INTENDED USE PLAN

CLEAN WATER
STATE REVOLVING FUND

State Fiscal Year 2015

COMMONWEALTH OF KENTUCKY

July 22, 2014

PREPARED BY THE

KENTUCKY INFRASTRUCTURE AUTHORITY
&
ENERGY AND ENVIRONMENT CABINET

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I. INTRODUCTION

Kentucky's Intended Use Plan (IUP) for the Clean Water State Revolving Fund (CWSRF, the Fund) is prepared in accordance with the provisions of Title VI of the Clean Water Act of 1987 (CWA), and P.L. 113-76, The Consolidated Appropriations Act, 2014. The purpose of the IUP is to communicate Kentucky's CWSRF plan for state fiscal year 2015 to potential borrowers from the Fund, the public, the Environmental Protection Agency (EPA), and other state agencies. The IUP also includes the project selection and ranking system.

An annual Intended Use Plan is required by Title VI of the CWA and is an integral part of the process to request the Federal Fiscal Year (FFY) 2014 Capitalization Grant. The IUP will identify how the funds available to Kentucky's CWSRF will be used during each state fiscal year (SFY) to support the goals of the CWSRF. The 2015 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. Administration and operation policies of the Fund;
4. Assurances and specific certifications for meeting certain requirements of the Capitalization Grant Agreement;
5. The public participation process;
6. The sources and uses of available funds; and
7. The Project Priority List - a list of eligible projects whose sponsors expressed interest in low interest rate loans from the CWSRF.

What is the Clean Water State Revolving Fund?

Kentucky's CWSRF financing program provides low interest loans for infrastructure projects that promote the goals of the CWA. Projects identified to receive funding are selected from the ranked group of Project Profiles submitted during the annual Call for Projects. Since its inception in 1988 Kentucky's CWSRF has committed funds to about 300 clean water infrastructure projects totaling approximately $1.37 billion.

Title VI of the CWA authorized the Environmental Protection Agency to make capitalization grants to each state to establish a water pollution control revolving fund to provide financial assistance for constructing publicly owned treatment works under section 212 of the CWA, implementing watershed management plans under section 319 of the CWA, and developing and implementing a conservation and management plan under section 320 of the CWA. A state match must be deposited into the CWSRF in an amount equal to at least 20 percent of the total Federal capitalization grant. The general intent of Title VI of the CWA is to ensure that each state's fund is designed and operated to provide financial assistance for water pollution control activities in perpetuity.

The Kentucky General Assembly enacted House Bill 217 during the 1988 legislative session, which established a Clean Water State Revolving Fund, the "Federally Assisted Wastewater Revolving Fund," as an enduring and viable fund. This fund is intended to allow Kentucky to qualify for the Federal CWSRF capitalization grants. The Fund is administered by the Kentucky Infrastructure Authority (KIA) while the Kentucky Energy and Environment Cabinet's (EEC) Division of Water (DOW) staff performs environmental and technical reviews on projects that seek assistance from the CWSRF.

Eligibility

Any governmental agency is eligible to apply for financial assistance for planning, design and construction of eligible projects.

Some examples of eligible projects include:

- Planning, design and construction of wastewater or stormwater collection, conveyance, and treatment facilities.
- The implementation of nonpoint source pollution control management programs.
- Guaranteeing or purchasing insurance for a local obligation to improve credit market access or reduce the interest rate of the obligations.
- Purchase of another wastewater system eligible under 33 U.S.C. 1383(d).
- Any applicant's project eligible for funding under 33 U.S.C. 1383

Significant Federal Requirements in 2015

A. Davis-Bacon Compliance

Federal labor laws regarding prevailing wages, hours of work, and rates of pay shall apply to construction carried out in whole or in part with assistance from CWSRFs. These requirements are collectively known as the Davis-Bacon laws. These requirements are in addition to the requirements of Kentucky prevailing wage laws. All CWSRF funded projects 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 2014 Federal capitalization grant authorization requires at least 20% but not more than 30% of the amount of the grant appropriation that exceeds $1 billion be made available to provide additional subsidization to eligible applicants. For SFY 2015 the State must provide a minimum of $971,083 but not more than $1,456,625 in additional subsidization. This will be provided in the form of loans with principal forgiveness based on the system's median household income (MHI). Since the amount of principal forgiveness is limited, KIA will offer principal forgiveness in rank order. Some projects that might be eligible for principal forgiveness may not receive an allotment if the maximum has been awarded to higher ranking projects. Additionally, if there are insufficient eligible project applications to meet the required subsidization range, KIA may invite additional

project applications or increase the subsidization percentage to the existing qualifying applicants.

To be eligible for 10% principal forgiveness, the borrower's entire service area must have a MHI at or below $34,088, or 80% of the State's MHI as determined by the American Community Survey (ACS) 5-Year Estimates 2008-2012. To be eligible for 50% principal forgiveness, the applicant's entire service area must have a MHI at or below $21,305, or 50% of the State's MHI as determined by the American Community Survey (ACS) 5-Year Estimates 2008-2012.

C. Green Project Reserve (GPR)

The FFY2014 capitalization grant requires that to the extent there are sufficient eligible project applications, not less than 10% ($1,784,500) of the funds made available under that grant must be used by the State for projects to 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 and will be considered eligible for award under the GPR.

D. American Iron and Steel (AIS)

P.L. 113-76, The Consolidated Appropriations Act, 2014, includes an American Iron and Steel (AIS) requirement in section 436 that requires Clean Water State Revolving Loan Fund and Drinking Water State Revolving Fund assistance recipients to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, or repair of a public water system or treatment works if the project is funded through an assistance agreement executed beginning January 17, 2014 (enactment of the Act), through September 30, 2014 (the end of Federal Fiscal Year 2014). Implementation guidance can be found at http://water.epa.gov/grants_funding/upload/AIS-final-guidance-3-20-14.pdf.

Structure of the CWSRF Program in Kentucky

KIA and the DOW jointly administer the program via a Memorandum of Agreement in accordance with Kentucky Revised Statute (KRS) 224A.111 and Kentucky Administrative Regulation (KAR) 200 KAR 17:050[1].

[1] KRS Ch 224A.111 and 200 KAR 17:050 may be found on the Internet from the Kentucky Legislature Home Page address: http://lrc.ky.gov/home.htm.

The following contacts can assist with CWSRF inquiries:

Contact	Agency	Subject
Jeff Abshire (502) 573-0260 Jeff.Abshire@ky.gov	KIA	Loan Application, Financial Terms, Rates
Cindy McDonald (502) 564-3410 Cindy.McDonald@ky.gov	DOW	Project Profile Submittal, Priority List, Environmental Review, Regional Facility Plans
Buddy Griffin (502) 564-3410 Buddy.Griffin@ky.gov	DOW	Procurement, Bidding Requirements
Mark Rasche (502) 564-3410 Mark.Rasche@ky.gov	DOW	Plans and Specifications
Shafiq Amawi Water Infrastructure Branch Manager (502) 564-3410 Shafiq.Amawi@ky.gov	DOW	General Information

II. CLEAN WATER STATE REVOLVING FUND GOALS

The Sustainable Infrastructure Initiative

The combination of aging water and wastewater infrastructure, growing population, and declining research and development investments in the area of water pollution abatement is forcing EPA, states and local governments to explore innovative methods for funding future water and wastewater capital projects. For the 2012 Clean Watersheds Needs Survey, Kentucky submitted documented needs of approximately $6.5 billion to meet its wastewater needs over the next 20 years.

EPA collaborated with external stakeholders and developed the Sustainable Infrastructure (SI) Initiative with a goal to reduce the funding gap between projected investment needs and current spending levels at the federal and local levels so the public can continue to enjoy safe drinking water and adequate sanitary service.

Another goal for the SI Initiative is to help change the way people view, value, manage, and invest in water and wastewater infrastructure. EPA is in the process of training state personnel to promote sustainable infrastructure through a four focused area approach:

- Better Management of Water and Wastewater Utilities
- Rate Structures that reflect the Actual Cost of Service
- Efficient Water Use
- Watershed Approach to Planning and Permitting

For more information, see EPA's Sustainable Infrastructure for Water and Wastewater website http://www.epa.gov/waterinfrastructure/index.html.

Short-Term Goals

1. Promote the principles of EPA's Sustainable Infrastructure Initiative to loan recipients so CWSRF borrowers will consider SI Initiatives in their planning, design, and construction activities.

2. Review the Integrated Project Priority Ranking System to prioritize water pollution control projects and activities according to specific criteria aimed at correcting the state's highest priority water quality problems.

3. Promote green infrastructure initiatives to loan recipients to meet the 2014 capitalization grant requirements.

4. Train borrowers to assure compliance with Davis Bacon and American Iron and Steel requirements.

5. Improve the pace at which available funds are disbursed. The best way to ensure the perpetuity of the fund is to revolve the available funds more quickly. KIA and DOW staff will work to match available funding with either planning and design loans or construction ready projects.

6. Expand the use of the fund by soliciting nonpoint source projects to address some of the state's high-priority water quality problems, such as nutrient impairments caused by agricultural runoff.

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

Long-Term Goals

1. Maintain a self-sustaining revolving loan program that will contribute to improving and protecting water quality and public health.

2. Assist publicly owned treatment works in maintaining compliance with their discharge permit limits.

3. Continue to assess the project selection and ranking criteria to determine whether revisions are needed to address the state's current high-priority water quality problems.

4. Ensure technical compliance of each project through adequate and effective planning, design and construction management.

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

III. CRITERIA FOR PROJECT SELECTION

The CWSRF was established to fund projects and activities whose primary goal is the protection of water quality. In 1996, EPA issued the funding framework, which encouraged all states that fund both point and nonpoint source projects to integrate their planning and priority ranking systems, so that CWSRF funds can most effectively target the nation's highest water quality problems. Following the EPA's recommendation, Kentucky developed the Kentucky Integrated Project Priority Ranking System (IPPRS) in Appendix C, designed to equally evaluate publicly owned treatment works, storm water, and nonpoint source projects according to water quality based criteria developed by the Kentucky Division of Water.

During the Call for Projects, which began October 1, 2013 and ended December 13, 2013, KIA and DOW invited all eligible borrowers to submit CWSRF project information via the Water Resource Information System (WRIS). An email invitation was sent to all sewer utilities, area development districts, mayors, county judges executive, and the engineering community. A sample of the Call for Projects email is attached in Appendix B. Only designated projects submitted via the WRIS during the Call for Projects process were considered for funding and placement on the Project Priority List. Projects were evaluated and assigned a score based upon the IPPRS priority formula. 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, Consent Decrees); (3) water quality impacts and (4) financial need as evidenced by the median household income of the applicant. More information on tie breakers can be found in the integrated priority ranking guidance attached in Appendix C.

The 2015 Project Priority List (Appendix A) shows that Kentucky has sufficient eligible projects to meet the binding commitment requirements of the FFY 2014 Capitalization Grant. A brief description of the following fields will be helpful in reviewing the list.

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

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

Loan Number: Priority list tracking number for project. Include this number on correspondence about the project before a loan number is assigned by DOW or KIA.

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

Loan Package Title: Short description of project components (may include multiple WRIS numbers).

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

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

Principal Forgiveness Amount: Estimated amount of principal forgiveness that a project is eligible for if sufficient principal forgiveness is eligible.

Green Amount: Amount of desired SRF loan identified that may qualify as green infrastructure.

Green Category: Identified numerically as to which category identified green infrastructure components are classified (1 – Green Infrastructure, 2 – Water Efficiency, 3 – Energy Efficiency, 4 – Environmentally Innovative).

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

The 2016 IUP process will begin in October 2014. The annual Call for Projects will be open from October to December 2014 during which time projects will be accepted for ranking in the SFY 2016 funding cycle. **An applicant must submit a request for each project to be ranked for the 2016 cycle even if it was included on a previous year's Project Priority List.** The following tentative schedule will apply:

2016 Call for Projects	**October 1, 2014 - December 12, 2014**
Creation of Project Priority List	**January 1, 2015 - March 31, 2015**
Public Notice Period for IUP	**May 1, 2015 - June 1, 2015**
Finalize 2016 IUP and send to EPA	**Prior to June 30, 2015**

Email notifications will be sent in September 2014 to all sewer utilities, area development districts, mayors, county judge executives, economic development directors, and the Kentucky Society of Professional Engineers announcing the call for projects.

IV. FUND ADMINISTRATION AND OPERATION

A. Project Funding

Although developing and maintaining a priority list is required by the CWA, the states are not required to select the highest ranked projects in any given year for funding. However, due to limited funding availability, Kentucky will fund projects based on priority ranking and readiness to proceed. KIA anticipates that the 10% GPR and the additional subsidization requirements will be met with no changes to the Project Priority List.

