be prepared to demonstrate loss of pressure, inadequate storage, or significant water loss to support the need for the project.

(b) Finished Water Quality

(i) Infrastructure to address inadequate turnover	***10 pts.***
(ii) Infrastructure to address inability to maintain disinfection residual	***10 pts.***
(iii) Replacement of lead or asbestos-cement waterlines	***10 pts.***
(iv) Redundant equipment/emergency power generators	***10 pts.***

Examples include new pump stations, chlorine booster pump stations, looping of waterlines to improve flow, replacement of asbestos-cement waterlines. Those utilities unable to comply with the DBP Rule, Lead and Copper Rule, or the Asbestos Standard will be given first priority over replacement projects with no violations.

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

RESTRICTIONS:
A waterline replacement project cannot receive points for III(a)(i), III(a)(ii), and III(b)(iii) cumulatively for one alignment. Identify in the Project Profile, the primary reason for the replacement and select accordingly. 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.*
▪ *Replacement of 1,000 LF of asbestos-cement waterline along Oaks Rd.*	*10 pts.*
	30 pts.

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

▪ *Replacement of 2,000 LF of undersized waterline along KY Road*	*10 pts.*
▪ *Replacement of 2,000 LF of asbestos-cement waterline along KY Road*	*0 pts.*
	10 pts.

IV. EXTENSION OF SERVICE

(a) 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.

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 households have insufficient financial and technical capabilities to maintain water supply systems that comply with the SDWA. 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.*
- *140 remaining households (14*2pts=28pts)* *28 pts.*

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.

V. 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

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

VI. COMPLIANCE WITH ENFORCEMENT ACTION

(a) Entities with executed Agreed Orders or Administrative Orders or other enforcement actions 15 pts.

The proposed project must improve a PWSs ability to achieve capacity to comply with existing and future national drinking water standards. The Agreed Order or other enforcement action must outline remedial measures with deadlines for return to compliance. The proposed project must rectify the problem/s within the PWS that resulted in the need for the enforcement action. In order for a project to receive the 15 points allotted in this category, the Agreed Order or other enforcement action must be eligible for termination upon completion of the project.

VII. PUBLIC WATER SYSTEM FINANCIAL NEED

(a) Borrowers with a median household income (MHI) less than $32,958 15 pts.
(b) Borrowers with a MHI between $41,197 and $32,958 10 pts.

VIII. SUSTAINABLE/GREEN INFRASTRUCTURE INCENTIVES

(a) Energy Efficiency

(i) Project reduces energy costs and consumption by replacing, reducing and/or controlling high-use operations used in treatment, pumping, storage, and support systems 5 pts.

Examples include, but are not limited to, variable frequency drive pumps, energy efficient pumps, energy efficient building materials for water treatment plant structures, etc.

(ii) Project utilizes SCADA (Supervisory Control and Data Acquisition) system, which performs data collection and control at the supervisory level that is placed on top of a real-time control system to reduce energy consumption and enhance process operation 5 pts.

(iii) Facility site planning includes facilities and building components designed to maximize energy efficiency 3 pts.

Examples include buildings with south-facing windows to provide good daylight in order to maximize natural lighting, planting of trees to shade at least 50 percent of roofs and hardscapes within 10 yrs., roofs and hardscapes made with high solar reflectance to reduce heat island effects (light colors, "white" roofing), geothermal heating/cooling or other high efficiency HVAC, or alternative energy source.

(iv) Project/System has conducted an energy audit and/or energy reduction/management plan 5 pts.

An energy management plan may include:

- Creating a system to track energy usage and costs
- Planning for the upgrade of equipment to energy efficient models (ie: conventional gas or electric HVAC to geothermal or solar; upgrade to hybrid or biofuel vehicles)
- Development of in-house energy management training for operators and staff

(b) Water Efficiency/Green Infrastructure

(i) Use of improved technologies and practices to deliver equal or better services with less water 5 pts.

Examples include:

- Purchase of water efficient fixtures, fittings, equipment, or appliances
- Purchase of leak detection devices and equipment
- Purchase of water meters, meter reading equipment and systems, and waterline
- Construction and installation activities that implement capital water efficiency projects

(ii) Implementation of a water conservation plan 3 pts.

(iii) Implementation of infrastructure practices that provide pollutant removal benefits for both surface and groundwater sources 5 pts.

