FINAL
INTENDED USE PLAN

Including

PROJECT PRIORITY LIST

FOR THE

CLEAN WATER
STATE REVOLVING FUND

For
State Fiscal Year 2014

COMMONWEALTH OF KENTUCKY

April 26, 2013

PREPARED BY THE

ENERGY AND ENVIRONMENT CABINET
&
KENTUCKY INFRASTRUCTURE AUTHORITY

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INTRODUCTION

Kentucky's Intended Use Plan (IUP) for the Clean Water State Revolving Fund (CWSRF) is prepared in accordance with the provisions of Title VI of the Clean Water Act of 1987 (CWA), and the Federal Fiscal Year (FFY) 2013 Continuing Resolution. The purpose of this IUP is to communicate Kentucky's CWSRF plan for state fiscal year 2014 to potential borrowers of the fund, the public, the Environmental Protection Agency (EPA), and other state agencies. This 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 2013 Capitalization Grant. This 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. This 2014 IUP includes:

1. A description of the short and long term goals of the fund;
2. The criteria and methods established for selecting projects;
3. 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 of available funds and the uses of those funds; and
7. The project priority list---a list of eligible projects and activities 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 299 clean water infrastructure projects, totaling more than $1.186 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 is required to 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 continue providing 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 Division of Water (DOW) staff performs the environmental and technical reviews on projects seeking assistance from the CWSRF.

Additional CWSRF Requirements Remain in 2014

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

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

For a fourth year, the authorization for the CWSRF capitalization grant provided for additional subsidization for appropriation amounts that exceed $1 billion. At least 20% and not more than 30% of the CWSRF capitalization grant that represents the percentage of the federal appropriation over $1 billion must be provided as additional subsidy. At least 5.46% ($955,664) and not more than 8.19% ($1,433,496) of the CWSRF capitalization grant must be provided as additional subsidy.

Congress continues to place emphasis on "green" projects. At least 10 percent of the 2013 capitalization grant must be used to fund green projects as defined by EPA.

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 financings will be required to comply with the Davis-Bacon laws and incorporate these provisions into any project work that has been or will be contracted. For more information on Davis Bacon laws, please visit:
http://www.dol.gov/whd/regs/compliance/whdfs66.pdf.

B. ADDITIONAL SUBSIDIZATION

The FFY 2013 capitalization grant authorization requires that at least $955,664 and not more than $1,433,496 of the funds made available under that grant must be used by the State to provide additional subsidization to eligible recipients. To be eligible to receive 10% principal forgiveness, the borrower's entire service area must have a MHI at or below $33,798, or 80% of the State's MHI as determined by the American Community Survey (ACS) 5 Year Estimates 2007-2011. To be eligible to receive 50% principal forgiveness, the borrower's entire service area must have a MHI at or below $21,124, or 50% of the State's MHI as determined by the American Community Survey

(ACS) 5 Year Estimates 2007-2011. If a borrower provides service to more than one jurisdiction, an average MHI will be calculated based on each jurisdiction's MHI. Should there be insufficient eligible project applications to meet the required subsidization level, KIA may invite additional project applications or may increase the percentage subsidization level to the existing qualifying participants. Since the amount of principal forgiveness is limited, KIA will offer principal forgiveness in rank order. Some projects that might be eligible for principal forgiveness may not receive an allotment if the maximum has been reached by the total of the higher ranking projects.

C. GREEN PROJECT RESERVE (GPR)

The FFY2013 capitalization grant also requires that to the extent there are sufficient eligible project applications, not less than 10% of the funds made available under that grant must be used by the State for projects which address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities (collectively referred to as "green" projects). The priority list reflects green projects that are eligible under the GPR. Other projects on the priority list may be able to show, through a business case or other information, that they also are green projects and will be considered eligible for award under the GPR.

Structure of the CWSRF Program in Kentucky

The Kentucky Infrastructure Authority (KIA) and the Kentucky Energy and Environment Cabinet (EEC) through the Division of Water (DOW) jointly administer the program via a Memorandum of Agreement in accordance with Kentucky Revised Statute (KRS) 224A.111 and Kentucky Administrative Regulation (KAR) 200 KAR 17:050[1].

The following contacts can assist you with your CWSRF inquiries:

Contact	Agency	Subject
Sandy Williams (502)573-0260 sandy.williams@ky.gov	KIA	Loan Application, Financial Terms, Rates
Anshu Singh (502)564-3410 Anshu.singh@ky.gov	DOW	Project Questionnaire, Priority List, Environmental Review, Regional Facility Plans
Buddy Griffin (502)564-3410 buddy.griffin@ky.gov	DOW	Loan Application, Procurement, Bidding Requirements
Mark Rasche (502)564-3410 mark.rasche@ky.gov	DOW	Plans and Specifications
Shafiq Amawi, Water Infrastructure Branch Manager (502)564-3410 shafiq.amawi@ky.gov	DOW	General Information

[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.

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. Based on the 2008 Clean Watersheds Needs Survey, the United States needs more than $298.1 billion to meet its wastewater needs over the next 20 years; Kentucky's documented share is about $2.117 billion.

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 2013 capitalization grant requirements.

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

5. Improve the pace at which available funds are loaned. The best way to ensure the perpetuity of the fund is to revolve the available funds more quickly. KIA and DOW staff will promote the fund to potential loan candidates.

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. Provide the environmental benefits of CWSRF-funded projects by updating the online CWSRF Benefits Reporting System.

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

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

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. Ensure that accounting procedures conform to generally accepted governmental accounting standards.

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

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, beginning October 1, 2012 and continuing through December 15, 2012, 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 list of projects that responded to the call for projects is found in Appendix A, showing that Kentucky has sufficient eligible projects to meet the binding commitment requirements of the capitalization grant. The 2014 Ranked Project Priority List will be added to this Intended Use Plan prior to sending funding invitations. A brief description of the following fields might prove helpful in evaluating 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.