Invited Projects

Applicants whose projects contain an "Invited Loan Amount" on the Project Priority List are invited to submit a loan application package for financial assistance from the CWSRF. A letter of invitation to apply was sent to applicants at the same time that the Intended Use Plan was published. The letter of invitation provides instructions to accept or decline the invitation through KIA's web site. Invitees will have seven days from the end of the IUP thirty day comment period to accept the invitation. First round invitation applicants will be given 21 days from the end of the IUP thirty day comment period to submit a complete loan application. Applicants that do not submit a loan application, complete with Kentucky e-Clearinghouse comments, by the deadline will be bypassed and the next eligible project will be invited and will have 45 days to submit a loan application. This process will continue until all estimated available funds have been allocated to projects.

Upon submittal of a complete loan application, the documents will be reviewed and a credit analysis will be prepared. Applicants must provide the three most current years of audited financial statements to support the credit analysis. For qualifying applicants, a loan request will be presented to the KIA Board for financial review and conditional approval. Upon KIA Board approval, a Conditional Commitment Letter will assure that funding will remain committed to the project for a period established in the letter, provided all of the conditions of the Conditional Commitment Letter are met.

All CWSRF program requirements must be met by the term outlined in the Conditional Commitment Letter. A one-time extension of up to six months for approved applicants that experience extenuating circumstances may be granted. Projects that are not approved for an extension will not be eligible for funding during the current funding cycle unless they were resubmitted and ranked during the current cycle's Call for Projects.

Planning and Design Loans

KIA recognizes that larger or particularly complex projects may require a lengthy planning and design process and thus may not be ready for construction within the allotted twelve months after the conditional commitment letter is issued or perhaps even with a six month extension period. For ranked projects that require funding for planning and design before the project can be bid, KIA will encourage the applicant to apply for a Planning and Design loan rather than a full construction loan. The standard interest rate will apply during the five year term of the loan. However, if the applicant initiates construction within a prescribed time frame after approval of plans and specifications for the project, the loan can be converted to a construction loan with the interest rate that the applicant would otherwise qualify for and a twenty year term. Upon approval of plans and specifications the applicant will receive a priority funding position to apply for a construction loan in the subsequent year's Intended Use Plan. If the applicant declines the invitation to apply for a construction loan the project will need to be resubmitted during future Calls for Projects to be considered for funding.

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

Actual project funding amounts may vary from amounts presented in the Project Priority List due to updated cost estimates and funding received from other sources. Increases to existing loans must be approved prior to the date of initiation of operation.

B. Bypass Process

A high priority project that is not ready to proceed or by virtue of being funded will cause loan portfolio concentration concerns within the given timeframe will be bypassed. A bypassed project will become ineligible for CWSRF 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, projects will be bypassed until a qualifying GPR or additional subsidization project is reached.

C. Addition of New Projects to the Project Priority List

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

D. Emergency Projects

These are projects that do not appear on the Project Priority List and result from unanticipated failures of wastewater infrastructure (treatment and/or collection and conveyance systems) that have a direct adverse effect on public health and the quality of surface and groundwater. The CWSRF may provide financial assistance to emergency projects, subject to their eligibility and the availability of funds.

E. Refinancing

KIA is generally opposed to refinancing existing CWSRF loans due to the lowered return to the revolving fund over time. However, certain hardship cases may be considered when the following criteria are met:

1. The borrower can prove that the existing rates are causing a financial hardship on users in the system;
2. The burden on the users by virtue of such rates is placing the repayment of the original loan in question;
3. The governmental agency can show significant savings as a result of the refinancing;
4. The governmental agency can identify an environmental problem within its jurisdiction that it is willing to immediately address with the savings achieved through the refinancing; and
5. Projects must meet all the applicable program requirements.

KIA is also willing to accept governmental agency requests that the refinancing of projects be on the Project Priority List provided that such refinancing from CWSRF funds will be assigned low priority and only recommended to the Board when no other higher ranking projects are ready for consideration. Refinancing projects will be considered by KIA only when all the following criteria are met:

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

F. Financial Terms of Loans

1. Interest Rates

The KIA Board must establish interest rates at least annually. Staff intends to present rates for Board consideration at the beginning of the state fiscal year. The rates are based on prevailing market conditions with the 20 Bond General Obligation (GO) index as a reference, availability of funds and funding demand. Staff intends to recommend a standard rate of 2.75 percent with two non-standard rates of 1.75 percent and 0.75 percent.

The standard rate will apply to all borrowers at or above the ACS 5 Year Estimate 2008-2012 State Median Household Income (MHI) of $42,610. To qualify for the non-standard rate of 1.75%, the project must assist the system to achieve compliance with an order or judgment addressing environmental noncompliance, or the borrower must have a MHI between $42,610 and $34,088 (80% of the State MHI) or be considered regional. To qualify for the non-standard rate of 0.75%, a borrower must have a MHI below $34,089. Qualifications for rates are subject to 200 KAR 17:050.

For ranked projects that require funding for planning and design before the project can be bid, KIA will encourage the applicant to apply for a Planning and Design loan rather than a full construction loan. The standard interest rate will apply during the five year term of the loan. However, if the applicant initiates construction within a prescribed time frame after approval of plans and specifications for the project, the loan can be converted to a construction loan with the interest rate that the applicant would otherwise qualify for and a twenty year term.

2. Repayment Terms

Planning, design and sanitary sewer evaluation study (SSES) loans will not exceed five years. If the planning and design loan is rolled into a CWSRF construction loan, the term for the planning and design amount will convert to the term approved for the construction loan. Construction loans will have a 20-year repayment term.

Principal and interest payments on each loan will commence no 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.

3. Loan Servicing Fees

A loan servicing fee of 0.2 percent on the annual outstanding loan balance will be charged as a part of each semi-annual loan payment in accordance with 200 KAR 17:050, 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 CWSRF program expenses.

4. Borrower Loan Compliance and Financial Monitoring

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

a) Depending on the amount of funds that are disbursed to a borrower during any one (borrower) fiscal year, the borrower may be required to have a single or program-specific audit conducted for that year in accordance with OMB Circular A-133.
b) The borrower must provide audited financial statements to KIA within six months of the entity's fiscal year end date. KIA will review each borrower's financial performance and, if necessary, will work with them to identify ways to remedy any financial non compliance issues.
c) Borrowers are required to annually fund a repair and replacement reserve account, based on amounts and time period specified by KIA, unless a documented replacement program is in place and being actively funded at a level that is acceptable to KIA.

G. 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 Drinking Water State Revolving Fund (DWSRF) capitalization grants received. KIA reserves the right to transfer the maximum allowable 33 percent of uncommitted repayment funds from the CWSRF to the DWSRF repayment fund as loan demand arises. This decision will be evaluated annually by 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.

While KIA reserves the right to transfer available funds a transfer is not expected during the 2015 fiscal year.

V. ASSURANCES AND SPECIFIC CERTIFICATIONS

The state will provide the assurances and certifications required by the EPA as part of the Operating Agreement. This agreement is the official document between Kentucky and the the EPA setting forth legal responsibilities of each. Pursuant to Section 606(c)(4) of the CWA, the State certifies that:

1. The state will enter into binding commitments equal to at least 120 percent of each quarterly grant payment within one year after receipt of the payment;
2. The state will expend all funds in the CWSRF in an expeditious and timely manner;
3. Funds will first be used to assure maintenance of progress toward compliance with enforceable deadlines, goals and requirements of the CWA, including the municipal compliance deadline; and
4. The state will conduct environmental reviews on projects that receive CWSRF assistance.

VI. FUNDS AVAILABLE TO BE COMMITTED AND DISBURSED

Kentucky's CWSRF is capitalized by appropriations from the U.S. Congress and the Kentucky General Assembly. The fund provides, in perpetuity, financial assistance to Kentucky's eligible CWSRF projects. As of June 30, 2013 the CWSRF had net assets of $664,792,000 and 213 active loans. During 2015, Kentucky will rely on funding as outlined in Table A to provide financial assistance and to support the operations of KIA and DOW.

Table A

Kentucky CWSRF Sources and Uses of Funds for 2015

July 1, 2014 through June 30, 2015

Funding Sources	Federal Contribution	State Contribution	Other	Total
Uncommitted Prior Year Loan Funds			5,000,000	5,000,000
Loan Repayments (P&I)			46,000,000	46,000,000
Interest Earnings (from cash on hand)			275,000	275,000
Leverage Bond Proceeds			50,000,000	50,000,000
Banked Prior Year Administration Funds			1,500,000	1,500,000
FFY 2014 Capitalization Grant	17,845,000	3,569,000		21,414,000
Total Funding Sources	17,845,000	3,569,000	102,775,000	124,189,000
Funding Uses				
Financial Assistance	17,131,200	3,569,000	75,168,000	95,868,200
Leverage Bond Debt Service			26,107,000	26,107,000
Banked Prior Year Administration Funds			1,500,000	1,500,000
FFY 2014 Administration (4%)	713,800			713,800
Total Funding Uses	17,845,000	3,569,000	102,775,000	124,189,000

During the 2015 funding cycle KIA will have an estimated $95,868,200 available to fund eligible CWSRF projects. This is comprised of the FFY 2014 capitalization grant of $17,845,000, state match funds of $3,569,000, leverage bond authorization of $50,000,000, estimated loan repayments $46,000,000 and interest earnings of $275,000 on existing cash balances. Funding is reduced by leverage bond debt service of $26,107,000 and $713,800 used by KIA and DOW to administer the CWSRF program. Any administration funds that are not used or are transferred into the construction account will be reserved for use in a future year. KIA and DOW will have $1,500,000 in banked administrative funds from prior capitalization grants for administration of the program.

The $3,569,000 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. If additional capitalization grant funding is made available, the required 20% state match will be provided to the full extent of the available capitalization grant. The anticipated submission date for the 2014 capitalization grant application is July 7, 2014. Grant awards are typically made within 90 days but not later than September 30 of each year. The approximate federal to state cash draw ratio for the CWSRF for FY 2014 is anticipated to be 83:17.

KIA received budgetary authorization to issue agency leverage bonds during the 2014-2016 biennium in an amount not to exceed $100 million. Bond proceeds will be deposited into the fund and used to make eligible CWSRF loans. For this authorization to become effective, KIA must obtain approval from the Kentucky Infrastructure Authority Board, the Capital Projects and Bond Oversight Committee, the Office of the State Budget Director and the Office of Financial Management in the Finance and Administration Cabinet with respect to the timing and amount of the leverage bond issuance. KIA anticipates that approximately one-half of the authorization will be used in each state fiscal year.

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

VII. PUBLIC PARTICIPATION

The draft 2015 CWSRF IUP including the Project Priority List was made available for public review and comment Kentucky Infrastructure Authority website at www.kia.ky.gov and the Division of Water website at water.ky.gov from June 19, 2014 through July 21, 2014. A public meeting to discuss the plan contents was held on July 9, 2014, at 1:30 p.m. at the offices of the Kentucky Infrastructure Authority located at 1024 Capital Center Drive, Suite 340, Frankfort, Kentucky. John Covington, Executive Director of KIA, stated the purpose of the meeting and explained to the audience the process for making oral and written comments. Shafiq Amawi, manager of the Water Infrastructure Branch, gave an overview of the draft 2015 CWSRF IUP and the Project Priority Ranking System.

No written or verbal comments were received during the public comment period or during the public meeting and the 2015 CWSRF IUP became final on July 22, 2014.