This category provides incentive points to projects that include erosion control methods and other practices that preserve and enhance riparian buffers and wetlands. Wetlands and riparian buffers improve water quality, alleviate flooding, recharge groundwater and reduce greenhouse gases via natural processes. Incentive points will be applied to projects that net a positive impact on wetlands, stream banks, riparian zones, floodplains, and both surface and ground drinking water sources.

(iv) Low impact construction technology is used to minimize impacts to the existing surface 5 pts.

The installation or rehabilitation of water distribution systems by open-cut construction can cause significant disturbance. Utilities that use low-impact technologies to complete pipe installation reduce environmental impacts, soil erosion, traffic obstructions, and in some cases construction costs. Examples of low-impact pipe installation/rehabilitation technologies include:

- Pipe bursting
- Cured in place pipe (CIPP)
- Slip-lining
- Horizontal directional boring
- Bore and jack
- Robotic lateral methods
- Fold and form pipe
- Spiral wound

(v) Environmentally innovative technologies/ other (specify) 5 pts.

Points may be applied to projects in this category that demonstrate new and/or innovative approaches to managing water resources in a more sustainable way, including projects that achieve pollution prevention or pollutant removal with reduced costs. Participants are encouraged to introduce additional sustainable infrastructure/green technologies for consideration.

(c) Asset Management

(i) System has mapped its treatment, distribution, and storage infrastructure and analyzed conditions, 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 (e.g., Capital Improvement Plan (CIP)) 5 pts.

(ii) System has developed appropriate rate structures to build, operate, and maintain the water works 3 pts.

(iii) System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure 5 pts.

To obtain points under this category, a copy of a CIP or similar document must be submitted upon request. Additionally, the applicant must be prepared to provide proof of revenues and infrastructure savings upon request. For more guidance on asset management, contact the Capacity Development Section of the KY Division of Water at (502) 564-3410.

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 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	 20 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 (ii) Replacement of lines with leaks, breaks, or restrictive flows due to age (iii) Construction of a new water storage tank (iv) Rehabilitation of a water storage tank or pump station	 10 10 10 10
(b)	Finished Water Quality (i) Infrastructure to address inadequate turnover (ii) Infrastructure to address inability to maintain disinfection residual (iii) Replacement of lead or asbestos-cement waterlines (iv) Redundant equipment/emergency power generators	 10 10 10 10

	IV. Extension of Service	Possible Points
(a)	Waterline extensions to serve existing households with inadequate domestic water supplies such as contaminated wells or cisterns (Up to 10 existing homes) Two additional points for every additional 10 households thereafter	20 2

	V. Security	Possible Points
(a)	Measures taken at the water treatment plant facilities or within the distribution system	5

	VI. Compliance With Enforcement Action	Possible Points
(a)	Entities with executed Agreed Orders, Administrative Orders or other enforcement actions (*Project must address the terms of the Agreed Order)*	15
	VII. Public Water System Financial Need	**Possible Points**
(a)	Borrowers with a MHI less than $32,958	15
(b)	Borrowers with a MHI between $41,197 and $32,958	10

	VIII. Sustainable/ Green Infrastructure Incentives	Bonus Points
(a)	Energy Efficiency (i) Project reduces energy costs and consumption by replacing, reducing and/or controlling high-use operations used in treatment, pumping, storage, and support systems (ii) Project utilizes SCADA (Supervisory Control and Data Acquisition) system, which performs data collection and control at the supervisory level that is placed on top of a real-time control system to reduce energy consumption and enhance process control (iii) Facility site planning includes facilities and building components designed to maximize energy efficien (iv) Project/System has conducted an energy audit and/or energy reduction plan	 5 5 3 5
(b)	Water Efficiency/Green Infrastructure (i) Use of improved technologies and practices to deliver equal or better services with less water (ii) Implementation of a water conservation plan (iii) Implementation of infrastructure practices that provide pollutant removal benefits for both surface and groundwater sources (iv) Low impact construction technology is used to minimize impacts to the existing surface (v) Environmentally innovative technologies/ other (specify)	 5 3 5 5 5
(c)	Asset Management (i) System has mapped its treatment, distribution, and storage infrastructure and analyzed conditions, 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 (e.g., Capital Improvement Plan). (ii) System has developed appropriate rate structures to build, operate, and maintain the water works (iii) System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure	 5 3 5