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

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 housed 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.

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

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

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

Green Score: The number of points earned by a project for green infrastructure components.

Project Description: Short description of project activities.

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).

Categorically Green: Identifies which projects may qualify as "Categorically" green. If "NO", then a Business Case must be submitted for the green infrastructure components to be considered eligible.

The 2015 IUP process will begin in October 2013. The annual Call for Projects will be open during October, November and December 2013, at which time projects will be accepted for the SFY 2015 funding cycle. The following schedule will apply:

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

Email notifications will be sent in September 2013 to all sewer utilities, area development districts, mayors, county judge executives, economic development directors, and the Kentucky Society of Professional Engineers, announcing the call for projects.

FUND ADMINISTRATION AND OPERATION

A. Actual 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.

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

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

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

Kentucky's CWSRF does not have a limit on the amount of funds that will be 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 those shown on 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 by-passed until a qualifying GPR or additional subsidization project is reached.

C. Addition of New Projects

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 projects' eligibility and 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 priority list provided that such refinancing from CWSRF monies 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. Rates and 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 the prevailing market conditions, availability of funds and funding demand. Staff intends to recommend a standard rate of 2.75 percent with two non-standard rates at 1.75 percent and 0.75 percent to start off the 2014 fiscal year.

The standard rate will apply to all borrowers at or above the ACS 5 Year Estimate 2007-2011 State Median Household Income (MHI) of $42,248. To qualify for the non-standard rate of 1.75%, the project must assist the system to achieve compliance with an order or judgment addressing environmental noncompliance, or the borrower must have a MHI between $42,248 and $33,798 (80% of the State MHI) or be considered regional. To qualify for the non-standard rate of 0.75%, a borrower must have a MHI at or below $33,798. Qualifications for rates are subject to 200 KAR 17:050.

Planning and design loans will be made at the standard rate during the planning and design phase of the project. Should the planning and design loan be rolled into a construction loan, the rate on the planning and design loan amount will revert to the rate approved for the construction loan.

2. Repayment Terms

Terms for planning, design and sanitary sewer evaluation study (SSES) loans will not exceed five years. Planning and design loans may be consolidated into a 20-year construction loan, if the construction of the project is funded by the CWSRF. Should the planning and design loan be rolled into a construction loan, the term for the planning and design loan amount will revert to the term approved for the construction loan. Construction loans will have a 20-year repayment term.

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. Financial Options of the Fund

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

a. Borrower Repayment – The borrower's ability to repay has a direct effect on the amount of funds available. A thorough credit analysis is performed for each borrower. Loan monitoring is performed throughout the life of the loan.
b. Leveraging – KIA will consider leveraging the fund to increase the dollars available for financial assistance. However, KIA did not receive authorization from the General Assembly to issue leverage bonds during the 2012-2014 biennium.

F. 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 2014 fiscal year.

ASSURANCES AND SPECIFIC CERTIFICATIONS

The state shall provide the assurances and certifications required by U.S EPA as part of the Operating Agreement. This agreement is the official document between Kentucky and the U.S. 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.

FUNDS AVAILABLE TO BE COMMITTED AND DISBURSED FOR SFY 2014

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. During 2014, Kentucky will rely on funding as outlined in Table A to provide financial assistance and to support operations in KIA and DOW. The FFY 2013 Capitalization Grant is represented to be $17,510,345, an amount subject to change as a result of sequestration.

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

Funding Sources	Federal Contribution	State Contribution	Other	Total
Uncommitted Prior Year Loan Funds			(7,517,838)	(7,517,838)
Loan Repayments *			34,005,437	34,005,437
Interest Earnings *			581,000	581,000
Banked Prior Year Administration Funds			2,034,278	2,034,278
FFY 2013 Capitalization Grant **	17,510,345	3,502,069		21,012,413
Total Funding Sources	17,510,345	3,502,069	29,102,876	50,115,290
Funding Uses				
Financial Assistance ***	16,809,931	3,502,069	893,398	21,205,397
Leverage Bond Debt Service			26,175,201	26,175,201
Banked Prior Year Administration Funds			2,034,278	2,034,278
FFY 2013 Administration (4%)	700,414			700,414
Total Funding Uses	17,510,345	3,502,069	29,102,877	50,115,290

* Estimated as of April 5, 2013.

** This amount is subject to change as a result of sequestration.

*** An amount equal to 10% of the federal capitalization grant will be used for green projects to the extent that KIA receives sufficient applications.

During the 2014 funding cycle, KIA will have an estimated $21,205,397 available to fund eligible CWSRF projects. This is comprised of the FFY 2013 capitalization grant of $17,510,345 *plus* state funds of $3,502,069, and estimated loan repayments *plus* estimated interest earnings of $34,586,437. Funding is reduced by a prior year over commitment of funds of $7,517,838, leverage bond debt service of $26,175,201 and $700,414 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 $2,034,278 in banked administrative funds from prior capitalization grants for administration of the program.

The $3,502,069 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 2013 capitalization grant application is February 28, 2013. Grant awards are typically made within 90 days. The approximate federal to state cash draw ratio for the CWSRF for FY 2013 is anticipated to be 83:17.

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

PUBLIC PARTICIPATION

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

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

No written or verbal comments were received during the public comment period or during the public meeting and the 2014 CWSRF IUP became final on April 26, 2013.