APPENDIX A

COMPREHENSIVE PROJECT PRIORITY LIST

2015 CWSRF Project Priority List

Rank	Score	Loan Number	Applicant	Loan Package Title	DOW Project Description	Total Project Costs	Requested Loan Amount	Invited Loan Amount	Utility Service Area MHI	Population	Principal Forgiveness Amount	Green Amount	Green Category	WRIS #
1	238	A15-001	Lexington-Fayette Urban County Government	Expansion Area Three Sanitary Sewer Infrastructure	Sanitary Sewer Extension	$ 16,888,634	$ 16,888,634	$ 16,888,634	$ 48,811	286,768	$ 0	$ 465,407	3, 4	SX21067002
2	210	A15-002	Regional Water Resource Agency	Southwest Master Pump Station And Force Main Project	CSO Correction	6,650,000	6,650,000	6,650,000	41,705	72,455	0	6,650,000	3, 4	SX21059033
3	190	A15-003	Georgetown, City of	Georgetown/Scott County South Sewer Extension	Sanitary Sewer Extension	2,820,000	745,000	745,000	53,845	30,468	0	325,000	3	SX21209012
4	173	A15-004	Vicco, City of	Vicco Wastewater Treatment Plant & Sewer Collection Project - Phase III	WWTP Repalcement	2,683,265	1,183,265	1,183,265	33,560	433	118,327	0		SX21193006
5	165	A15-005	Mercer County Sanitation District	City of Burgin Sanitary Sewer Extension	Sanitary Sewer Extension	8,765,000	1,740,000	1,740,000	42,841	402	0	7,564,200	3, 4	SX21167012
6	150	A15-006	Barbourville Utility Commission	Barbourville: Sewer Rehab	Sanitary Sewer Rehabilitation	1,856,109	1,856,109	1,856,109	21,688	5,604	185,611	1,642,574	3	SX21121133
7	150	A15-007	Catlettsburg, City of	Catlettsburg: Add new Clarifier to the WWTP & Rehab Existing Clarifiers	WWTP Rehabilitation	2,700,000	2,700,000	0	33,098	2,283	0	5,000	3	SX21019075
8	145	A15-008	Regional Water Resource Agency	Parkview Drive Area Basin/Chamber	CSO Correction	525,000	3,300,000	0	41,705	72,455	0	450,000	4	SX21059044
9	143	A15-009	Winchester Municipal Utilities Commission	Hampton Manor Outfall Sewer	SSO Correction	1,404,000	1,280,000	1,280,000	41,016	25,141	0	10,000	3	SX21049028
10	140	A15-010	Brodhead, City of	City of Brodhead - Sewer Rehabilitation	Sanitary Sewer Rehabilitation	1,775,000	1,275,000	1,275,000	19,591	1,176	637,500	1,265,000	3	SX21203316
11	136	A15-011	Pineville, City of	Pineville: Virginia Avenue Utility Replacement	CSO Correction	2,233,485	1,500,000	0	25,723	3,106	0	0		SX21013151
12	134	A15-012	Versailles, City of	Sanitary Sewer Rehabilitation Phase I Versailles	Sanitary Sewer Rehabilitation	1,677,000	1,627,000	1,627,000	50,885	15,614	0	50,000	3	SX21239009
13	128	A15-013	Beattyville, City of	Beattyville Highway 11 South Sewer Line Extension	Sanitary Sewer Exrtension	2,000,000	1,000,000	1,000,000	16,788	2,626	500,000	0		SX21129005
14	127	A15-014	Oldham County Environmental Authority	Orchard Grass Regional WWTP Phase 3	Sanitary Sewer Extension	6,300,000	6,300,000	0	97,085	16,624	0	0		SX21185053
15	120	A15-015	Williamsburg, City of	Sanitary Sewer Rehabilitation and I&I Removal Project	Sanitary Sewer Rehabilitation	1,179,835	1,179,835	1,179,835	27,932	5,633	117,984	850,000	3	SX21235004
16	116	A15-016	Calvert City, City of	City of Calvert City-Phase IV Sewer Rehab	Sanitary Sewer Rehabiliation	450,000	450,000	450,000	45,728	2,424	0	45,000	3	SX21157036
17	115	A15-017	Versailles, City of	City of Versailles - Sanitary Sewer System Rehabilitation - Phase 2	Sanitary Sewer Rehabilitation	1,579,509	1,579,509	1,579,509	50,885	15,614	0	1,275,400	3	SX21239011
18	112	A15-018	Carrollton Utilities	CU - The 3444 Sanitary Sewer Project	Sanitary Sewer Rehabilitation & Extension	1,978,865	1,978,856	1,978,856	36,244	8,451	0	1,232,846	3, 4	SX21041003
19	110	A15-019	Liberty, City of	Liberty Wastewater Treatment Plant Upgrade and Improvements	WWTP Upgrade	4,156,000	4,156,000	4,156,000	24,330	2,050	415,600	205,000	3	SX21045002
20	106	A15-020	Eddyville, City of	City of Eddyville - Wastewater System Evaluation and Rehabilitation	Sanitary Sewer Rehabilitation	1,484,500	1,400,000	1,400,000	32,376	2,210	140,000	687,000	1, 3	SX21143007
21	105	A15-021	Lexington-Fayette Urban County Government	West Hickman Subbasin WH-7 WWS Tank	SSO Correction	19,087,695	19,087,695	19,087,695	48,811	286,768	0	65,639	4	SX21067053
22	105	A15-022	Winchester Municipal Utilities Commission	Maple Street Storm and Sanitary Sewer Rehabilitation	Sanitary Sewer Rehabilitation	926,000	926,000	926,000	41,016	25,141	0	0		SX21049037

2015 CWSRF Project Priority List

Rank	Score	Loan Number	Applicant	Loan Package Title	DOW Project Description	Total Project Costs	Requested Loan Amount	Invited Loan Amount	Utility Service Area MHI	Population	Principal Forgiveness Amount	Green Amount	Green Category	WRIS #
23	100	A15-023	Morganfield, City of	Morganfield Combined Sewer Separation Project - Phase II	CSO Correction	2,642,200	1,642,200	1,642,200	35,257	5,720	0	0		SX21225024
24	97	A15-024	Sturgis, City of	Sturgis Wastewater Treatment Plant Upgrade	WWTP Upgrade	2,710,000	2,630,000	2,630,000	33,862	2,098	263,000	0		SX21225012
25	96	A15-025	Richmond, City of	Water Street Stormwater Improvements, Phase 2	Stormwater Control	1,150,000	1,150,000	1,150,000	30,472	31,364	115,000	535,000	1	SX21151051
26	95	A15-026	Lexington-Fayette Urban County Government	West Hickman WWTP Wet Weather Storage Tanks - Phase 1	WWTP Upgrade	71,303,742	42,953,060	0	48,811	286,768	0	137,106	4	SX21067048
27	95	A15-027	Regional Water Resource Agency	Hayden Road and Pleasant Valley Road Area Subdivisions	Sanitary Sewer Extension	1,425,000	1,425,000	1,425,000	41,705	72,455	0	1,100,000	4	SX21059045
28	95	A15-028	Regional Water Resource Agency	Airport/Bittel Road Area Subdivisions	Sanitary SewerExtension	572,500	572,500	572,500	41,705	72,455	0	425,000	4	SX21059046
29	90	A15-029	Hazard, City of	Hazard Sanitary Trunk Rehabilitation	Sanitary Sewer Rehabilitation	3,211,510	1,250,000	1,250,000	41,676	6,313	0	0		SX21193003
30	86	A15-030	Richmond, City of	Richmond - Hanover Street & Rice Court Stormwater Improvements	Stormwater Control	1,150,000	1,150,000	1,150,000	30,472	31,364	115,000	450,000	1	SX21151047
31	83	A15-031	Booneville, City of	Booneville I/I Replacement Project	Sanitary Sewer Rehabilitation	1,526,000	1,526,000	1,526,000	22,344	830	152,600	1,526,000	3	SX21189005
32	83	A15-032	Frankfort, City of	Frankfort Sewer Department - West Frankfort Pump Station	SSO Correction	3,138,500	3,138,500	3,138,500	45,623	34,505	0	0		SX21073038
33	80	A15-033	Hardinsburg, City of	Hardinsburg WWTP Phosphorus Removal & Effluent Monitoring	WWTP Upgrade	1,279,500	1,279,500	1,279,500	31,395	1,978	127,950	0		SX21027021
34	80	A15-034	Hartford, City of	Hartford Sewer Rehabilitation Project - Phase II	Sanitary Sewer Rehabilitation	2,002,000	2,002,000	2,002,000	31,700	2,635	200,200	2,000,000	3	SX21183014
35	75	A15-035	Corbin Utilities Commission	Corbin Wastewater Treatment Plant Upgrade Improvements	WWTP Upgrade	9,184,115	8,684,115	8,684,115	31,265	13,022	868,412	600,000	3, 4	SX21235117
36	75	A15-036	Owensboro, City of	Sherm Ditch- Phase IV	CSO Correction	3,975,000	3,975,000	3,975,000	37,762	57,265	0	3,257,140	4	SX21059047
37	73	A15-037	Falmouth, City of	Sanitary Sewer and Stormwater Improvements	Sanitary Sewer Extension & Stormwater Control	1,151,449	1,151,449	1,151,449	35,422	2,682	0	605,000	3	SX21191005
38	71	A15-038	Richmond, City of	Richmond - Taylor Fork Stormwater Improvements Phase 1	Stormwater Control	950,000	950,000	950,000	30,472	31,364	95,000	0		SX21151050
39	70	A15-039	Fordsville, City of	Fordsville Wastewater System Improvement/Rehabilitation Project	Sanitary Sewer & WWTP Rehabilitation	753,450	753,450	753,450	24,456	554	75,345	0		SX21183015
40	70	A15-040	Versailles, City of	Southeast Sewer System Expansion	Sanitary Sewer Extension	3,996,000	3,996,000	3,996,000	50,885	15,614	0	0		SX21239006
41	67	A15-041	South Shore, City of	South Shore: Upgrade Forest Heights Collection Lines	Sanitary Sewer Rehabilitation	648,500	648,500	648,500	25,136	2,282	64,850	1,500	3	SX21089096
42	67	A15-042	Sturgis, City of	Grangertown Lift Station Rehab and Taylor (Camp) Road Lift Station Replacement	Sanitary Sewer Rehabilitation	415,000	252,000	252,000	33,862	2,098	25,200	150,000	3	SX21225021
43	66	A15-043	Richmond, City of	Richmond - Irvine Road Area Stormwater Improvements, Phase 1	Stormwater Control	1,400,000	1,400,000	0	30,472	31,364	140,000	1,150,000	1	SX21151049
44	65	A15-044	Booneville, City of	Booneville Hwy 1411 Sewer Extension	Sanitary Sewer Extension	602,600	602,600	0	22,344	830	60,260	0		SX21189600
45	65	A15-045	Mount Vernon, City of	City of Mt. Vernon Wastewater Replacement Along Main Street	Sanitary Sewer Rehabilitation	1,025,000	1,025,000	0	22,564	2,867	102,500	769,500	3	SX21203190

2015 CWSRF Project Priority List

Rank	Score	Loan Number	Applicant	Loan Package Title	DOW Project Description	Total Project Costs	Requested Loan Amount	Invited Loan Amount	Utility Service Area MHI	Population	Principal Forgiveness Amount	Green Amount	Green Category	WRIS #
46	65	A15-046	Harrodsburg, City of	Harrodsburg - Cleaning and Rehabilitation of Sanitary Sewer Collector Lines	Sanitary Sewer Rehabilitation	1,420,000	576,000	0	29,435	8,778	57,600	450,000	3	SX21167014
47	65	A15-047	Pikeville, City of	City of Pikeville KY Waste water Treatment Plant Upgrade	WWTP Expansion	21,945,000	2,445,000	0	30,807	11,175	244,500	0		SX21195024
48	63	A15-048	Booneville, City of	Booneville Pump Station Rehab	Sanitary Sewer Rehabilitation	273,500	273,500	0	22,344	830	27,350	140,000	3	SX21189002
49	62	A15-049	Sturgis, City of	Individual Pump Stations for Unsewered Residents of Sturgis	Sanitary Sewer Extension	115,000	115,000	0	33,862	2,098	11,500	0		SX21225023
50	61	A15-050	Wilmore, City of	Wilmore Wastewater Collection System Rehabilitation - Phase 2	Sanitary Sewer Rehabilitation	530,000	530,000	0	34,932	5,243	0	0		SX21113026
51	60	A15-051	Falmouth, City of	Oak Haven Pump Station and Force Main	Sanitary Sewer Extension	701,385	701,385	0	35,422	2,682	0	0		SX21191102
52	60	A15-052	Northern Madison Sanitation District	Muddy Creek Wastewater Treatment Plant	New WWTP	1,400,000	1,000,000	0	59,523	4,925	0	0		SX21151036
53	60	A15-053	Cynthiana, City of	Cynthiana - Northend Sewer Extension Project	Sanitary Sewer Extension	1,018,285	968,285	0	27,793	6,532	96,829	0		SX21097015
54	60	A15-054	Brandenburg, City of	Brandenburg Main Lift Station Replacement / Upgrade	Sanitary Sewer Rehabilitation	368,000	368,000	0	33,207	2,788	36,800	95,000	3	SX21163006
55	60	A15-055	Falmouth, City of	WWTP Lagoon Aerator Augmentation	WWTP Upgrade	504,715	504,715	0	35,422	2,682	0	330,000	3	SX21191004
56	60	A15-056	Hopkinsville Water Environment Authority	HWEA - Oak Grove Spring Meadows Sewer	Sanitary Sewer Extension	2,875,000	2,875,000	0	34,808	42,917	0	0		SX21047009
57	60	A15-057	Middlesboro, City of	Middlesboro: Noetown Sewer Rehab/Binghamtown PS Rehab	Sanitary Sewer Rehabilitation	2,550,000	1,200,000	0	22,101	10,364	120,000	2,460,000	3	SX21013148
58	57	A15-058	South Shore, City of	South Shore: Upgrade Lift Stations 4, 5, and 6	Sanitary Sewer Rehabilitation	753,000	753,000	0	25,136	2,282	75,300	3,410	3	SX21089095
59	53	A15-059	Mount Olivet, City of	Mt. Olivet Phase 1 - Wastewater Treatment Plant Upgrade	WWTP Upgrade	65,000	65,000	0	29,422	560	6,500	20,000	3	SX21201007
60	51	A15-060	Northern Madison Sanitation District	NMCSD - Madison Village Collection System Rehab	Sanitary Sewer Rehabilitation	1,275,000	1,275,000	0	59,523	4,925	0	1,275,000	3	SX21151039
61	50	A15-061	Martin County Sanitation District	Martin County Sanitation District - Belt Press and Sludge Handling	WWTP Upgrade	1,021,600	1,021,600	0	25,370	1,193	102,160	0		SX21159007
62	50	A15-062	Bracken County Fiscal Court	Augusta/Brooksville Regional Sewer-Planning & Design	Planning $ Design for WWTP	700,000	600,000	0	22,376	686	60,000	0		SX21023010
63	50	A15-063	West Point, City of	West Point Sewer Rehabilitation and Drainage Improvements III	Sanitary Sewer Rehabilitation	507,500	250,000	0	28,417	875	25,000	150,000	3	SX21093024
64	50	A15-064	Wickliffe, City of	Wickliffe Lift Station Upgrade	Sanitary Sewer Rehabilitation	700,000	700,000	0	30,528	772	70,000	150,000	3	SX21007018
65	50	A15-065	Wilmore, City of	Wilmore WWTP Sludge Handling Improvements	WWTP Upgrade	3,460,000	2,460,000	0	34,932	5,243	0	240,000	3	SX21113025
66	50	A15-066	Winchester Municipal Utilities Commission	Industrial Park Non-Potable Water Line	Recycled Water Distribution	425,000	425,000	0	41,016	25,141	0	0		SX21049031
67	49	A15-067	Sacramento, City of	Sacramento Gravity Sewer Project, Phase II	Sanitary Sewer Rehabilitation	940,000	940,000	0	33,996	685	94,000	84,600	3	SX21149023
68	49	A15-068	Boyd County Sanitation District #4	SD4: Phase 2 Rt 5 Area Sewer Extension	Sanitary Sewer Exrtension	2,157,000	2,157,000	0	50,001	10,724	0	0		SX21019070