APPENDIX B

2012 FUNDING CYCLE

PROJECT PRIORITY LIST

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
1	330	DWL12045	WX21001024	ADAIR COUNTY WATER DISTRICT	DOWNTOWN WATER SYSTEM IMPROVEMENTS	$4,000,000	$4,000,000	$4,000,000	$4,000,000	$29,247	$1,400,000	$1,400,000	$3,243,800	$3,243,800	2	NO	17,872
2	216	DWL12064	WX21037313	NORTHERN KENTUCKY WATER DISTRICT	ADVANCED TREATMENT PROJECT	$80,300,000	$59,521,966	$8,000,000	$12,000,000	$53,219	$0			$3,243,800			156,399
3	205	DWL12048	WX21217009	CITY OF CAMPBELLSVILLE	CITY WATERLINE IMPROVEMENTS PROJECT	$1,875,000	$1,875,000	$1,875,000	$13,875,000	$25,136	$656,250	$2,056,250	$1,875,000	$5,118,800	2	NO	11,119
4	180	DWL12035	WX21233108	CITY OF SEBREE	SEBREE SCATTERED WATERLIN REHABILITATION PROJECT	$1,400,000	$700,000	$700,000	$14,575,000	$33,462	$0		$700,000	$5,818,800	2	NO	1,625
5	165	DWL12004	WX21113029 WX21113039	JESSAMINE SOUTH ELKHORN WATER DISTRICT	WATERLINE REPLACEMENT PROJECTS	$3,025,300	$3,025,300	$3,025,300	$17,600,300	$48,577	$0		$3,025,300	$8,844,100	2	NO	45,551
6	135	DWL12012	WX21227073	BOWLING GREEN MUNICIPAL UTILITIES	BGMU SMALL WATERLINE REPLACEMENT	$912,037	$912,037	$912,037	$18,512,337	$34,471	$0		$912,037	$9,756,137	2	NO	54,803
7	130	DWL12059	WX21123019	CITY OF HODGENVILLE	HODGENVILLE HIGH SCHOOL TOWER REHABILITATION	$774,183	$774,183	$774,183	$19,286,520	$33,382	$0			$9,756,137			2,752
8	115	DWL12031	WX21071903	WHEELWRIGHT UTILITIES COMMISSION	WATER TREATMENT PLANT IMPROVEMENT	$2,500,000	$1,330,000	$1,330,000	$20,616,520	$18,750	$465,500	$2,521,750	$640,000	$10,396,137	2,3,4	NO	1,111
9	105	DWL12058	WX21093043 WX21093038 WX21093037 WX21093026 WX21093039	HARDIN COUNTY WATER DISTRICT NO. 1	WATER SYSTEM IMPROVEMENTS PROJECT	$8,048,000	$6,798,000	$6,798,000	$27,414,520	$46,098	$0		$1,000,000	$11,396,137	2,3	YES	98,113
10	100	DWL12034	WX21225034	UNION COUNTY FISCAL COURT	STURGIS/UNION COUNTY CONSOLIDATION	$4,500,000	$4,500,000	$4,500,000	$31,914,520	$39,133	$0			$11,396,137			15,158
11	99	DWL12050	WX21027033	CITY OF HARDINSBURG *	AREA 8 WATERLINE EXTENSION	$4,000,000	$4,000,000	$4,000,000	$35,914,520	$31,793	N/A			$11,396,137			2,351