APPENDIX A

COMPREHENSIVE PROJECT PRIORITY LIST

2014 CLEAN WATER SRF RANKED PROJECT PRIORITY LIST

Rank	Score	CWSRF#	WRIS#	Apply Entity	Project Title	Project Description	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Cumulative Invited	MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness	Green Amount	Cumulative Green Amount	Green Category
1	205	A14-001	SX21067049	Lexington-Fayette Urban Co. Government	Lower Cane Run Wet Weather Storage Tank	SSO Elimination	19,837,063	19,837,592	9,829,750	9,829,750	48,306		0	63,043	63,043	4
2	182	A14-002	SX21135009	Vanceburg Electric Plant Board	Vanceburg Main Sewer Plant	WWTP Rehabilitation	1,500,000	1,500,000	1,500,000	11,329,750	14,260	750,000	750,000	135,000	198,043	3
3	175	A14-003	SX21067050	Lexington-Fayette Urban Co. Government	Lower Griffin Gate Trunk	SSO Elimination	860,494	860,494		11,329,750	48,306		750,000	8,433	206,476	3, 4
4	170	A14-004	SX21209012	City of Georgetown	Georgetown/Scott County South Sewer Extension	Sanitary Sewer Extension	2,945,000	2,945,000		11,329,750	51,692		750,000	0	206,476	
5	165	A14-005	SX21067052	Lexington-Fayette Urban Co. Government	UK Trunk A	SSO Elimination	2,832,319	2,932,319		11,329,750	48,306		750,000	28,544	235,020	3, 4
6	160	A14-006	SX21073059	City of Frankfort	Kentucky Avenue Interceptor Renovation	CSO Elimination	4,905,000	4,905,000	4,905,000	16,234,750	39,524		750,000	3,700,000	3,935,020	3
7	155	A14-007	SX21067051	Lexington-Fayette Urban Co. Government	Lower Cane Run Force Main Extension	Sewer Line Extension	180,112	180,112		16,234,750	48,306		750,000	559	3,935,579	4
8	155	A14-008	SX21059044	Regional Water Resource Agency	Parkview Drive Area Basin/Chamber	Sanitary Sewer Rehabilitation	3,300,000	3,300,000		16,234,750	44,763		750,000	2,700,000	6,635,579	4
9	153	A14-009	SX21193006	City of Vicco	Vicco Wastewater Treatment Plant & Sewer Collection Project Phase III	New WWTP	2,036,800	500,000		16,234,750	34,583		750,000	0	6,635,579	
10	153	A14-010	SX21125001	London Utility Commission	London Sanitary Sewer Rehab	Sanitary Sewer Rehabilitation	3,765,250	3,765,250	3,765,250	20,000,000	30,466	376,525	1,126,525	2,000	6,637,579	3
11	151	A14-011	SX21013151	City of Pineville	City of Pineville-Sanitary & Storm Sewer Separation	CSO Elimination	6,000,000	4,000,000		20,000,000	24,030	400,000	1,526,525	0	6,637,579	
12	151	A14-012	SX21013140	City of Pineville	Sanitary and Storm Sewer Separation	CSO Elimination	8,000,000	8,000,000		20,000,000	24,030	800,000	2,326,525	0	6,637,579	
13	150	A14-013	SX21019075	City of Catlettsburg	New Clarifier at WWTP & Rehab of Existing Clarifiers	WWTP Rehabilitation	3,000,000	3,000,000		20,000,000	25,167	300,000	2,626,525	0	6,637,579	
14	147	A14-014	SX21135002	Garrison-Quincy KY-O-Heights Water District	Garrison Sewer Phase II	Sanitary Sewer Extension	2,000,000	2,000,000		20,000,000	28,681	200,000	2,826,525	40,500	6,678,079	1, 3
15	146	A14-015	SX21023005	Bracken County Fiscal Court	Augusta/Brooksville Regional Sewer Project	New WWTP	11,550,000	3,000,000		20,000,000	39,643		2,826,525	13,000	6,691,079	1, 2, 3
16	145	A14-016	SX21203153	City of Livingston	Wastewater System Improvements Project	WWTP Expansion	1,419,000	419,000		20,000,000	31,544	41,900	2,868,425	40,000	6,731,079	1, 3
17	145	A14-017	SX21067054	Lexington-Fayette Urban Co. Government	West Hickman Main Trunk B	SSO Elimination	9,487,363	5,166,385		20,000,000	48,306		2,868,425	64,811	6,795,890	3, 4