2015 CWSRF Project Priority List

Rank	Score	Loan Number	Applicant	Loan Package Title	DOW Project Description	Total Project Costs	Requested Loan Amount	Invited Loan Amount	Utility Service Area MHI	Population	Principal Forgiveness Amount	Green Amount	Green Category	WRIS #
69	46	A15-069	Centertown, City of	Centertown Liftstation Rebuild Project	Sanitary Sewer Rehabilitation	150,000	150,000	0	40,765	538	0	45,400	3	SX21183016
70	45	A15-070	Liberty, City of	Liberty – North US 127 Collector Sewer Project	Sanitary Sewer Extension	553,000	513,000	0	24,330	2,050	51,300	0		SX21045005
71	43	A15-071	Mountain Water District	Douglas WWTP Expansion	WWTP Expansion	3,058,735	300,000	0	30,478	1,739	30,000	0		SX21195699
72	40	A15-072	Williamsburg, City of	Ball Park Pump Station/ Force Main - Phase II	Sanitary Sewer Extension	1,599,411	1,599,411	0	27,932	5,633	159,941	0		SX21235005
73	40	A15-073	Greenup, City of	Greenup: Rehab Or Replacement of Collection System	Sanitary Sewer Rehabiltiation	5,000,000	5,000,000	0	42,829	1,270	0	0		SX21089036
74	40	A15-074	Harrodsburg, City of	Harrodsburg New Wastewater Treatment Plant	WWTP Expansion	21,400,000	21,400,000	0	29,435	8,778	2,140,000	0		SX21167003
75	40	A15-075	Harrodsburg, City of	Harrodsburg - Corning-Industrial Pump Station and Force Main Sys	Sanitary Sewer Extension	810,000	810,000	0	29,435	8,778	81,000	0		SX21167013
76	40	A15-076	Morganfield, City of	Camp Breckenridge Sewer Rehab	Sanitary Sewer Rehabilitation	3,552,800	3,552,800	0	35,257	5,720	0	3,000,000	3	SX21225006
77	40	A15-077	Mountain Water District	MWD- Sewer Lift Station Upgrades	Sanitary Sewer Rehabilitation	400,000	400,000	0	30,478	1,739	40,000	0		SX21195004
78	40	A15-078	Hopkinsville Water Environment Authority	HWEA Oak Grove Village Sewer Project	Sanitary Sewer Extension	7,500,000	7,500,000	0	34,808	42,917	0	0		SX21047023
79	40	A15-079	Regional Water Resource Agency	Ravines Sewer Upgrade	Sanitary Sewer Rehabilitation	1,340,000	1,340,000	0	41,705	72,455	0	300,000	3	SX21059027
80	40	A15-080	Versailles, City of	Emergency Backup Power to Serve The WWTP	Equipment	1,000,000	1,000,000	0	50,885	15,614	0	0		SX21239005
81	33	A15-081	Jackson, City of	Wal-Mart Area Sewer Project	Sanitary Sewer Extension	510,000	230,000	0	22,405	2,960	23,000	0		SX21025007
82	30	A15-082	Hawesville, City of	Hawesville Sewer Plant Rebuild Project	WWTP Rehabilitation	5,000,000	5,000,000	0	43,846	1,266	0	0		SX21091015
83	30	A15-083	Lebanon Junction, City of	Truck Stop Lift Satation Replacement	Sanitary Sewer Rehabilitation	200,000	200,000	0	44,938	1,624	0	0		SX21029032
84	30	A15-084	Flemingsburg, City of	Phase 2 - Flemingsburg Bypass Sewer Line	Sanitary Sewer Extension	525,000	525,000	0	27,021	3,116	52,500	0		SX21069020
85	30	A15-085	Wilmore, City of	Wilmore Wastewater Treatment Plant Expansion	WWTP Expansion	11,000,000	6,600,000	0	34,932	5,243	0	0		SX21113003
86	20	A15-086	Hopkinsville Water Environment Authority	HWEA - Crofton Division Gordon Park Sewer Main Extension	Sanitary Sewer Extension	104,700	104,700	0	34,808	42,917	0	0		SX21047030
87	20	A15-087	Hopkinsville Water Environment Authority	HWEA Oak Grove Industrial Park Sewer Line Extension	Sanitary Sewer Extension	490,000	490,000	0	34,808	42,917	0	0		SX21047006
88	20	A15-088	Hopkinsville Water Environment Authority	HWEA SRF Phase VIII - Rockbridge Interceptor	Sanitary Sewer Extension	12,328,550	12,328,550	0	34,808	42,917	0	0		SX21047029
89	20	A15-089	Nicholasville, City of	Brookview Sanitary Sewer Replacement Project Nicholasville	Sanitary Sewer Rehabilitation	730,000	330,000	0	43,422	29,008	0	0		SX21113014
90	20	A15-090	Nicholasville, City of	Nicholasville - Orchard Parallel Sanitary Sewer Project	Sanitary Sewer Rehabilitation	340,980	340,980	0	43,422	29,008	0	0		SX21113027
91	20	A15-091	Sanitation District #1 of Northern Kentucky	SD1 - Highland Pike Sewer Replacement	Sanitary Sewer Replacement	3,185,000	3,152,500	0	58,941	296,700	0	0		SX21117001
Total					**Totals:**	**$ 331,815,124**	**$ 258,030,203**	**$ 103,179,117**			**$ 8,125,619**	**$ 44,237,722**		

2015 CWSRF Project Priority List

IUP Priority List Invited Package Totals	
Category	**Total**
Invited Loan Amount	**$ 103,179,117**
Principal Forgiveness Amount	**$ 4,217,579**
Green Project Components Amount	**$ 32,982,706**

APPENDIX B

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, 2013

To Whom It May Concern:

The Kentucky Infrastructure Authority and the Kentucky Division of Water are announcing the 2015 Clean Water State Revolving Fund Call for Projects.

The Clean Water State Revolving Fund Call For Projects

Will Be Open from October 1, 2013 to December 13, 2013

If you have a wastewater, stormwater or nonpoint source project that will need funding during the 2015 state fiscal year (July 1, 2014 thru June 30, 2015), we want to hear from you as your project may be eligible for funding from the Clean Water State Revolving Fund (CWSRF). The CWSRF is a competitive program. To qualify to apply for a low interest CWSRF loan, your project MUST be ranked and listed on the 2015 CWSRF Project Priority List developed by the Division of Water (DOW). Projects will not be carried forward from the 2014 project priority list to the 2015 project priority list.

You Will Need a Project Profile for Your Project

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

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

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

DOW strongly encourages you to read the Integrated Project Priority Ranking System (IPPRS) document before you submit your Project Profile as you might obtain some useful ideas to improve your project's overall score. **Only those projects that can start construction by March 31, 2016 will be considered for funding.**

Current Interest Rates

Projected interest rates for the program will be provided in the 2015 CWSRF Intended Use Plan (IUP) which will be available late Spring 2014. Rates provided in the IUP are subject to approval by the KIA Board. KIA currently offers three interest rates for the CWSRF program. The standard rate of 2.75% is available for borrowers with a median household income (MHI) at or above $42,248, the MHI of the Commonwealth according to U.S. Census estimates from American Factfinder. A 1.75% rate is offered to borrowers whose MHI is between $42,248 and $33,798 (80% of the Commonwealth MHI). The 1.75% rate also applies to those projects that facilitate compliance with an order or judgment addressing environmental non-compliance or those systems that are considered regional. To qualify for the 0.75% rate, the borrower must have an MHI at or below $33,798.

Sustainable Infrastructure Initiative

A brochure that highlights the Sustainable Infrastructure (SI) initiative launched by EPA and the Kentucky Division of Water in 2008 is available on KIA's and DOW's websites. 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 CWSRF 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 Anshu Singh (anshu.singh@ky.gov) or Shafiq Amawi (shafiq.amawi@ky.gov) at the Water Infrastructure Branch or call (502) 564-3410. For more information on loan requirements, terms or eligibility, please contact Jeff Abshire (jeff.abshire@ky.gov, (502) 573-0260) at KIA.

Sincerely,

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

APPENDIX C

INTEGRATED PROJECT PRIORITY RANKING SYSTEM (IPPRS)

KENTUCKY
INTEGRATED PROJECT PRIORITY RANKING SYSTEM

For Wastewater, Stormwater and Nonpoint Source Projects
Eligible To Be Funded By The

KENTUCKY CLEAN WATER STATE REVOLVING FUND

2015 Funding Cycle

ENERGY AND ENVIRONMENTCABINET
Department for Environmental Protection
Division of Water

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

Table of Contents

I. Introduction

The Federal Water Pollution Control Act of 1956 provided a strong role for the federal government in the construction of publicly owned wastewater treatment works. The amendments enacted in 1972, commonly referred to as the Clean Water Act (CWA), expanded the level of federal aid and increased the federal grant share in an effort by Congress to speed up the pace of construction of wastewater treatment facilities and eliminate the backlog of needed facilities. The 1977 Amendments to the Clean Water Act directed the Environmental Protection Agency (EPA) to delegate most of its construction grants management functions to the states. EPA continued to provide funds for grants to local governments to construct wastewater treatment facilities through federal fiscal year (FFY) 1990. The Water Quality Act of 1987, which amended the CWA, authorized EPA to make capitalization grants to each state for the purpose of establishing a water pollution control revolving fund for providing financial assistance for projects that protect and restore water quality, including publicly owned treatment works (POTWs), nonpoint source pollution control and estuary management. EPA made capitalization grants beginning in FFY 1987; however, when federal funding ends, the Clean Water State Revolving Fund (CWSRF) is to be maintained in perpetuity by the state to replace the previous federal participation.

The Kentucky General Assembly enacted House Bill 217 during the 1988 legislative session, which established the CWSRF as an enduring and viable fund. This fund is intended to allow the Commonwealth of Kentucky to qualify for the federal CWSRF capitalization grants. The CWA requires in section 602 a state match to be deposited into the CWSRF of an amount equal to at least 20 percent of the total amount of all capitalization grants which will be made to the State.

The CWSRF may fund projects for construction of publicly owned treatment works as defined in section 212 of the Clean Water Act, including stormwater projects. The CWSRF may also fund nonpoint source pollution control activities which implement the U.S. EPA-approved *Kentucky Nonpoint Source Management Program - 2.0* (Kentucky Division of Water, 2002) required under Section 319 of the Clean Water Act, which lists specific activities for controlling nonpoint source pollution impacts and identifies responsible implementing agencies and potential/available funding sources.

The purpose of this document is to outline the Division of Water's (DOW) project selection and ranking criteria which shall be used to establish project priority ranking in the annual CWSRF Intended Use Plan (IUP). This document, entitled the *Integrated Project Priority Ranking System (IPPRS)*, complies with EPA's *Integrated Planning and Priority Setting in the Clean Water State Revolving Fund* guidance (EPA-832-R-01-002 March 2001), which states, "An integrated planning and priority setting system is effective if it ensures that CWSRF-funded projects address high priority water quality problems. Four actions are key to its success: identifying water quality priorities, assessing the CWSRF role, undertaking outreach efforts, and selecting priority projects."

DOW is committed to reassessing the Integrated Project Priority Ranking Criteria and Points System upon the completion of the initial review and ranking process and development of the 2015 Project Priority List. Modifications may be made to the criteria and points system if it is determined that this process does not meet EPA's guidance for utilizing the CWSRF to address the high priority water quality problems.