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
12	95	DWL12076	WX21035017	CITY OF MURRAY	MURRAY ELEVATED STORAGE TANK	$1,936,125	$925,125	$925,125	$36,839,645	$28,013	$323,794	$2,845,544	$96,000	$11,492,137	1,3	NO	16,283
13	91	DWL12038	WX21025012	BREATHITT COUNTY WATER DISTRICT	HWY 1812 EAST WATERLINE EXTENSIONS FROZEN AREA	$3,470,000	$1,000,000	$1,000,000	$37,839,645	$19,329	$350,000	$3,195,544		$11,492,137			15,641
14	87	DWL12037	WX21025009	BREATHITT COUNTY WATER DISTRICT	HWY 378/394 WATERLINE EXTENSIONS FROZEN AREA	$1,989,000	$700,000	$700,000	$38,539,645	$19,329	$245,000	$3,440,544		$11,492,137			15,641
15	87	DWL12049	WX21027031	CITY OF HARDINSBURG *	AREA 6 WATERLINE EXTENSION	$2,072,715	$2,072,715	$2,072,715	$40,612,360	$31,793	N/A			$11,492,137			2,351
16	85	DWL12032	WX21183030	CITY OF CENTERTOWN	WATER SYSTEM IMPROVEMENTS, PHASE III	$250,000	$250,000	$250,000	$40,862,360	$31,765	$87,500	$3,528,044	$150,000	$11,642,137	2	NO	500
17	85	DWL12084	WX21211068	SHELBY COUNTY FISCAL COURT	I-64 TRANSMISSION PIPELINE	$51,500,000	$25,500,000	$8,000,000	$48,862,360	$55,748	$0			$11,642,137			40,322
18	80	DWL12072	WX21143007	LYON COUNTY WATER DISTRICT	WATER QUALITY AND SYSTEM IMPROVEMENTS	$2,500,000	$2,000,000	$2,000,000	$50,862,360	$39,934	$0		$312,000	$11,954,137	2	NO	8,325
19	75	DWL12083	WX21183031	CITY OF CENTERTOWN	CENTERTOWN WATER SYSTEM IMPROVEMENTS PHASE IV	$290,000	$290,000	$290,000	$51,152,360	$31,765	$101,500	$3,629,544		$11,954,137			500
20	75	DWL12085	WX21041304	CARROLL COUNTY FISCAL COURT	COUNTYWIDE UNDERSERVED PROJECT	$1,640,270	$1,540,270	$1,540,270	$52,692,630	$44,087	$0			$11,954,137			10,536
21	72	DWL12040	WX21025015	BREATHITT COUNTY WATER DISTRICT *	HWY 1098 SOUTH FORK WATERLINE EXTENSION	$1,217,000	$1,217,000	$1,217,000	$53,909,630	$19,329	N/A		$30,000	$11,984,137		NO	15,641
22	71	DWL12046	WX21045012	EAST CASEY COUNTY WATER DISTRICT	VARIOUS WATERLINE EXTENSIONS, TANK AND PUMP	$1,545,000	$1,545,000	$1,545,000	$55,454,630	$26,079	$540,750	$4,170,294		$11,984,137			16,306
23	70	DWL12030	WX21183020	CITY OF HARTFORD	HARTFORD PRETREATMENT BASIN & SYSTEM IMPROVEMENTS	$800,000	$762,500	$762,500	$56,217,130	$28,400	$266,875	$4,437,169		$11,984,137			2,628