Rank	Score	CWSRF#	WRIS#	Apply Entity	Project Title	Project Description	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Cumulative Invited	MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness	Green Amount	Cumulative Green Amount	Green Category
18	142	A14-018	SX21135018	Sanitation District #1 of Lewis County	LCSD #1 Sewer Plant Upgrade	WWTP Expansion & Sanitary Sewer Extension	6,350,000	1,000,000		20,000,000	27,181	100,000	2,968,425	41,050	6,836,940	1, 2, 3
19	140	A14-019	SX21059031	Regional Water Resource Agency	Sunrise Drive Sewer Extension	Sanitary Sewer Extension	1,655,565	1,655,565		20,000,000	44,763		2,968,425	0	6,836,940	
20	135	A14-020	SX21067048	Lexington-Fayette Urban Co. Government	West Hickman WWTP Wet Weather Storage Tanks, Phase 1	Wet Weather Storage Tank	70,374,340	42,953,060		20,000,000	48,306		2,968,425	137,106	6,974,046	4
21	123	A14-021	SX21167012	Mercer County Sanitation District	City of Burgin Sanitary Sewer Extension	New Collection System	9,160,000	8,420,000		20,000,000	47,690		2,968,425	0	6,974,046	
22	120	A14-022	SX21059014	Regional Water Resource Agency	Masonville Sewer Extension	Sanitary Sewer Extension	1,538,750	1,538,750		20,000,000	44,763		2,968,425	1,230,000	8,204,046	3
23	118	A14-023	SX21073029	Farmdale Sanitation District	Phase I Collection System & 0.75 MGD WWTP	New WWTP and Collection System	9,500,000	8,077,000		20,000,000	47,062		2,968,425	1,600,000	9,804,046	2, 3
24	115	A14-024	SX21137001	Lincoln Co. Sanitation District	Phase I Sewer Project (Junction City to Moreland Area)	New Sanitary Sewer System	4,433,000	2,000,000		20,000,000	33,398	200,000	3,168,425	0	9,804,046	3
25	115	A14-025	SX21067053	Lexington-Fayette Urban Co. Government	West Hickman Subbasin WH-7 WWS Tank	SSO Elimination	19,087,695	19,087,695		20,000,000	48,306		3,168,425	65,639	9,869,685	4
26	115	A14-026	SX21059045	Regional Water Resource Agency	Hayden Road and Pleasant Valley Rd. Area Subdivisions	Sanitary Sewer Extension	1,425,000	1,425,000		20,000,000	44,763		3,168,425	1,100,000	10,969,685	4
27	110	A14-027	SX21235004	City of Williamsburg	Sanitary Sewer Rehabilitation & I&I Removal Project	Sanitary Sewer Rehabilitation	1,179,835	1,179,835		20,000,000	26,868	117,984	3,286,409	400,000	11,369,685	3
28	105	A14-028	SX21235005	City of Williamsburg	Ball Park Pump Station/Force Main Phase II	Sanitary Sewer Rehabilitation	1,599,411	1,099,411		20,000,000	26,868	109,941	3,396,350	0	11,369,685	
29	105	A14-029	SX21059046	Regional Water Resource Agency	Airport/Bittel Road Area Subdivisions	Sanitary Sewer Extension	572,500	572,500		20,000,000	44,763		3,396,350	425,000	11,794,685	4
30	104	A14-030	SX21019062	Boyd County Sanitation District #2	System-Wide Inflow and Infiltration Abatement Project	Sanitary Sewer Rehabilitation	2,173,000	2,173,000		20,000,000	38,848		3,396,350	84,500	11,879,185	3
31	100	A14-031	SX21225024	City of Morganfield	Morganfield Combined Sewer Separation Project Phase II	CSO Elimination	2,214,200	2,214,200		20,000,000	37,201		3,396,350	0	11,879,185	
32	100	A14-032	SX21239010	City of Versailles	Versailles Wastewater Treatment Plant Expansion	WWTP Expansion	11,814,400	11,764,400		20,000,000	43,086		3,396,350	1,200,000	13,079,185	4
33	100	A14-033	SX21203316	City of Brodhead	City of Brodhead Sewer Rehabilitation	Sanitary Sewer Rehabilitation	1,775,000	1,275,000		20,000,000	20,854	637,500	4,033,850	1,500,050	14,579,235	1, 3
34	100	A14-034	SX21235117	City Utilities Commmission of Corbin	Corbin Wastewater Treatment Plant Upgrade Improvements	WWTP Upgrade	9,184,115	8,684,115		20,000,000	29,636	868,412	4,902,261	0	14,579,235	4
35	100	A14-035	SX21059025	Regional Water Resource Agency	Locust Hills Sewer Extension	Sanitary Sewer Extension	619,070	406,070		20,000,000	44,763		4,902,261	470,835	15,050,070	3
36	95	A14-036	SX21073038	City of Frankfort	West Frankfort Pump Station	SSO Elimination	3,138,500	3,138,500		20,000,000	39,524		4,902,261	0	15,050,070	
37	95	A14-037	SX21059026	Regional Water Resource Agency	Woodlands South Sewer Extension	Sanitary Sewer Extension	406,550	406,550		20,000,000	44,763		4,902,261	323,250	15,373,320	4
38	90	A14-038	SX21027013	City of Hardinsburg	Hardinsburg Sewer System Rehabilitation Phase 2	Sanitary Sewer Rehabilitation	827,240	827,240		20,000,000	29,423	82,724	4,984,985	400,000	15,773,320	3