II. Identifying and Ranking Water Quality Priorities

According to the March 2001 EPA IPPS guidance:

> "Water quality priorities provide a context for the activities of the CWSRF program. CWSRF resources should address these priorities in the most efficient manner possible. State water quality priorities also provide a valuable standard against which a state can measure the success of its water quality programs, i.e., has the state used its resources to address its highest water quality priorities?
>
> A state's water quality program should be the CWSRF's major resource in identifying the state's water quality priorities. A water quality program has typically developed its understanding of the state's priorities by considering water quality information from many sources. Familiarity with these sources of water quality information is also useful to the CWSRF during the development of project ranking systems."

DOW operates several water quality programs that have been used to identify criteria for ranking projects in the context of CWSRF funding priority.

All surface waters in Kentucky are assessed based on a five-year, rotating watershed basin cycle. Assessment data and narrative explanations are compiled into the 305(b) Report to Congress. Section 303(d) of the CWA requires each state to list those waters within its boundaries for which technology based effluent limitations are not stringent enough to protect any water quality standard applicable to such waters. The 303(d) List of Waters identifies all waters assessed as "impaired" for one or more pollutants, and are therefore waters not "meeting the water quality standard." Listed waters are prioritized with respect to designated use classifications and the severity of pollution. The 305(b) report and 303(d) list are now published together in the *2010 Integrated Report to Congress on Water Quality in Kentucky* (Kentucky DOW, April 2010).

Kentucky is required to develop TMDLs for those water bodies that are not meeting water quality standards. The TMDL process establishes the allowable loadings of pollutants or other quantifiable parameters for a waterbody based on the relationship between point and nonpoint pollution sources and in-stream water quality conditions. See the following website for approved TMDLs http://water.ky.gov/waterquality/Pages/ApprovedTMDLs.aspx.

As required in 200 KAR 17:050, the cabinet shall determine the priority for funding eligible projects to be included on the Project Priority List based on criteria established pursuant to 33 U.S.C. 1296, which states that projects should be designed to achieve optimum water quality management consistent with public health and water quality goals, and the following:

A. Project Needs

A project is awarded points based on the importance of the need in addressing a water quality or public health problem. Each of the need categories are defined in this section.

Criterion #1: Combined Sewer Overflow (CSO) Correction- Correction measures used to achieve water quality objectives by preventing or controlling periodic discharges of a mixture of storm water and untreated wastewater (combined sewer overflows) that occur when the capacity of a sewer system is exceeded during a rainstorm.
Points Received: 40

Criterion #2: Sanitary Sewer Overflow (SSO) Correction- Control of sanitary sewer overflows caused by excessive infiltration and inflow into the sanitary sewer collection system. The problem of water penetration into a sewer system from the ground through such means as defective pipes or manholes (infiltration) or from sources such as drains, storms sewers, and other improper entries into the systems (inflow). Sanitary sewer overflow refers to overflow, spill, release, or discharge of untreated or partially treated wastewater from a sanitary sewer system.
Points Received: 30

Criterion #3: Replacement or Rehabilitation of Aging Infrastructure, including correction of moderate infiltration and inflow (i.e., no associated SSO)- Reinforcement or reconstruction of structurally deteriorating interceptor or collector sewers and pipes used to collect and convey wastewater by gravity or pressure flow to a common point. Projects that propose to correct infiltration and inflow (i.e., no associated SSO) go under this criterion.
Points Received: 20

Criterion #4: New Treatment Plant- Construction of a new facility including any devices and systems used in the storage, treatment, recycling or reclamation of municipal sewage, sewage sludge, and biosolids, or industrial waste.
Points Received: 10

Criterion #5: New Collector Sewers and Appurtenances- Install new pipes used to collect and carry wastewater from a sanitary or industrial wastewater source to an interceptor sewer that will convey the wastewater to a treatment plant.
Points Received: 10

Criterion #6: Decentralized Wastewater Treatment Systems- This includes onsite, mound, and/or cluster treatment systems that process household and commercial sewage that may include, but are not limited to, septic systems, disposal beds and packaged wastewater treatment plants configured to treat and dispose of the wastewater without offsite discharge. Usually the wastewater is percolated into the soil through infiltration beds or trenches or is disposed by irrigation or other means.
Points Received: 20

Criterion #7: Upgrade to Advanced Treatment- Upgrade of a facility to a level of treatment that is more stringent than secondary treatment or produces a significant reduction in nonconventional pollutants.
Points Received: 20

Criterion #8: Rehabilitation/Upgrade/Expansion of Existing Treatment Plant- Rehabilitation, upgrades, improvements, or expansion of existing treatment plant.
Points Received: 20

Criterion #9: New Interceptors and Appurtenances- Install new major sewer lines receiving wastewater flows from collector sewers. The interceptor sewer carries wastewater directly to the treatment plant or another interceptor.
Points Received: 10

Criterion #10: Storm Water Control- Storm water is defined as runoff water resulting from precipitation. Includes activities to plan and implement municipal storm water management programs with environmental benefits pursuant to National Pollutant

Discharge Elimination System permits for discharges from municipal separate storm sewer systems.
Points Received: 20

Criterion #11: Nonpoint Source (NPS) Pollution Control- NPS project may include, but not limited to, stream restoration, Best Management Practices, and land purchases.
Points Received: 20

Criterion #12: Recycled Water Distribution- Project that may include, but are not limited to, the recycling of nonpotable water or reclaimed water for irrigation and other nonpotable uses.
Points Received: 10

Criterion #13: Planning- Developing plans to address water quality and water quality-related public health problems that are supported by sound science and appropriate technology. Examples included Watershed-Based Plan, Total Maximum Daily Load Implementation Plans and Long-term Control Plans for Combined Sewer Overflow (CSO).
Points Received: 10

Criterion #14: Other- If any project that does not meet the list of project needs definitions and/or standards provided above. If it does meet the Other category please list a project need.
Points Received: 10

B. Regionalization

1. Criterion #1: Will this project provide regionalization and/or consolidation of wastewater treatment systems?
   This question addresses regionalized wastewater treatment approaches which may significantly minimize wastewater impacts. Regionalization occurs when smaller systems integrate part or all of their wastewater management systems to reduce costs, improve service, and maintain regulatory compliance. Smaller systems, regardless of ownership status, lack economics of scale and are having an increasingly difficult time finding the capital and human resources required to comply with stringent water quality standards to remain viable. Large wastewater systems are generally encouraged to acquire smaller systems in an effort to address the growing number of unviable water/ wastewater systems. Regionalized wastewater treatment approach may significantly minimize wastewater impacts, resulting in a reduced number of NPDES discharges. This includes projects that will combine and/or eliminate one or more existing treatment plants, result in the abandonment of one or more wastewater treatment plants and connection to an existing wastewater treatment plant, acquisitions of smaller systems by larger systems, mergers between utilities. Project must reduce the number of KPDES discharges.
   Points Received: 20

C. Compliance and Enforcement

Criterion #1: Is the project necessary to achieve full or partial compliance with a court order, or a judicial or administrative consent decree?
Points Received: 50

Criterion #2: Will the project achieve voluntary compliance (violation with no order)?

This question refers to when the facility/system is out of compliance before the project is implemented and will be in compliance at project completion.
Points Received: 25

D. Water Quality

Criterion #1: Will the project implement an approved Total Maximum Daily Load (TMDL) for impaired waterbodies?
This question addresses the TMDL process, which establishes the allowable loadings of pollutants or other quantifiable parameters for a waterbody based on the relationship between point and nonpoint pollution sources and in-stream water quality conditions. See the following website for approved TMDLs http://water.ky.gov/waterquality/Pages/ApprovedTMDLs.aspx.
Points Received: 10

Criterion #2: Will the project allow that system to address existing or projected nutrient TMDL?

This question considers the impact of a project on the water quality of nutrient impaired streams that have an existing or are projected to have a nutrient TMDL.
Points Received: 30

Criterion #3: Will the project implement any part of an approved Watershed Plan?
Please refer to list of approved watershed plans on page 20.
Points Received: 10

Criterion #4: Will the project make reasonable progress towards eliminating identified pollutant sources for waterbodies that appear on the *2010 Integrated Report to Congress on Water Quality in Kentucky*?
This question addresses the state's goal to improve water quality in impaired waterbodies. The 2010 Integrated Report and maps are available on DOW's website. http://water.ky.gov/waterquality/Pages/IntegratedReport.aspx. The reports list the impaired waterbodies with the pollutants of concern and probable sources of the pollutants.
Points Received: 20 for each pollutant-water body combination addressed

Criterion #5: Will the project eliminate existing or potential sources of pollution in groundwater sensitivity areas?
This question considers the importance of groundwater as one of Kentucky's vital resources as a source of drinking water, a source for industrial and agricultural use, and the source of sustained base flow in most streams. Groundwater is classified across the state on a scale from 1 (lowest) to 5 (highest) sensitivity. Groundwater data is available for download at http://kygeonet.ky.gov/metadataexplorer/.
Points Received: 15 if project is in a 4 or 5 sensitivity area
Points Received: 10 if project is in a 2.5 or 3 sensitivity area

Criterion #6: Will the project eliminate existing or potential sources of pollution in an identified SWAPP zone or WHPA?
Each public water supply (PWS) must develop a Source Water Assessment and Protection Plan (SWAPP) which delineates its drinking water source protection area, called SWAPP zones or Wellhead Protection Areas (WHPA), and potential sources of contamination within those areas. Look up your SWAPP and WHPA areas in the Watershed Viewer at http://eppcmaps.ky.gov/website/watershed/viewer.htm.

Points Received: 10 for each SWAPP Zone 1 or WHPA Zone 3
Points Received: 7 for each SWAPP Zone 2 or WHPA Zone 2
Points Received: 3 for each SWAPP Zone 3 or WHPA Zone 1

Criterion #7: Will the project make reasonable progress towards eliminating identified pollutant sources of water quality impairments within an identified DOW Priority Watershed?
The Division of Water has developed a list of state priority watersheds at the HUC11 level. *Please refer to the list of Kentucky Division of Water State Priority Watersheds on Page 19.*
Points Received: 20

Criterion #8: Will the project protect Special Use Waters?
This question considers the importance of protecting special waters in Kentucky. Special Use Waters are rivers, streams and lakes listed in Kentucky Administrative Regulations (http://www.lrc.state.ky.us/kar/TITLE401.HTM) as Cold Water Aquatic Habitat (401 KAR 10:031 Section 4), Exceptional Waters (401 KAR 10:030 Section 1), Reference Reach Waters (401 KAR 10:030 Section 1), Outstanding State Resource Waters (401 KAR 10:031 Section 8), Outstanding National Resource Waters (401 KAR 10:030 Section 1), State Wild Rivers (Kentucky Wild Rivers Act of 1972), and Federal Wild and Scenic Rivers (Wild and Scenic Rivers Act, PL 90-542). http://water.ky.gov/waterquality/Pages/SpecialUseWaters.aspx
Points Received: 10

Criterion #9: Will the project eliminate existing or potential sources of contamination within a 5-mile radius of a drinking water source location?
This question considers the importance of protecting drinking water supplies from potential contaminant sources.
Points Received: 10

Criterion #10: Will the project eliminate failing on-site septic tanks or straight pipes?
This question considers the importance of protecting groundwater and surface water quality from potential contaminant sources.
Points Received: 15

E. Financial Need

This section of the project ranking criteria considers the importance or the ability of facilities/systems to acquire and manage sufficient financial resources to achieve and maintain regulatory compliance.

Points will be given if the project is in an area of Kentucky where the Median Household Income (MHI) is at or below 80 percent of the State's MHI as determined by the American Community Survey (ACS) 5-Year Estimate (2008-2012).
Points Received: 20

Points will be given if the project is an area with a MHI between 80 percent of the State's MHI and the State's MHI as determined by the ACS 5 Year Estimate (2008-2012).
Points Received: 10

F. Asset Management

Criterion #1: System has a Capital Improvement Plan or similar planning document.
Points will be given if the system has mapped its treatment and collection system and

analyzed conditions, including risks of failure, expected dates of renewals and ultimate replacements, and sources and amounts of revenues needed to finance operation, maintenance, and capital needs (e.g., Capital Improvement Plan (CIP), Asset Inventory Report Form). To obtain points under this category a copy of the planning document should be uploaded in WRIS.
Points Received: 20

Criterion #2: System has developed appropriate rate structures to build, operate, and maintain the water works.
To obtain points under this category supporting documents should be uploaded in WRIS.
Points Received: 10

Criterion #3: System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.
To obtain points under this category supporting documents should be uploaded in WRIS.
Points Received: 10

G. Green Projects

The following four categories will be considered incentives by the Kentucky Division of Water, and projects that incorporate components from any of the categories will receive bonus points. ***Projects with an "*" require business case***.