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
24	65	DWL12016	WX21203523	CITY OF MOUNT VERNON	PHASE 2 POTABLE WATER STORAGE TANKS AND LINES	$2,600,000	$2,600,000	$2,600,000	$58,817,130	$22,028	$910,000	$5,347,169		$11,984,137			2,571
25	65	DWL12082	WX21121539	BARBOURVILLE UTILITY COMMISSION *	BARBOURVILLE RAW WATERLINE UPGRADE	$6,000,000	$4,000,000	$4,000,000	$62,817,130	$13,710	N/A			$11,984,137			3,539
26	65	DWL12010	WX21167013	CITY OF HARRODSBURG	WATER MAIN IMPROVEMENTS	$438,000	$438,000	$438,000	$63,255,130	$31,685	$153,300	$5,500,469		$11,984,137			8,148
27	60	DWL12011	WX21171027	MONROE COUNTY WATER DISTRICT	MONROE COUNTY WATER TREATMENT PLANT	$12,000,000	$10,750,000	$8,000,000	$71,255,130	$28,871	$2,800,000	$8,300,469		$11,984,137			11,650
28	60	DWL12067	WX21081019	CITY OF WILLIAMSTOWN *	US 25 NORTH WATERLINE REPLACEMENT PROJECT	$1,861,617	$1,861,617	$1,861,617	$73,116,747	$35,430	$0			$11,984,137			3,463
29	57	DWL12041	WX21025021	BREATHITT COUNTY WATER DISTRICT *	CANOE ROAD WTERLINE EXTENSIONS	$1,594,000	$1,594,000	$1,594,000	$74,710,747	$19,329	N/A			$11,984,137			15,641
30	55	DWL12014	WX21013912	PINEVILLE UTILITY COMMISSION	PINEVILLE A/C WATERLINE REPLACEMENT	$1,529,948	$1,529,948	$1,529,948	$76,240,695	$10,802	$535,482	$8,835,951		$11,984,137			2,388
31	55	DWL12051	WX21027043	CITY OF HARDINSBURG	2011 EXTENSIONS 1740 & 1401	$966,030	$966,030	$966,030	$77,206,725	$31,793	$338,111	$9,174,061		$11,984,137			2,351
32	50	DWL12044	WX21133101	CITY OF WHITESBURG	WATER TREATMENT PLANT EXPANSION	$6,500,000	$2,500,000	$2,500,000	$79,706,725	$34,167	$0			$11,984,137			1,649
33	50	DWL12057	WX21093040	HARDIN COUNTY WATER DISTRICT #1	NEW INTAKE AND TREATMENT UPGRADE	$6,115,410	$4,000,000	$4,000,000	$83,706,725	$46,098	$0			$11,984,137			98,113
34	45	DWL12039	WX21025013	BREATHITT COUNTY WATER DISTRICT	HWY 540 E. EXTENSIONS FROZEN AREA	$850,000	$850,000	$850,000	$84,556,725	$19,329	$297,500	$9,471,561		$11,984,137			15,641
35	45	DWL12029	WX21149041	CITY OF SACRAMENTO	SACRAMENTO-CALHOUN INTERCONNECT	$550,000	$265,000	$265,000	$84,821,725	$19,847	$92,750	$9,564,311		$11,984,137			600
36	45	DWL12070	WX21047021	CITY OF OAK GROVE	WATERLINE REPLACEMENT PROJECT	$395,000	$395,000	$395,000	$85,216,725	$33,544	$0		$395,000	$12,379,137		NO	9,109

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
37	45	DWL12066	WX21081001	CITY OF WILLIAMSTOWN	WILLIAMSTOWN NEW WATER TREATMENT PLANT	$13,623,775	$13,623,775	$8,000,000	$93,216,725	$35,430	$0		$250,000	$12,629,137		NO	3,463
38	43	DWL12061	WX21163012	CITY OF BRANDENBURG *	BRANDENBURG WATER TREATMENT PLANT UPGRADE	$3,080,000	$2,080,000	$2,080,000	$95,296,725	$33,370	$0		$234,000	$12,863,137		NO	2,354
39	40	DWL12033	WX21225025	CITY OF UNIONTOWN	UNIONTOWN WATERLINE REPLACEMENT	$963,300	$424,000	$424,000	$95,720,725	$22,219	$148,400	$9,712,711	$650,000	$13,513,137		NO	608
40	40	DWL12028	WX21149024	MCLEAN COUNTY FISCAL COURT	ISLAND PUMP STATION AND TANK PAINTING	$305,000	$165,000	$165,000	$95,885,725	$39,857	$0			$13,513,137			9,690
41	40	DWL12065	WX21041705	WEST CARROLL WATER DISTRICT	WCWD 2008 SYSTEM IMPROVEMENTS PROJECT	$490,102	$490,102	$490,102	$96,375,827	$44,087	$0			$13,513,137			10,536
42	40	DWL12009	WX21151051	MADISON COUNTY UTILITIES DISTRICT	MCUD IMPROVEMENTS PHASE 4	$688,000	$688,000	$688,000	$97,063,827	$39,854	$0		$688,000	$14,201,137		NO	81,334
43	35	DWL12052	WX21085021	CITY OF LEITCHFIELD	LEITCHFIELD RAW WATER INTAKE	$4,000,000	$2,000,000	$2,000,000	$99,063,827	$26,811	$700,000	$10,412,711		$14,201,137			6,475
44	35	DWL12075	WX21007020	CITY OF BARLOW *	BARLOW WATER TANK REFURBISHMENT	$230,000	$230,000	$230,000	$99,293,827	$28,824	N/A			$14,201,137			655
45	30	DWL12025	WX21127006	LOUISA WATER AND SEWER COMMISSION	LOUISA WTP INTAKE IMPROVEMENTS PHASE 2	$500,000	$500,000	$500,000	$99,793,827	$19,816	$175,000	$10,587,711		$14,201,137			2,722
46	30	DWL12043	WX21133047	CITY OF JENKINS	FISHPOND LAKE RAW WATER PROJECT	$1,850,000	$1,850,000	$1,850,000	$101,643,827	$21,900	$647,500	$11,235,211		$14,201,137			2,389
47	30	DWL12026	WX21059005	CITY OF WHITESVILLE	JACK HINTON PUMP STATION PROJECT	$430,000	$430,000	$430,000	$102,073,827	$33,229	$0			$14,201,137			615
48	30	DWL12074	WX21177016	MUHLENBERG COUNTY WATER DISTRICT #3	BREMEN WATERMAIN REPLACEMENT	$350,000	$350,000	$350,000	$102,423,827	$35,617	$0		$350,000	$14,551,137		NO	31,378
49	30	DWL12018	WX21019039	CANNONSBURG WATER DISTRICT	REFURBISHMENT OF THE TARPIN RIDGE/PRINCESS TANKS	$275,000	$275,000	$275,000	$102,698,827	$39,309	$0			$14,551,137			48,669