Rank	Score	CWSRF#	WRIS#	Apply Entity	Project Title	Project Description	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Cumulative Invited	MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness	Green Amount	Cumulative Green Amount	Green Category
39	90	A14-039	SX21235006	City Utilities Commission of Corbin	Tattersall Subdivision Sanitary Sewer Extension	Sanitary Sewer Extension	4,732,000	4,732,000		20,000,000	29,636	473,200	5,458,185	0	15,773,320	
40	85	A14-040	SX21189003	City of Booneville	Booneville Highway 11 Sewer Extensions	Sanitary Sewer Extension	2,239,900	2,239,900		20,000,000	24,688	223,990	5,682,175	6,000	15,779,320	3
41	85	A14-041	SX21089073	City of Wurtland	Phase 2 Wurtland Greenup Lloyd Regional Sewer Project		533,840	233,840		20,000,000	33,036	23,384	5,705,559	0	15,779,320	
42	75	A14-042	SX21129005	City of Beattyville	Beattyville Highway 11 South Sewer Line Extension	Sanitary Sewer Extension	2,000,000	1,000,000		20,000,000	15,066	500,000	6,205,559	0	15,779,320	
43	75	A14-043	SX21151014	City of Berea	Sugarville/Terrill Branch Interceptor	Sanitary Sewer Extension	1,271,140	439,640		20,000,000	39,090		6,205,559	0	15,779,320	3
44	75	A14-044	SX21059047	City of Owensboro	Sherm Ditch Phase IV	Sanitary Sewer Rehabilitation	3,975,000	3,975,000		20,000,000	37,289		6,205,559	3,257,140	19,036,460	4
45	70	A14-045	SX2112133	Barbourville Utility Commission	Barbourville Sewer Rehab	Sanitary Sewer Rehabilitation	1,000,000	1,000,000		20,000,000	22,582	100,000	6,305,559	100,000	19,136,460	3
46	70	A14-046	SX21183014	City of Hartford	Hartford Sewer Rehabilitation Project Phase II	Sanitary Sewer Rehabilitation	2,165,000	2,165,000		20,000,000	31,946	216,500	6,522,059	2,000,000	21,136,460	3
47	70	A14-047	SX21073062	City of Frankfort	WWTP Electrical Upgrade, Emergency Generator	Equipment	1,320,000	1,320,000		20,000,000	39,524		6,522,059	0	21,136,460	
48	67	A14-048	SX21147020	McCreary County Water District	Sewer System Extensions Revelo to Stearns Phase 1	Sanitary Sewer Extension	930,000	930,000		20,000,000	24,292	93,000	6,615,059	0	21,136,460	
49	65	A14-049	SX21137016	City of Crab Orchard	Crab Orchard Sewer Line Rehab-Phase I	Sanitary Sewer Rehabilitation	727,000	727,000		20,000,000	19,850	363,500	6,978,559	507,500	21,643,960	1, 3
50	65	A14-050	SX21183015	City of Fordsville	Fordsville Wastewater System Improvement/Rehab Project	WWTP Upgrade	753,450	753,450		20,000,000	21,354	75,345	7,053,904	0	21,643,960	
51	65	A14-051	SX21195004	Mountain Water District	MWD, Sewer Lift Station Upgrades	Sanitary Sewer Rehabilitation	400,000	400,000		20,000,000	33,148	40,000	7,093,904	0	21,643,960	
52	64	A14-052	SX21019013	Boyd County Sanitation District #4	Phase 1 Rt. 5 Area Sewers	Sanitary Sewer Extension	1,203,000	1,203,000		20,000,000	38,848		7,093,904	1,171	21,645,131	3
53	60	A14-053	SX21225012	City of Sturgis	Sturgis Wastewater Treatment Plant Upgrade	WWTP Upgrade	2,710,000	2,710,000		20,000,000	32,263	271,000	7,364,904	0	21,645,131	
54	60	A14-054	SX21089085	City of Wurtland	Phase 2 of System Rehab	Sanitary Sewer Rehabilitation	500,000	500,000		20,000,000	33,036	50,000	7,414,904	0	21,645,131	3
55	60	A14-055	SX21195699	Mountain Water District	Douglas WWTP Expansion	WWTP Expansion	2,800,000	300,000		20,000,000	33,148	30,000	7,444,904	0	21,645,131	
56	60	A14-056	SX21059033	Regional Water Resource Agency	Southwest Master Pump Station & Force Main Project	Sanitary Sewer Extension	4,944,750	4,944,750		20,000,000	44,763		7,444,904	0	21,645,131	
57	58	A14-057	SX21025007	City of Jackson	Wal-Mart Area Sewer Project	Sanitary Sewer Extension	510,000	230,000		20,000,000	23,421	23,000	7,467,904	0	21,645,131	
58	57	A14-058	SX21225023	City of Sturgis	Individual Pump Stations for Unsewered Residents of Sturgis	Sanitary Sewer Extension	115,000	115,000		20,000,000	32,263	11,500	7,479,404	0	21,645,131	
59	55	A14-059	SX21203192	City of Mount Vernon	Gravity Force Main and Lift Station Hwy 25 S from Mt. Vernon to Burr Area	Sanitary Sewer Extension	5,385,000	5,385,000		20,000,000	21,181	538,500	8,017,904	0	21,645,131	

Rank	Score	CWSRF#	WRIS#	Apply Entity	Project Title	Project Description	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Cumulative Invited	MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness	Green Amount	Cumulative Green Amount	Green Category
60	55	A14-060	SX21203190	City of Mount Vernon	City of Mt. Vernon Wastewater Extension Along Main Street	Sanitary Sewer Rehabilitation	1,025,000	1,025,000		20,000,000	21,181	102,500	8,120,404	125,000	21,770,131	1, 3
61	55	A14-061	SX21239006	City of Versailles	Southeast Sewer System Expansion	Sanitary Sewer Extension	3,996,000	3,996,000		20,000,000	43,086		8,120,404	0	21,770,131	
62	55	A14-062	SX21009017	Glasgow Water & Sewer Commission	Glasgow Old WWTP Retention and Southside Interceptor	Sanitary Sewer Rehabilitation	5,500,000	3,000,000		20,000,000	30,391	300,000	8,420,404	0	21,770,131	
63	55	A14-063	SX21151045	City of Berea	Berea Gravity Sewer Rehabilitation	Sanitary Sewer Rehabilitation	1,600,000	1,600,000		20,000,000	39,090		8,420,404	1,200,000	22,970,131	3
64	52	A14-064	SX21089096	City of South Shore	Upgrade Forest Heights Collection Lines	Sanitary Sewer Rehabilitation	648,500	648,500		20,000,000	22,727	64,850	8,485,254	0	22,970,131	
65	52	A14-065	SX21225021	City of Sturgis	Grangertown Lift Station Rehab & Taylor Mine Rd. Lift Station Replacement	Sanitary Sewer Rehabilitation	415,000	252,000		20,000,000	32,263	25,200	8,510,454	0	22,970,131	
66	50	A14-066	SX21189600	City of Booneville	Booneville Hwy 1411 Sewer Extension	Sanitary Sewer Extension	602,600	602,600		20,000,000	24,688	60,260	8,570,714	0	22,970,131	
67	50	A14-067	SX21239003	City of Midway	Midway Brand Street Sewer Rehab Project	Sanitary Sewer Rehabilitation	517,000	517,000		20,000,000	55,903		8,570,714	380,000	23,350,131	3
68	50	A14-068	SX21121139	Barbourville Utility Commission	City of Barbourville Sewer Plant Expansion Phase 1	WWTP Expansion	4,600,000	4,600,000		20,000,000	22,582	460,000	9,030,714	0	23,350,131	
69	50	A14-069	SX21151011	City of Berea	US 25 North Sewer Extension Project	Sanitary Sewer Extension	1,675,000	1,675,000		20,000,000	39,090		9,030,714	0	23,350,131	
70	50	A14-070	SX21151034	City of Berea	Berea Water Street Stormwater Drainage Imrpovement	Stormwater	255,985	255,985		20,000,000	39,090		9,030,714	0	23,350,131	
71	49	A14-071	SX21239009	City of Versailles	Sanitary Sewer Rehabilitation Phase I Versailles	Sanitary Sewer Rehabilitation	1,677,000	1,627,000		20,000,000	43,086		9,030,714	50,000	23,400,131	3
72	47	A14-072	SX21089095	City of South Shore	Upgrade of Lift Stations 4, 5, and 6	Sanitary Sewer Rehabilitation	707,500	707,500		20,000,000	22,727	70,750	9,101,464	0	23,400,131	3
73	47	A14-073	SX21191102	City of Falmouth	Oak Haven Pump Station and Force Main	Sanitary Sewer Extension	646,034	646,034		20,000,000	36,842		9,101,464	0	23,400,131	
74	42	A14-074	SX21185032	Oldham County Environmental Authority	Kentucky State Reformatory Rehab Phase I	WWTP Rehabilitation	2,718,080	2,718,080		20,000,000	82,578		9,101,464	0	23,400,131	
75	40	A14-075	SX21081305	Grant County Sanitary Sewer District	GCSSD Wastewater Treatment Plant Improvements	WWTP Upgrade	913,300	913,300		20,000,000	43,755		9,101,464	0	23,400,131	3
76	40	A14-076	SX21019064	City of Catlettsburg	Grit Chamber Rehab/Replacement	WWTP Rehabilitation	300,000	300,000		20,000,000	25,167	30,000	9,131,464	0	23,400,131	
77	40	A14-077	SX21019061	City of Catlettsburg	Rehab Clarifiers at WWTP	WWTP Rehabilitation	462,000	462,000		20,000,000	25,167	46,200	9,177,664	0	23,400,131	
78	38	A14-078	SX21183016	City of Centertown	Centertown Lift Station Rebuild Project	Sanitary Sewer Rehabilitation	150,000	150,000		20,000,000	35,000		9,177,664	45,400	23,445,531	3
79	36	A14-079	SX21149023	City of Sacramento	Sacramento Gravity Sewer Project Phase II	Sanitary Sewer Rehabilitation	940,000	940,000		20,000,000	28,750	94,000	9,271,664	84,600	23,530,131	3