1. Green Infrastructure:

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

Examples:

- Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment or retrofits including: permeable pavement, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- Wet weather management systems for parking areas including: permeable pavement, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- Implementation of comprehensive street tree or urban forestry programs, including expansion of tree boxes to manage additional stormwater and enhance tree health.
- Stormwater harvesting and reuse projects, such as cisterns and the systems that allow for utilization of harvested stormwater, including pipes to distribute stormwater for reuse.

- Downspout disconnection to remove stormwater from sanitary, combined sewers and separate storm sewers and manage runoff onsite.
- Comprehensive retrofit programs designed to keep wet weather discharges out of all types of sewer systems using green infrastructure technologies and approaches such as green roofs, green walls, trees and urban reforestation, permeable pavements and bioretention cells, and turf removal and replacement with native vegetation or trees that improve permeability.
- Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks. This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds this may not be the original hydrology.
- Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).
    - Includes constructed wetlands.
    - May include natural or restored wetlands if the wetland and its multiple functions are not degraded and all permit requirements are met.
- The water quality portion of projects that employ development and redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.
- Fee for simple purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.
- Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients and other pollutants.*

Points Received: 5 each / maximum 10

Projects That Do Not Meet the Definition of Green Infrastructure:

- Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
- Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins.
- In-line and end-of-pipe treatment systems that only filter or detain stormwater.
- Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal/floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
- Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels.
- Hardening, channelizing or straightening streams and/or stream banks.
- Street sweepers, sewer cleaners, and vactor trucks unless they support green infrastructure projects.

2. Water Efficiency:

Definition: EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.

Examples:

- Installing or retrofitting water efficient devices, such as plumbing fixtures and appliances
  - For example -- shower heads, toilets, urinals and other plumbing devices
  - Implementation of incentive programs to conserve water such as rebates.
- Installing any type of water meter in previously unmetered areas
  - If rate structures are based on metered use
  - Can include backflow prevention devices if installed in conjunction with water meter
- Replacing existing broken/malfunctioning water meters, or upgrading existing meters, with:
  - Automatic meter reading systems (AMR), for example: Advanced metering infrastructure (AMI), Smart meters
  - Meters with built in leak detection
  - Can include backflow prevention devices if installed in conjunction with water meter replacement
- Retrofitting/adding AMR capabilities or leak detection equipment to existing meters (not replacing the meter itself).
- Water audit and water conservation plans, which are reasonably expected to result in a capital project.
- Recycling and water reuse projects that replace potable sources with non-potable sources,
  - Gray water, condensate and wastewater effluent reuse systems (where local codes allow the practice)
  - Extra treatment costs and distribution pipes associated with water reuse.
- Retrofit or replacement of existing landscape irrigation systems with more efficient landscape irrigation systems, including moisture and rain sensing equipment.
- Retrofit or replacement of existing agricultural irrigation systems with more efficient agricultural irrigation systems.
- Water meter replacement with traditional water meters.*
- Projects that result from a water audit or water conservation plan.*
- Storage tank replacement/rehabilitation to reduce loss of reclaimed water.*
- New water efficient landscape irrigation system (where there currently is not one).*
- New water efficient agricultural irrigation system (where there currently is not one).*

Points Received: 5 each / maximum 10

Projects That Do Not Meet the Definition of Water Efficiency:

- Agricultural flood irrigation.
- Lining of canals to reduce water loss.
- Replacing drinking water distribution lines.
- Leak detection equipment for drinking water distribution systems, unless used for reuse distribution pipes.

3. Energy Efficiency:

Definition: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

Examples:

- Renewable energy projects such as wind, solar, geothermal, micro-hydroelectric, and biogas combined heat and power systems (CHP) that provide power to a POTW. Micro-hydroelectric projects involve capturing the energy from pipe flow.
  - POTW owned renewable energy projects can be located onsite or offsite.
  - Includes the portion of a publicly owned renewable energy project that serves POTW's energy needs.
  - Must feed into the grid that the utility draws from and/or there is a direct connection.
- Collection system Infiltration/Inflow (I/I) detection equipment
- POTW 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 a capital project are eligible.
- POTW projects or unit process projects that achieve energy efficiency improvement. Retrofit projects should compare energy used by the existing system or unit process to the proposed project. The energy used by the existing system should be based on name plate data when the system was first installed, recognizing that the old system is currently operating at a lower overall efficiency than at the time of installation. New POTW projects or capacity expansion projects should be designed to maximize energy efficiency and should select high efficiency premium motors and equipment where cost effective. Estimation of the energy efficiency is necessary for the project to be counted toward GPR.*
- Projects implementing recommendations from an energy audit.*
- Projects that cost effectively eliminate pumps or pumping stations.*
- Infiltration/Inflow (I/I) correction projects that save energy from pumping and reduced treatment costs and are cost effective*.
- Projects that count toward GPR cannot build new structural capacity. These projects may, however, recover existing capacity by reducing flow from I/I.*
- Replacing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors.*
- Upgrade of POTW lighting to energy efficient sources such as metal halide pulse start technologies, compact fluorescent, light emitting diode (LED).*
- SCADA systems can be justified based upon substantial energy savings.*
- Variable Frequency Drive can be justified based upon substantial energy savings.*

Points Received: 10 each/ no maximum

Projects That Do Not Meet the Definition of Energy Efficiency:

- Renewable energy generation that is *privately* owned or the portion of a publicly owned renewable energy facility that does not provide power to a POTW, either through a connection to the grid that the utility draws from and/or a direct connection to the POTW.
- Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency.
- Facultative lagoons, even if integral to an innovative treatment process.
- Hydroelectric facilities, except micro-hydroelectric projects. Micro-hydroelectric projects involve capturing the energy from pipe flow.

4. Environmentally Innovative:

Definition: Environmentally innovative projects include those that demonstrate new

and/or innovative approaches to delivering services or managing water resources in a more sustainable way.

Examples:

- Total/integrated water resources management planning likely to result in a capital project.
- Utility Sustainability Plan consistent with EPA SRF's sustainability policy.
- Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry)
- Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.
- Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.
- Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.
- Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.*
- Projects or components of projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.*
- Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.*
- POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.*
- Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects such as:*
    - Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment;
    - Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals. Includes composting, class A and other sustainable biosolids management approaches.
- Educational activities and demonstration projects for water or energy efficiency.*
- Projects that achieve the goals/objectives of utility asset management plans.*
- Sub-surface land application of effluent and other means for ground water recharge, such as spray irrigation and overland flow.*
    - Spray irrigation and overland flow of effluent is not eligible for GPR where there is no other cost effective alternative.

Points Received: 5 each / maximum 10

Projects That Do Not Meet the Definition of Environmentally Innovative:

- Air scrubbers to prevent nonpoint source deposition.
- Facultative lagoons, even if integral to an innovative treatment processes.
- Surface discharging decentralized wastewater systems where there are cost effective soil-based alternatives.
- Higher sea walls to protect POTW from sea level rise.
- Reflective roofs at POTW to combat heat island effect.

H. Project Readiness:

Criterion# 1: Borrower has submitted complete technical plans to the Division of Water; and

Criterion# 2: Borrower has conducted a full environmental review for all components of the project or has completed the cross-cutter scoping process (including eClearinghouse, US Fish and Wildlife service, National Resource Conservation Service, and State Historic Preservation Office reviews); and

Criterion# 3: Borrower has received funding commitments from other funding sources; or the CWSRF is the sole source of funding.

To be considered "project ready", the borrower must have completed a majority of the planning phase and be ready to bid the project.

Points Received: 30 if all three criteria have been met

Note: Plans do not have to be approved by the Division of Water, but they must have been submitted for review. A full environmental review does not have to be finalized however the cross-cutter scoping process must be complete. To obtain points under this category supporting documents should be submitted to Anshu Singh via email Anshu.singh@ky.gov or mailed to Division of Water, 200 Fair Oaks Lane, 4th Floor, Frankfort, KY 40601.

III. Summary of Points System Used to Establish Project Priority Ranking

Priority Ranking Criteria		Possible Points
A. Project Needs Category		
1.	Combined Sewer Overflow (CSO) Correction	40
2.	Sanitary Sewer Overflow (SSO) Correction	30
3.	Replacement or Rehabilitation of Aging Infrastructure, including correction of moderate infiltration and inflow (i.e., no associated SSO).	20
4.	New Treatment Plant	10
5.	New Collector Sewers and Appurtenances	10
6.	Decentralized Wastewater Treatment Systems	20
7.	Upgrade to Advanced Treatment	20
8.	Rehabilitation/Upgrade/Expansion of Existing Treatment Plant	20
9.	New Interceptors and Appurtenances	10
10.	Storm Water Control	20
11.	Nonpoint Source (NPS) Pollution Control	20
12.	Recycled Water Distribution	10
13.	Planning	10
14.	Other (specify):	10
B. Regionalization		
1.	Will this project provide regionalization and/or consolidation of wastewater treatment systems? Proposed project reduces the number of NPDES discharges by regionalization.	20
C. Compliance and Enforcement		
1.	Is the project necessary to achieve full or partial compliance with a court order, agreed order, or a judicial or administrative consent decree?	50
2.	Will the project achieves voluntary compliance (violation with no order)?	25
D. Water Quality		
1.	Will the project allow the system to address existing Total Maximum Daily Load (TMDL)?	10
2.	Will the project allow the system to address existing or projected nutrient TMDL?	30
3.	Will the project allow the system to address an approved Watershed Management Plan?	10
4.	Will the project make reasonable progress towards eliminating identified pollutant sources for waterbodies that appear on the *2010 Integrated Report to Congress on Water Quality in Kentucky*?	20 points for each pollutant-waterbody combination

5.	Does the project eliminate existing or potential sources of pollution in groundwater sensitivity areas?	15 points for high or highest sensitivity 10 points for moderate sensitivity
6.	Is the project located within an identified SWAPP zone or WHPA?	10 for each Zone 1 7 for each Zone 2 3 for each Zone 3
7.	Will the project make reasonable progress towards eliminating identified pollutant sources of water quality impairments within an identified DOW Priority Watershed?	30 points
8.	Will the project have a positive effect on Special Use Waters?	10 points
9.	Will the project have a positive impact on drinking water sources within a 5-mile radius of its location?	10
10.	Will the project eliminate failing on-site septic tanks or straight pipes?	15
E. Financial Need		
1.	Borrowers with a median household income (MHI) at or below 80 percent of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimate (2008-2012)	20
2.	Borrowers with a MHI between 80 percent of the State's MHI and the State's MHI as determined by the ACS 5 Year Estimate (2008-2012)	10
F. Asset Management		
1.	System has a Capital Improvement Plan or similar planning document	20
2.	System has developed appropriate rate structures to build, operate, and maintain the water works	10
3.	System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure	10

G. Green Projects (See Green Project Reserve Guidance Document)		
1.	Green Infrastructure: Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintains and restores natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as: • Bioretention • Trees • Green roofs • Permeable pavement • Cisterns • Constructed wetlands • Urban forestry programs • Downspout disconnection • Riparian buffers and wetlands • Sustainable landscaping and site design • Purchase of land or easements on land for riparian and wetland protection or restoration • Fencing to divert livestock from streams and stream buffers*	5 pts. each/10 pts. maximum
2.	Water Efficiency: The use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Examples include: • Installing or retrofitting water efficient devices such as plumbing fixtures and appliances (toilets, showerheads, urinals) • Installing any type of water meter in previously unmetered areas (can include backflow prevention if in conjunction with meter replacement) • Replacing existing broken/malfunctioning water meters with AMR or smart meters, meters with leak detection, backflow prevention • Retrofitting/adding AMR capabilities or leak equipment to existing meters • Developing water audit and conservation plans, which are reasonably expected to result in a capital project • Recycling and water reuse projects that replace potable sources with non-potable sources (Gray water, condensate, and wastewater effluent reuse systems, extra treatment or distribution costs associated with water reuse) • Retrofit or replacement of existing landscape irrigation/agricultural systems to more efficient landscape/agricultural irrigation systems (rain and moisture sensing equipment) • Water meter replacement with traditional water meters * • Projects that result from a water audit or water conservation plan* • Storage tank replacement/rehabilitation to reduce water loss* • New water efficient landscape/agricultural irrigation system, where there currently is not one*	5 pts. each/10 pts. maximum

3.	Energy Efficiency: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water projects, use energy in a more efficient way, and/or produce/utilize renewable energy. Examples include: • Renewable energy projects such as wind, solar, geothermal, and micro-hydroelectric, and biogas combined heat and power systems that provide power to a POTW • POTW-owned renewable energy projects • Collection system infiltration/inflow (I/I) detection equipment • POTW energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas • Projects that achieve a reduction in energy consumption (pumps, motors)* • Projects that cost effectively eliminate pumps or pumping stations* • I/I correction projects that save energy from pumping and reduced treatment costs* • Replacing old motors with premium energy efficiency motors* • Upgrade of POTW lighting to energy efficient sources* • SCADA systems where substantial energy savings can be demonstrated* • Variable Frequency Drive (VFD) controllers where substantial energy savings can be demonstrated*	10 pts. each
4.	Environmentally Innovative: Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way. Examples include: • Total integrated water resources management planning likely to result in a capital project • Utility sustainability plan consistent with EPA's sustainability policy • Greenhouse gas inventory or mitigation plan and submission of a GHG inventory to a registry as long as it is being done for an SRF eligible facility • Planning activities by a POTW to prepare for adaption to the long-term affects of climate change and/or extreme weather • Construction of US Building Council LEED certified buildings, or renovation of an existing building on POTW facilities • Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems • Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal* • Projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are CWSRF eligible* • Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaption study* • POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae* • Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment* • Treatment technologies that significantly reduce the volume of residuals, generation of residuals, or lower the amount of chemicals in the residuals* • Educational activities and demonstration projects for water or energy efficiency* • Projects that achieve the goals/objectives of utility asset management plans* • Sub-surface land application of effluent and other means for groundwater recharge, such as spray irrigation and overland flow*	5 pts. each/10 pts. maximum

H. Project Readiness		
1.	Borrower has submitted complete technical plans and specifications to the Division of Water; and	30
2.	Borrower has conducted a full environmental review for all components of the project or has completed the cross-cutter scoping process (including eClearinghouse, US Fish and Wildlife service, National Resource Conservation Service, and State Historic Preservation Office reviews); and	
3.	Borrower has received funding commitments from other funding sources, where applicable	

*Denotes that a business case may be required.