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
50	30	DWL12062	WX21179014	CITY OF BLOOMFIELD	WATER SYSTEM IMPROVEMENTS	$800,000	$800,000	$800,000	$103,498,827	$43,125	$0			$14,551,137			224
51	30	DWL12060	WX21155017	MARION COUNTY WATER DISTRICT	MARION COUNTY WATER DISTRICT SOUTH CONNECTOR	$3,420,000	$1,000,000	$1,000,000	$104,498,827	$37,239	$0		$25,000	$14,576,137		NO	19,245
52	30	DWL12077	WX21111163	LOUISVILLE WATER COMPANY	WATERMAIN REHABILITATION	$7,280,000	$4,000,000	$4,000,000	$108,498,827	$42,798	$0			$14,576,137			562,382
53	25	DWL12042	WX21129004	CITY OF BEATTYVILLE	BEAR TRACK WATERLINE REPLACEMENT	$612,000	$612,000	$612,000	$109,110,827	$10,282	$214,200	$11,449,411		$14,576,137			1,172
54	25	DWL12024	WX21127004	LOUISA WATER AND SEWER COMMISSION	UPGRADE FOR THE RAW WATER INTAKE	$200,000	$200,000	$200,000	$109,310,827	$19,816	$70,000	$11,519,411		$14,576,137			2,722
55	25	DWL12047	WX21207009	CITY OF JAMESTOWN	WATER PLANT TRANSMISSION LINE	$2,300,000	$2,300,000	$2,300,000	$111,610,827	$16,226	$805,000	$12,324,411		$14,576,137			1,698
56	25	DWL12015	WX21109722	JACKSON COUNTY WATER ASSOCIATION	TRANSMISSION MAIN FROM MCKEE TO SANDGAP	$1,534,000	$1,534,000	$1,534,000	$113,144,827	$26,360	$536,900	$12,861,311		$14,576,137			13,399
57	25	DWL12013	WX21071004	SOUTHERN WATER AND SEWER DISTRICT	WATERLINE REPLACEMENT FROM ALLEN TANK TO MARTIN	$1,890,000	$1,890,000	$1,890,000	$115,034,827	$28,479	$661,500	$13,522,811		$14,576,137			41,965
58	22	DWL12006	WX21113031	JESSAMINE SOUTH ELKHORN WATER DISTRICT	FORT BRAMLETT/CAMP NELSON WATERLINE EXTENSION	$709,000	$709,000	$709,000	$115,743,827	$48,577	$0			$14,576,137			45,551
59	20	DWL12069	WX21047019	CITY OF OAK GROVE	HUGH HUNTER ROAD WATERLINE REPLACEMENT	$865,000	$865,000	$865,000	$116,608,827	$33,544	$0		$865,000	$15,441,137		NO	9,109
60	20	DWL12027	WX21149022	MCLEAN COUNTY FISCAL COURT	431 TANK PROJECT	$1,471,270	$1,221,270	$1,221,270	$117,830,097	$39,857	$0			$15,441,137			9,690
61	20	DWL12023	WX21089080	CITY OF WORTHINGTON	UPGRADE TO WATER TREATMENT PLANT	$295,000	$295,000	$295,000	$118,125,097	$41,369	$0			$15,441,137			1,527
62	20	DWL12071	WX21107002	NEBO WATER DISTRICT	NEBO WATER DISTRICT TANK UPGRADE	$168,000	$168,000	$168,000	$118,293,097	$47,500	$0		$131,000	$15,572,137		NO	245