Rank	Score	CWSRF#	WRIS#	Apply Entity	Project Title	Project Description	Total Project Cost	Requested Loan Amount	Invited Loan Amount	Cumulative Invited	MHI	Principal Forgiveness Amount	Cumulative Principal Forgiveness	Green Amount	Cumulative Green Amount	Green Category
80	35	A14-080	WX21225006	City of Morganfield	Camp Breckenridge Sewer Rehab	Sanitary Sewer Rehabilitation	3,552,800	3,552,800		20,000,000	37,201		9,271,664	3,000,000	26,530,131	3
81	35	A14-081	SX21089026	Greenup County Environmental Commission	New Bar Screen for WWTP	WWTP Rehabilitation	305,000	305,000		20,000,000	41,902		9,271,664	0	26,530,131	
82	35	A14-082	SX21089078	Greenup County Environmental Commission	Lagoon Aeration Equipment	WWTP Rehabilitation	250,000	250,000		20,000,000	41,902		9,271,664	0	26,530,131	
83	35	A14-083	SX21185057	Oldham County Environmental Authority	Covered Bridge Lift Station Wet Well Improvement	Sanitary Sewer Rehabilitation	150,000	150,000		20,000,000	82,578		9,271,664	100,000	26,630,131	3
84	35	A14-084	SX21185058	Oldham County Environmental Authority	Ohio River WWTP Headworks Rehab & Carbon Replacement	WWTP Rehabilitation	150,000	150,000		20,000,000	82,578		9,271,664	0	26,630,131	
85	30	A14-085	SX21013148	City of Middlesboro	Noetown Sewer Rehab/Binghamtown PS Rehab	Sanitary Sewer Rehabilitation	2,550,000	1,200,000		20,000,000	20,391	600,000	9,871,664	360,000	26,990,131	3
86	30	A14-086	SX21163006	City of Brandenburg	Brandenburg Main Lift Station Replacement/Upgrade	Sanitary Sewer Rehabilitation	368,000	368,000		20,000,000	32,181	36,800	9,908,464	90,000	27,080,131	3
87	30	A14-087	SX21157030	Marshall County Sanitation District #1	Marshall SD1 Lift Station Repair/Replacement & WWTP Upgrades	WWTP Upgrade and Sanitary Sewer Rehabilitation	550,000	250,000		20,000,000	45,605		9,908,464	0	27,080,131	
88	25	A14-088	SX21239008	City of Versailles	Ultra-Violet Disinfection & Improvements at the WWTP	WWTP Upgrade	2,000,000	2,000,000		20,000,000	43,086		9,908,464	0	27,080,131	
89	25	A14-089	SX21091015	City of Hawesville	Hawesville Sewer Plant Rebuild Project	WWTP Rehabilitation	5,000,000	5,000,000		20,000,000	43,750		9,908,464	0	27,080,131	
90	25	A14-090	SX21185051	Oldham County Environmental Authority	OCEA Lift Station Rehab, Renovation, and Replacement	Sanitary Sewer Rehabilitation	2,005,000	2,005,000		20,000,000	82,578		9,908,464	600,000	27,680,131	3
91	20	A14-091	SX21019077	Boyd County Sanitation District #4	Rehab Ray Drive Sewer Line	Sanitary Sewer Rehabilitation	312,000	312,000		20,000,000	38,848		9,908,464	0	27,680,131	
92	20	A14-092	SX21239005	City of Versailles	Emergency Backup Power to Serve the WWTP	Equipment	1,000,000	1,000,000		20,000,000	43,086		9,908,464	0	27,680,131	

2014 CLEAN WATER SRF RANKED PROJECT PRIORITY LIST

INTEREST RATE STRUCTURE

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

PRINCIPAL FORGIVENESS PARAMETERS

The FFY2013 Capitalization Grant requires additional subsidization (principal forgiveness) of at least 20%, not to exceed 30%.
Minimum Amount that must be provided as Additional Subsidization is $955,664 (5.46% of the FFY 2013 CWSRF Capitalization Grant of $17,510,345.)
Maximum Amount that may be provided as Additional Subsidization $1,433,496 (8.19% of the FFY 2013 CWSRF Capitalization Grant of $17,510,345.)