IV. Developing and Updating the Project Priority List and Intended Use Plan

In order for a project to be considered for funding from the CWSRF, it must appear on the Comprehensive Project Priority List for the state fiscal year in which the project will receive a binding commitment. To be included in this list, an eligible project applicant must complete or update a Project Profile (and related mapping) in the Water Resource Information System (WRIS) through the Area Development District (ADD). Once the project is submitted for CWSRF funding, DOW staff will evaluate the project based on the ranking system discussed above and assign the project a numeric score. Eligible projects will then be added to the next Comprehensive Project Priority List. In the event of a tie, the following factors will be 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, Consent Decrees); (3) water quality impacts; and (4) financial need as evident by the median household income of the applicant. If the project is only for accommodating future growth and will not address an existing water quality or public health need, and therefore does not receive any points from the above criteria, the project will be still included on the Comprehensive Project Priority List if it is eligible for CWSRF funding.

DOW and the Kentucky Infrastructure Authority (KIA) will prepare an annual Intended Use Plan (IUP) that will describe how the state intends to use the funds in the Kentucky CWSRF for each state fiscal year, and how those uses support the objectives of the CWA. DOW will publish and maintain the IUP and Project Priority List on its CWSRF website. Each IUP will include an updated Comprehensive Project Priority List and a Fundable List of projects that are anticipated to receive funding during that state fiscal year. Once the IUP has been drafted, notice will be given to the public that the draft IUP is available for review and comment for a period of at least 30 days. After the comment period has ended DOW and KIA will review any comments received and make changes to the IUP as appropriate. Both the draft and final IUPs will be available on DOW's CWSRF website.
http://water.ky.gov/Funding/Pages/CleanWaterStateRevolvingFund.aspx

V. Eligible Project Applicants/Projects

Any governmental agency shall be eligible to apply for financial assistance for planning, design and construction of eligible projects. Any project that triggers the requirement of 401 KAR 5:006 wastewater planning regulation to submit a facility plan will be eligible for planning and design loan only.

VI. References

Kentucky Division of Water website: http://water.ky.gov/Pages/default.aspx

Kentucky Division of Water CWSRF website: http://water.ky.gov/Funding/Pages/CleanWaterStateRevolvingFund.aspx

Kentucky Infrastructure Authority website: http://kia.ky.gov/

U.S. EPA 2010 website: http://www.epa.gov/waterinfrastructure/

VII. Kentucky Division of Water State Priority Watersheds

HUC	Watershed	River Basin
05110001150	Bacon Creek	Green and Tradewater
05100101290	Banklick Creek	Licking
05140101250	Beargrass Creek, St. Matthews	Salt
05110001090	Big Pitman Creek	Green and Tradewater
05140104250030	Boiling Springs	Salt
05090201130	Cabin Creek	Licking
05100205280200	Cane Run	Kentucky
06040006040	Clarks River	Four Rivers
05100205190	Clarks Run	Kentucky
05130101330	Clear Fork, Cumberland River	Upper Cumberland
05130101330	Clear Fork, Cumberland River	Upper Cumberland
05130101055	Clover Fork, Cumberland River	Upper Cumberland
05100205170	Dix River, Herrington Lake	Kentucky
05100205410	Eagle Creek mouth	Kentucky
05130101350	Elk Fork Creek	Upper Cumberland
05070202060290	Elkhorn Creek, near Pine Mountain	Big, Little Sandy and Tygarts
05100101200	Fleming Creek	Licking
05140102180	Floyds Fork	Salt
05140102190	Floyds Fork	Salt
05100205180	Hanging Fork Creek	Kentucky
05070202020	Jonican Branch, near Fish Trap Lake	Big, Little Sandy and Tygarts
05130101450	Laurel River	Upper Cumberland
05070203170	Levisa Fork, near Louisa	Big, Little Sandy and Tygarts
05100101010	Licking River, headwaters	Licking
08010201010	Mayfield Creek	Four Rivers
05130101340	Mud Creek	Upper Cumberland
05100205020	Muddy Creek	Kentucky
00005100201	North Fork Kentucky River	Kentucky
05130206090010	Pleasant Grove Creek	Four Rivers
05070203040	Prater Creek, near Banner	Big, Little Sandy and Tygarts
05100204120	Red River Gorge	Kentucky
05140104250	Sinking Creek, at Hardinsburg	Salt
05130102090	Sinking Creek, of Rockcastle River	Upper Cumberland
05100205270	South Elkhorn Creek	Kentucky
05130205180	South Fork Little River	Four Rivers
05100102030	Strodes Creek	Licking
05100102050	Townsend Creek	Licking
05110002220	West Fork Drakes Creek	Green and Tradewater
05130206230	West Fork Red River	Four Rivers
05130206150	Whippoorwill Creek	Four Rivers

VIII. 319h Funded Watershed-Based Plans in Kentucky

Current 319(h) Funded Watershed-Based Plans in Kentucky				
Project Year	**Watershed Name**	**Basin**	**Size of Watershed (sq. miles)**	**Completion Date**
2002	Dix River/Herrington Reservoir Applies to Clark's Run and Hanging Fork Subwatersheds	Kentucky	28.5 / 96.5	Accepted November 2009
2002	Cane Creek	Four Rivers	26	Inactive*
2002	Upper East Fork Clarks River	Four Rivers	48	Accepted March 2010
2003	Floyds Fork	Salt	284	Inactive*
2004	Corbin City/Laurel River	Upper Cumberland	200.5	Accepted May 2007
2004	Darby Creek of Harrods Creek	Salt	10.4	Inactive*
2004	Dry Creek of Triplett Creek	Licking	11.5	Accepted May 2010
2004	Town Branch (Stockton Creek) of Fleming Creek	Licking	5.9	Accepted June 2010
2004	Hancock Creek of Strodes Creek	Licking	12.9	Accepted June 2010
2005	Bacon Creek	Green	90.5	Accepted March 2011
2005	Pleasant Grove Creek	Four Rivers	34	Inactive*
2005	Ten Mile Creek of Eagle Creek	Kentucky	10.5	Accepted Nov 2005
2005	Pleasant Run	Green	13	Accepted Dec 2005
2005	Benson Creek (Goose Creek)	Kentucky	107 (10.27)	Inactive*
2006	Curry's Fork	Salt	28.5	Accepted March 2012
2006	Three sub-watersheds of Big South Fork: Bear Creek, Roaring Paunch, Big Creek	Upper Cumberland	155.5	Provisional Acceptance Oct 2012
2006	Cane Run	Kentucky	24.7	Accepted Oct 2011
2006	Rock Creek	Upper Cumberland	13.2	Accepted April 2008
2007	Banklick Creek	Licking	58	Accepted May 2010
2007	Elkhorn Creek	Big Sandy	53	Inactive*
2008	Triplett Creek	Licking	180	Expected Completion Dec 2013
2008	Hinkston Creek	Licking	260	Accepted July 2011
2009	Red River	Kentucky	105	Expected Completion Dec 2013
2009	Gunpowder Creek	Licking	58	Expected Completion Dec 2013

2009	Wolf Run	Kentucky	10	Accepted March 2013
2010	Woolper Creek	Licking	33	Expected Completion Oct 2014
2010	Brushy Creek	Upper Cumberland	44	Expected Completion Dec 2013
2011	Sinking Creek	Upper Cumberland	34	Expected Completion Dec 2015
2011	Kinniconick Creek	Licking	23	Expected Completion Dec 2015
* Inactive - Partial plan completed but not accepted by Kentucky Division of Water				

APPENDIX D

GREEN RESERVE GUIDANCE

2015 Clean Water and Drinking Water State Revolving Fund
10% Green Project Reserve:
Guidance for Determining Project Eligibility

The following section includes Green Project Reserve guidance for the Clean Water SRF program.

The FFY 2014 capitalization grant requires that "to the extent there are sufficient eligible projects, not less than 10% of the funds made available to each State for Clean Water State Revolving Fund capitalization grants shall be used by the State for projects to address 1) green infrastructure, 2) water efficiency improvements, 3) energy efficiency improvements, or 4) other environmentally innovative activities." These four categories 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 current 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 above. 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 Part A).

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. However, it is noted in the SRF assistance agreements that the SRFs cannot provide funding for operation and maintenance costs, including training. Some of these costs may, however, be funded through appropriate DWSRF set-asides under limited conditions.

PART A – CWSRF GPR SPECIFIC GUIDANCE

CWSRF 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 must otherwise be eligible for CWSRF funding. The GPR requirement does not create new funding authority beyond that described in Title VI of the CWA. Consequently, a subset of 212, 319 and 320 projects will count towards the GPR. The principles guiding CWSRF funding eligibility include:

0.2 All Sec 212 projects must be consistent with the definition of "treatment works" as set forth in section 212 of the Clean Water Act (CWA).

- 0.2-1 All section 212 projects must be publicly owned, as required by CWA section 603(c)(1).
- 0.2-2 All section 212 projects must serve a public purpose.
- 0.2-3 POTWs as a whole are utilized to protect or restore water quality. Not all portions of the POTW have a direct water quality impact in and of themselves (i.e. security fencing). Consequently, POTW projects are not required to have a direct water quality benefit, though most of them will.

0.3 Eligible nonpoint source projects implement a nonpoint source management program under an approved section 319 plan or the nine element watershed plans required by the 319 program.

- 0.3-1 Projects prevent or remediate nonpoint source pollution.
- 0.3-2 Projects can be either publicly or privately owned and can serve either public or private purposes. For instance, it is acceptable to fund land conservation activities that preserve the water quality of a drinking water source, which represents a public purpose project. It is also acceptable to fund agricultural BMPs that reduce nonpoint source pollution, but also improve the profitability of the agricultural operation. Profitability is an example of a private purpose.
- 0.3-3 Eligible costs are limited to planning, design and building of capital water quality projects. The CWSRF considers planting trees and shrubs, purchasing equipment, environmental cleanups and the development and initial delivery of education programs as capital water quality projects. Daily maintenance and operations, such as expenses and salaries are not considered capital costs.
- 0.3-4 Projects must have a direct water quality benefit. Implementation of a water quality project should, in itself, protect or improve water quality. States should be able to estimate the quantitative and/or qualitative water quality benefit of a nonpoint source project.
- 0.3-5 Only the portions of a project that remediate, mitigate the impacts of, or prevent water pollution or aquatic or riparian habitat degradation should be funded. Where water quantity projects improve water quality (e.g. reduction of flows from impervious surfaces that adversely affect stream health, or the modification of

irrigation systems to reduce runoff and leachate from irrigated lands), they would be considered to have a water quality benefit. In many cases, water quality protection is combined with other elements of an overall project. For instance, brownfield revitalization projects include not only water quality assessment and cleanup elements, but often a redevelopment element as well. Where the water quality portion of a project is clearly distinct from other portions of the project, only the water quality portion can be funded by the CWSRF.

0.3-6 Point source solutions to nonpoint source problems are eligible as CWSRF nonpoint source projects. Section 319 Nonpoint Source Management Plans identify sources of nonpoint source pollution. In some cases, the most environmentally and financially desirable solution has point source characteristics and requires an NPDES discharge permit. For instance, a septage treatment facility may be crucial to the proper maintenance and subsequent functioning of decentralized wastewater systems. Without the septage treatment facility, decentralized systems are less likely to be pumped, resulting in malfunctioning septic tanks.

0.4 Eligible projects under section 320 implement an approved section 320 Comprehensive Conservation Management Plan (CCMP).

0.4-1 Section 320 projects can be either publicly or privately owned.

0.4-2 Eligible costs are limited to capital costs.

0.4-3 Projects must have a direct benefit to the water quality of an estuary. This includes protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on water, and requires the control of point and nonpoint sources of pollution to supplement existing controls of pollution.