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
63	20	DWL12022	WX21089079	CITY OF RUSSELL	UPGRADE OF TWO PUMP STATIONS	$140,000	$140,000	$140,000	$118,433,097	$50,769	$0			$15,572,137			3,604
64	20	DWL12003	WX21113028	CITY OF NICHOLASVILLE	NICHOLASVILLE 20IN BACKBONE WATERMAIN EXTENSION	$4,154,018	$4,154,018	$4,154,018	$122,587,115	$44,064	$0			$15,572,137			25,838
65	15	DWL12086	WX21083006	GRAVES COUNTY WATER DISTRICT	WATER METERING IMPROVEMENTS	$2,000,000	$2,000,000	$2,000,000	$124,587,115	$35,107	$0		$737,500	$16,309,637		YES	37,516
66	15	DWL12020	WX21089062	CITY OF WURTLAND	RADIO READ METERS	$117,520	$117,520	$117,520	$124,704,635	$35,952	$0		$117,520	$16,427,157		YES	1,051
67	15	DWL12017	WX21019029	CANNONSBURG WATER DISTRICT	RADIO READ WATER METERS	$690,000	$690,000	$690,000	$125,394,635	$39,309	$0		$690,000	$17,117,157		YES	48,669
68	15	DWL12073	WX21143009	LYON COUNTY WATER DISTRICT	LCWD AUTOMATED METER SYSTEM	$530,000	$530,000	$530,000	$125,924,635	$39,934	$0		$530,000	$17,647,157		YES	8,325
69	15	DWL12002	WX21113012	JESSAMINE CO. WATER DISTRICT #1	NEW WATER TANK PROJECT	$3,035,000	$1,135,000	$1,135,000	$127,059,635	$48,577	$0		$125,000	$17,772,157		NO	45,551
70	15	DWL12078	WX21111164	LOUISVILLE WATER COMPANY	HARDIN CO/FT. KNOX TRANSMISSION	$19,492,000	$14,992,000	$8,000,000	$135,059,635	$42,798	$0			$17,772,157			562,382
71	15	DWL12008	WX21113040	CITY OF NICHOLASVILLE	NICHOLASVILLE 24 IN PARALLEL TRANSMISSION MAIN	$3,176,675	$3,176,675	$3,176,675	$138,236,310	$44,064	$0		$50,000	$17,822,157		NO	25,838
72	10	DWL12063	WX21179016	CITY OF BLOOMFIELD	CITY OF BLOOMFIELD WATER STORAGE TANK	$1,250,000	$1,250,000	$1,250,000	$139,486,310	$43,125	$0			$17,822,157			1,044
73	10	DWL12079	WX21111168	LOUISVILLE WATER COMPANY	NORTH SHELBY REGIONAL STORAGE	$1,854,000	$1,854,000	$1,854,000	$141,340,310	$42,798	$0			$17,822,157			562,382
74	10	DWL12080	WX21111169	LOUISVILLE WATER COMPANY	ENGLISH STATION STORAGE	$7,000,000	$7,000,000	$7,000,000	$148,340,310	$42,798	$0			$17,822,157			562,382
75	10	DWL12005	WX21113030	CITY OF NICHOLASVILLE	EJMS POTABLE AND FIRE PROTECTION WATERMAIN	$360,000	$360,000	$360,000	$148,700,310	$44,064	$0			$17,822,157			25,838