Principal Forgiveness of 50% will be offered to those utilities whose entire service area has an MHI at or below $21,124 (50% of the state MHI of $42,248).
Principal Forgiveness of 10% will be offered to those utilities whose entire service area has an MHI between $21,124 and $33,798 (80% of the state MHI of $42,248).

MEDIAN HOUSEHOLD INCOME

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

GREEN PROJECT RESERVE

An amount equal to 10% of the federal capitalization grant will be used for green projects to the extent that KIA receives sufficient applications.
The green project reserve is estimated to be $1,751,034.

Eligible Green Categories are:

1. Green Infrastructure
2. Water Efficiency
3. Energy Efficiency
4. Environmentally Innovative

APPENDIX B

CALL FOR PROJECTS LETTERS

KENTUCKY INFRASTRUCTURE AUTHORITY

Steven L. Beshear
Governor

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

John E. Covington, III
Executive Director

October 1, 2012

To Whom It May Concern:

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

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

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

You Will Need a Project Profile for Your Project

To submit a project for inclusion on the 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.

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 has been refined and now includes the information necessary to evaluate potential CWSRF projects. The ADD staff may have already contacted you to start providing additional information for your existing project profiles to be updated. To give the ADD staff time to get your profile approved by the AWMC, you must get the profile information to your AWMC before their next meeting.

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

Current Interest Rates

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

Sustainable Infrastructure Initiative

Available on KIA's and DOW's websites is a brochure highlighting the Sustainable Infrastructure (SI) initiative launched by EPA and the Kentucky Division of Water in 2008. Projects that incorporate some of the practices and recommendations described in the SI brochure might receive additional points, resulting in a higher ranking on the 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) of the Water Infrastructure Branch or call (502) 564-3410. For more information on loan requirements, terms or eligibility contact Sandy Williams (sandy.williams@ky.gov), Jeff Abshire (jeff.abshire@ky.gov), John LeFevre (john.lefevre@ky.gov) or Tammy McCall (tammy.mccall@ky.gov) of KIA or call (502) 573-0260.

Sincerely,

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

Sandra L. Gruzesky, Director
Division of Water

APPENDIX 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

2014 Funding Cycle

ENERGY AND ENVIRONMENTCABINET
Department for Environmental Protection
Division of Water

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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 2014 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.
> If the project is needed for Combined Sewer Overflow (CSO) Correction it receives 40 points.

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. If the project is needed for correcting SSO resulting from I/I, it will receive 20 points.

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 moderate infiltration and inflow (i.e., no associated SSO) go under this criterion. If the project is needed for Replacement or Rehabilitation of Aging Infrastructure it will receive 10 points.

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.
If the project is needed for a New Treatment Plant it will receive 10 points.

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.
If the project is needed for New Collector Sewers and Appurtenances it will receive 10 points.

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.
If the project is needed for Decentralized Wastewater Treatment Systems it will receive 10 points.

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.
If the project is needed for Upgrade to Advanced Treatment it will receive 20 points.

Criterion #8: Rehabilitation/Upgrade/Expansion of Existing Treatment Plant- Rehabilitation, upgrades, improvements, or expansion of existing treatment plant.
If the project is needed for Upgrade Existing Plant it will receive 20 points.

Criterion #9: New Interceptors and Appurtenances- Install new major sewer lines receiving wastewater flowers from collector sewers. The interceptor sewer carries wastewater directly to the treatment plant or another interceptor.
If the project is needed for New Interceptors and Appurtenances it will receive 10 points.

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.
If the project is needed for Storm Water Control it will receive 10 points.

Criterion #11: Nonpoint Source (NPS) Pollution Control- NPS project may include, but not limited to, stream restoration, Best Management Practices, and land purchases.
If the project is needed for Nonpoint Source (NPS) Pollution Control it will receive 5 points.

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.
If the project is needed for Recycled Water Distribution it will receive 10 points.

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).
If the project is needed for Planning it will receive 10 points.

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.
If the project is needed for Other, it will receive points based on a sliding scale of 5 to 10 points.

B. Regionalization/Decentralization

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. The project will receive 20 points if it results in a reduced number of KPDES discharges.

2. Criterion #2: Will this project provide an on-site and/or clustered decentralized wastewater treatment system with sub-surface discharge?

This question addresses decentralized treatment systems which are potentially affordable, viable, long-term alternatives to centralized wastewater treatment, particularly in small-town, rural, and suburban areas. These include onsite, mound, and/or cluster treatment systems that treat and disperse relatively small volumes of wastewater from individual or small numbers of residential and commercial buildings. These systems may include, but are not limited to, septic systems with drainfields, mounds, cluster systems 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. The project will receive 10 points if it eliminates or prevents failing on-site septic tanks or straight pipes through decentralized wastewater treatment systems.

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? A project receives 50 points if it is necessary for achieving full or partial compliance with a court order, or a judicial or administrative consent decree.

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 and will be in compliance at project completion. A project will receive 25 points if it is necessary for achieving voluntary compliance where there is a history of multiple violations.

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. A project will receive 10 points if it answers "Yes" to this question.

Criterion #2: Will the project implement any part of an approved Watershed Plan?
A project will receive 10 points if it answers "Yes." Contact the DOW Watershed Management Branch at (502) 564-3410 for more information on accepted Watershed Plans.