0.4-4 Only the portions of a project that remediate, mitigate the impacts of, or prevent water pollution in the estuary watershed should be funded.

0.5 GPR projects must meet the definition of one of the four GPR categories. The Individual GPR categories do not create new eligibility for the CWSRF. The projects that count toward GPR must otherwise be eligible for CWSRF funding.

0.6 GPR projects must further the goals of the Clean Water Act.[1]

[1] Drinking Water Utilities can apply for CWSRF funding

CWSRF Technical Guidance

The following sections outline the technical aspects for the CWSRF 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 INFRASTRUCUTRE

1.1 Definition: Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintain and restore 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

- 1.2-1 Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment or retrofits including: permeable pavement[2], bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- 1.2-2 Wet weather management systems for parking areas including: permeable pavement[2], bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
- 1.2-3 Implementation of comprehensive street tree or urban forestry programs, including expansion of tree boxes to manage additional stormwater and enhance tree health.
- 1.2-4 Stormwater harvesting and reuse projects, such as cisterns and the systems that allow for utilization of harvested stormwater, including pipes to distribute stormwater for reuse.
- 1.2-5 Downspout disconnection to remove stormwater from sanitary, combined sewers and separate storm sewers and manage runoff onsite.
- 1.2-6 Comprehensive retrofit programs designed to keep wet weather discharges out of all types of sewer systems using green infrastructure technologies and approaches

[2] The total capital cost of permeable pavement is eligible, not just the incremental additional cost when compared to impervious pavement.

such as green roofs, green walls, trees and urban reforestation, permeable pavements and bioretention cells, and turf removal and replacement with native vegetation or trees that improve permeability.

1.2-7 Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks. This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds this may not be the original hydrology.

1.2-8 Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).[3]

1.2-8a Includes constructed wetlands.

1.2-8b May include natural or restored wetlands if the wetland and its multiple functions are not degraded and all permit requirements are met.

1.2-9 The water quality portion of projects that employ development and redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.

1.2-10 Fee simple purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.

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.

1.3-6 Hardening, channelizing or straightening streams and/or stream banks.

1.3-7 Street sweepers, sewer cleaners, and vactor trucks unless they support green infrastructure projects.

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[3] Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, vernal pools, and similar areas.

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 that capture, treat, infiltrate, or evapotranspire water on the parcels where it falls and does not result in interbasin 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 are available at: http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm and http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm

1.5 Examples of Projects Requiring A Business Case

1.5-1 Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients and other pollutants.

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 -- shower heads, toilets, urinals and other plumbing devices
- 2.2-1b Where specifications exist, WaterSense labeled products should be the preferred choice (http://www.epa.gov/watersense/index.html).
- 2.2-1c Implementation of incentive programs to conserve water such as rebates.

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, or upgrading existing 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 detection equipment to existing meters (not replacing the meter itself).

2.2-5 Water audit and water conservation plans, which are reasonably expected to result in a capital project.

2.2-6 Recycling and water reuse projects that replace potable sources with non-potable sources,

2.2-6a Gray water, condensate and wastewater effluent reuse systems (where local codes allow the practice)

2.2-6b Extra treatment costs and distribution pipes associated with water reuse.

2.2-7 Retrofit or replacement of existing landscape irrigation systems with more efficient landscape irrigation systems, including moisture and rain sensing equipment.

2.2-8 Retrofit or replacement of existing agricultural irrigation systems with more efficient agricultural irrigation systems.

2.3 Projects That Do Not Meet the Definition of Water Efficiency

2.3-1 Agricultural flood irrigation.

2.3-2 Lining of canals to reduce water loss.

2.3-3 Replacing drinking water distribution lines. This activity extends beyond CWSRF eligibility and is more appropriately funded by the DWSRF.

2.3-4 Leak detection equipment for drinking water distribution systems, unless used for reuse distribution pipes.

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 POTW, since less water would need to be collected and treated; therefore, there are also energy and financial savings.

2.5 Examples of 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 Projects that result from a water audit or water conservation plan

2.5-3 Storage tank replacement/rehabilitation to reduce loss of reclaimed water.

2.5-4 New water efficient landscape irrigation system (where there currently is not one).

2.5-5 New water efficient agricultural irrigation system (where there currently is not one).

3.0 ENERGY EFFICIENCY

3.1 Definition: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

3.2 Categorical Projects

3.2-1 Renewable energy projects such as wind, solar, geothermal, micro-hydroelectric, and biogas combined heat and power systems (CHP) that provide power to a POTW. (http:///www.epa.gov/cleanenergy). Micro-hydroelectric projects involve capturing the energy from pipe flow.

3.2-1a POTW owned renewable energy projects can be located onsite or offsite.

3.2-1b Includes the portion of a publicly owned renewable energy project that serves POTW'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 Projects that achieve a 20% reduction in energy consumption are categorically eligible for GPR[4]. Retrofit projects should compare energy used by the existing system or unit process[5] to the proposed project. The energy used by the existing system should be based on name plate data when the system was first installed, recognizing that the old system is currently operating at a lower overall efficiency than at the time of installation. New POTW projects or capacity expansion projects should be designed to maximize energy efficiency and should select high efficiency premium motors and equipment where cost effective. Estimation of the energy efficiency is necessary for the project to be counted toward GPR. If a project achieves less than a 20% reduction in energy efficiency, then it may be justified using a business case.

3.2-3 Collection system Infiltration/Inflow (I/I) detection equipment

3.2-4 POTW 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 a capital project are eligible. Guidance to help POTWs develop energy management programs, including assessments and audits is available at http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf.

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[4] The 20% threshold for categorically eligible CWSRF energy efficiency projects was derived from a 2002 Department of Energy study entitled *United States Industrial Electric Motor Systems Market Opportunities Assessment, December 2002* and adopted by the Consortium for Energy Efficiency. Further field studies conducted by Wisconsin Focus on Energy and other State programs support the threshold.

[5] A unit process is a portion of the wastewater system such as the collection system, pumping stations, aeration system, or solids handling, etc.

3.3 Projects That Do Not Meet the Definition of Energy Efficiency

3.3-1 Renewable energy generation that is *privately* owned or the portion of a publicly owned renewable energy facility that does not provide power to a POTW, either through a connection to the grid that the utility draws from and/or a direct connection to the POTW.

3.3-2 Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency.

3.3-3 Facultative lagoons, even if integral to an innovative treatment process.

3.3-4 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 Project must be cost effective. An evaluation must identify energy savings and payback on capital and operation and maintenance costs that does not exceed the useful life of the asset. http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf

3.4-2 The business case must describe how the project maximizes energy saving opportunities for the POTW or unit process.

3.4-3 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/cupss) to document current energy usage and track anticipated savings.

3.5 Examples of Projects Requiring a Business Case

3.5-1 POTW projects or unit process projects that achieve less than a 20% energy efficiency improvement.

3.5-2 Projects implementing recommendations from an energy audit that are not otherwise designated as categorical.

3.5-3 Projects that cost effectively eliminate pumps or pumping stations.

3.5-4 Infiltration/Inflow (I/I) correction projects that save energy from pumping and reduced treatment costs and are cost effective.

3.5-4a Projects that count toward GPR cannot build new structural capacity. These projects may, however, recover existing capacity by reducing flow from I/I.

3.5-5 I/I correction projects where excessive groundwater infiltration is contaminating the influent requiring otherwise unnecessary treatment processes (i.e. arsenic laden groundwater) and I/I correction is cost effective.

3.5-6 Replacing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors.

3.5-6a NEMA is a standards setting association for the electrical manufacturing industry (http://www.nema.org/gov/energy/efficiency/premium/).

3.5-7 Upgrade of POTW lighting to energy efficient sources such as metal halide pulse start technologies, compact fluorescent, light emitting diode (LED).

3.5-8 SCADA systems can be justified based upon substantial energy savings.

3.5-9 Variable Frequency Drive can be justified based upon substantial energy savings.

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 likely to result in a capital project.

4.2-2 Utility Sustainability Plan consistent with EPA SRF's 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)

4.3-3a Note: GHG Inventory and mitigation plan is eligible for CWSRF funding.

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

4.2-4 Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.

4.2-4a Office of Water – Climate Change and Water website:
http://www.epa.gov/water/climatechange/

4.2.5 Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.

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 U.S. Green Building Council website:
http://www.usgbc.org/displaypage.aspx?CategoryID=19

4.2-6 Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.

4.2-6a Decentralized wastewater systems include individual onsite and/or cluster wastewater systems used to collect, treat and disperse relatively small volumes of wastewater. An individual onsite wastewater treatment system is a system relying on natural processes and/or mechanical components, that is used to collect, treat and disperse or reclaim wastewater from a single dwelling or building. A cluster system is a wastewater collection and treatment system under some form of common ownership that collects wastewater from two or more dwellings or buildings and conveys it to a treatment and dispersal system located on a suitable site near the dwellings or buildings. Decentralized projects may include a combination of these systems. EPA recommends that decentralized systems be managed under a central management entity with enforceable program requirements, as stated in the *EPA Voluntary Management Guidelines.*
http://www.epa.gov/owm/septic/pubs/septic_guidelines.pdf

4.2-6b Treatment and Collection Options: A variety of treatment and collection options are available when implementing decentralized wastewater systems. They typically include a septic tank, although many configurations include additional treatment components following or in place of the septic tank, which provide for advanced treatment solutions. Most disperse treated effluent to the soil where further treatment occurs, utilizing either conventional soil absorption fields or alternative soil dispersal methods which provide advanced treatment. Those that discharge to streams, lakes, tributaries, and other water bodies require federal or state discharge permits (see below). Some systems promote water reuse/recycling, evaporation or wastewater uptake by plants. Some decentralized systems, particularly cluster or community systems, often utilize alternative methods of collection with small diameter pipes which can flow via gravity, pump, or siphon, including pressure sewers, vacuum sewers and small diameter gravity sewers. Alternative collection systems generally utilize piping that is less than 8 inches in diameter, or the minimum diameter allowed by the state if greater than 8 inches, with shallow burial and do not require manholes or lift stations. Septic tanks are typically installed at each building served or another location upstream of the final treatment and dispersal site. Collection systems can transport raw sewage or septic tank effluent. Another popular dispersal option used today is subsurface drip infiltration. Package plants that discharge to the soil are generally considered decentralized, depending on the situation in which they are used. While not entirely inclusive, information on treatment and collection processes is described, in detail, in the "*Onsite Wastewater Treatment Technology Fact Sheets*" section of the EPA Onsite Manual http://www.epa.gov/owm/septic/pubs/septic_2002_osdm_all.pdf and on EPA's septic system website under Technology Fact Sheets. http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=283

4.3 Projects That Do Not Meet the Definition of Environmentally Innovative

4.3-1 Air scrubbers to prevent nonpoint source deposition.

4.3-2 Facultative lagoons, even if integral to an innovative treatment processes.

4.3-3 Surface discharging decentralized wastewater systems where there are cost effective soil-based alternatives.

4.3-4 Higher sea walls to protect POTW from sea level rise.

4.3-5 Reflective roofs at POTW 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 or 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;

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 Examples of Projects Requiring a Business Case

4.5-1 Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.

4.5-1a Natural wetlands, as well as the restoration/enhancement of degraded wetlands, may not be used for wastewater treatment purposes and must comply with all regulatory/permitting requirements.

4.5-1b Projects may not (further) degrade natural wetlands.

4.5-2 Projects or components of projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.

4.5-3 Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.

4.5-4 POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.

4.5-5 Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects such as:

4.5-5a Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment;

4.5-5b 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. (National Biosolids Partnership, 2010; *Advances in Solids Reduction Processes at Wastewater Treatment Facilities Webinar*; http://www.e-wef.org/timssnet/meetings/tnt_meetings.cfm?primary_id=10CAP2&Action=LONG&subsystem=ORD%3cbr).

4.5-5b(i) Includes composting, class A and other sustainable biosolids management approaches.

4.5-6 Educational activities and demonstration projects for water or energy efficiency.

4.5-7 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).

4.5-8 Sub-surface land application of effluent and other means for ground water recharge, such as spray irrigation and overland flow.

4.5-8a Spray irrigation and overland flow of effluent is not eligible for GPR where there is no other cost effective alternative.

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 must address the decision criteria for the category of project
- 5.0-2 Business cases should be adequate, but not exhaustive.
  - 5.0-2a There are many formats and approaches. EPA does not require any specific one.
  - 5.0-2b Some projects will require detailed analysis and calculations, while others many not require more than one page.
  - 5.0-2c Limit the information contained in the business case to only the pertinent 'green' information needed to justify the project.
- 5.0-3 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 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.
- 5.1-2 The cost and financial benefit of the project should be included, along with the payback time period where applicable. (NOTE: Clean Water SRF requires energy efficiency projects to be cost effective.)

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/.

APPENDIX E

PUBLIC COMMENTS

2015 Clean Water State Revolving Fund Intended Use Plan
Public Comments

No written or verbal comments were received during the public comment period or during the public meeting