Rank	Final Project Score	DWSRF#	WRIS#	Applying Entity	Project Title	Total Project Cost	Total SRF Loan Amount	Invited Amount	Cumulative Invited	MHI	**Principal Forgiveness Amount (35%)**	**Cumulative Principal Forgiveness**	Green Amount	Cumulative Green Amount	Green Category	Cate-gorically Green?	Population
76	10	DWL12081	WX21005006	CITY OF LAWRENCEBURG	LAWRENCEBURG CENTER STREET TANK REPLACEMENT	$1,000,000	$1,000,000	$1,000,000	$149,700,310	$45,409	$0			$17,822,157			9,807
77	5	DWL12021	WX21089063	CITY OF RACELAND	WATER METER REPLACEMENT PROJECT	$369,900	$369,900	$369,900	$150,070,210	$43,218	$0		$369,900	$18,192,057		YES	2,755
78	5	DWL12019	WX21089055	CITY OF RUSSELL	RADIO READ WATER METERS	$350,000	$350,000	$350,000	$150,420,210	$50,769	$0		$350,000	$18,542,057		YES	3,604
79	5	DWL12036	WX21211054	US 60 WATER DISTRICT	US 60 WATER DISTRICT RADIO READS	$770,000	$770,000	$770,000	$151,190,210	$55,748	$0		$770,000	$19,312,057		YES	40,322
80	0	DWL12001	WX21097023	CITY OF CYNTHIANA	CYNTHIANA WATER TREATMENT PLANT FLOOD PROTECTION	$1,547,590	$1,547,590	$1,547,590	$152,737,800	$31,522	$541,657	$14,064,468		$19,312,057			6,258
81	0	DWL12068	WX21047018	CITY OF OAK GROVE	OAK GROVE CROSS COUNTRY/INDUSTRIAL PARK WATERLINE	$2,200,000	$1,900,000	$1,900,000	$154,637,800	$33,544	$0		$2,200,000	$21,512,057		NO	9,109

* Denotes previously funded

Total Principal Forgiveness shall be $4,013,700

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Green Categories

1 Green Infrastructure

2 Water Efficiency

3 Energy Efficiency

4 Environmentally Innovative

To the extent there are sufficient eligible project applications, not less than $2,675,800 of the funds made available under the 2011 capitalization grant must be used for projects which address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities (collectively referred to as "green" projects).

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, 2010

To Whom It May Concern:

The Kentucky Infrastructure Authority and the Kentucky Division of Water are announcing the 2012 Drinking Water State Revolving Fund (DWSRF) Call for Projects.

The Drinking Water State Revolving Fund Call for Projects
Will Be Open from October 1, 2010 to January 4, 2011

If you have a drinking water project that will need funding during the 2012 state fiscal year (July 1, 2011 thru June 30, 2012), 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 DWSRF Priority List developed by the Division of Water (DOW). NOTE: Projects will not be carried forward from the 2011 project priority list to the 2012 project priority list.

The Call for Projects Process Has Been Improved…It's Easier

It is now even easier to submit your project for inclusion on the DWSRF Priority List. All you need to do is 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). The Project Profile has undergone a significant transformation over the past year and now 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.

You Will Need a Project Profile for Your Project to Be Ranked for SRF

All information needed by DOW to review and rank potential DWSRF projects has been incorporated into the Project Profile template. For your project to be included in the DWSRF Priority List you must work with the Water Management Planner at your local ADD to update or create a WRIS Project Profile.

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 December 31, 2012 will be considered for funding.**

KENTUCKY INFRASTRUCTURE AUTHORITY

Steven L. Beshear
Governor

1024 Capital Center Drive, Suite 340
Frankfort, Kentucky 40601
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John E. Covington, III
Executive Director

Training Sessions Will Be Provided

Training addressing the changes to the Call for Projects process will be held October 11th and 12th for potential loan recipients, consultants, project administrators, or other interested parties. The October 11th training will be held in Bowling Green, Kentucky at the Carroll Knicely Conference Center located at 2355 Nashville Road starting at 9:30 a.m. CST. The October 12th training will be held in Morehead, Kentucky at the Morehead Conference Center located at 111 East First Street starting at 9:30 a.m. EST. These training sessions are anticipated to last no more than 4 hours and will include a demonstration and explanation of the new Project Profile Portal and SRF related information.

Current Interest Rates

Projected interest rates for the program will be identified in the 2012 DWSRF Intended Use Plan (IUP) which will be available late spring, 2011. 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 3% is available for borrowers with a median household income (MHI) at or above $33,672, the MHI of the Commonwealth from the 2000 Census. A 2% rate is offered to borrowers whose MHI is between $33,672 and $26,938 (80% of the Commonwealth MHI). The 2% 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 1% rate, the borrower must have a MHI at or below $26,938.

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 Kasi White or Sandy Williams of KIA at kasi.white@ky.gov or sandy.williams@ky.gov or at (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

2011 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/.