Criterion #3: 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 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. The project will receive 20 points for each pollutant water-body combination it will address.

Criterion #4: Does 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. The project will receive 15 points if it eliminates existing or potential sources of groundwater contamination within a high sensitivity groundwater (rating 4 or 5) area. The project will receive 10 points if it eliminates existing or potential sources of groundwater contamination within a moderate sensitivity groundwater (rating 2.5 or 3) area. Groundwater data is available for download at http://kygeonet.ky.gov/metadataexplorer/.

Criterion #5: Is the project located within 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 inventories known and potential sources of contamination within those areas. The project will receive ten (10) points for each SWAPP Zone 1or WHPA Zone 3, seven (7) points for each SWAPP or WHPA Zone 2, and three (3) points for each SWAPP Zone 3 or WHPA Zone 1 in which the project is located. Look up your SWAPP and WHPA areas in the Watershed Viewer at http://eppcmaps.ky.gov/website/watershed/viewer.htm.

Criterion #6: 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. List each watershed on the Questionnaire Form that is located in the project area and indicate if the watershed is on this list. The project will receive 20 points if a priority watershed is located in the project area. ***Please refer to the attached list of Kentucky Division of Water State Priority Watersheds.***

Criterion #7: Will the project have a positive effect on 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). The project will receive 10 points if the applicant can demonstrate that the project will benefit one or more of these waters. http://water.ky.gov/waterquality/Pages/SpecialUseWaters.aspx

Criterion #8: Will the project have a positive impact on drinking water sources within a 5-mile radius of its location?
This question considers the importance of protecting drinking water supplies from potential contaminant sources. The project will receive 10 points if it eliminates existing or potential sources of drinking water contamination within a 5-mile radius of the project location.

Criterion #9: 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. The project will receive 15 points if it eliminates or prevents failing on-site septic tanks or straight pipes.

Criterion #10: Will the project impact water quality of the affected waterbodies that will receive discharge? *(This question is pertinent to treatment projects only.)*
This question provides a methodical approach to determining if the water quality of receiving waterbody/waterbodies will be impacted by a project through reduction, maintenance, or increased pollutant loading. The project will receive 10 points if it improves water quality by reducing pollutant loadings; 5 points if it sustains water quality by maintaining current loading; and 0 points if it is Not Applicable or increases loadings or is a new discharge into high quality waters.

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. The project will receive 15 points 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 (2007-2011). Borrowers with a MHI between 80 percent of the State's MHI and the State's MHI as determined by the ACS 5 Year Estimate (2007-2011) will be given 10 points.

F. Asset Management

Criterion #1: System has a Capital Improvement Plan or similar planning document.
A project receives 20 points 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 submitted to Anshu Singh via email Anshu.singh@ky.gov or mailed to Division of Water, 200 Fair Oaks Lane, Frankfort, KY 40601.

Criterion #2: System has developed appropriate rate structures to build, operate, and maintain the water works.
A project receives 10 points if the system has developed appropriate rate structures to build, operate, and maintain the water works. 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, Frankfort, KY 40601.

Criterion #3: System has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.
A project will receive 10 points if the system has specifically allocated funds for rehabilitation and replacement of aging and deteriorating infrastructure. 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, Frankfort, KY 40601.

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 (maximum 10 points per category) on the project priority ranking. ***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 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.*

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).*

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.*
- 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.*
- 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.*

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.

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. All three of the criteria under this category must be met in order to receive the full 30 points. **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, 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	20
3.	Replacement or Rehabilitation of Aging Infrastructure, including correction of moderate infiltration and inflow (i.e., no associated SSO).	10
4.	New Treatment Plant	10
5.	New Collector Sewers and Appurtenances	10
6.	Decentralized Wastewater Treatment Systems	10
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	10
11.	Nonpoint Source (NPS) Pollution Control	5
12.	Recycled Water Distribution	10
13.	Planning	10
14.	Other (specify):	5-10
B. Regionalization/Decentralization		
1.	Will this project provide regionalization and/or consolidation of wastewater treatment systems? Proposed project reduces the number of NPDES discharges by regionalization.	20
2.	Will this project provide an on-site and/or clustered decentralized wastewater treatment system with sub-surface discharge?	10
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 or projected Total Maximum Daily Load (TMDL)?	10
2.	Will the project allow the system to address an approved Watershed Management Plan?	10
3.	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

4.	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
5.	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
6.	Will the project make reasonable progress towards eliminating identified pollutant sources of water quality impairments within an identified DOW Priority Watershed?	20 points
7.	Will the project have a positive effect on Special Use Waters?	10 points
8.	Will the project have a positive impact on drinking water sources within a 5-mile radius of its location?	10
9.	Will the project eliminate failing on-site septic tanks or straight pipes?	15
10.	Will the project impact water quality of the affected waterbodies that will receive discharge? *(This question is pertinent to Treatment projects only)*	
	a. Improvement (Reduces pollutant loading to affected waterbody)	10
	b. Maintenance (Sustains current water quality)	5
	c. Not Applicable (New WWTP discharging into high quality water)	0
E. Financial Need		
1.	Borrowers with a MHI Less than $32,958	15
2.	Borrowers with a MHI Between $32,959 and $41,197	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* • I/I correction where excessive groundwater infiltration is contaminating the influent requiring otherwise unnecessary treatment processes* • 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*	5 pts. each/10 pts. maximum

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

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

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	Expected Completion 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 2012
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	Expected Completion Dec 2012
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

2012 Clean Water and Drinking Water State Revolving Fund 10% Green Project Reserve: Guidance for Determining Project Eligibility

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

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

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

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

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

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

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

PART 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.[2]

[2] 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[3], 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

[3] 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).[4]

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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[4] 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[5]. Retrofit projects should compare energy used by the existing system or unit process[6] 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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[5] 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.

[6] 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/.