



STATE OF OKLAHOMA
WATER RESOURCES BOARD

www.owrb.ok.gov

MEMORANDUM

DATE: May 14, 2010

TO: CWSRF Loan Applicants
Oklahoma Municipal League
Oklahoma Department of Commerce
Oklahoma Department of Environmental Quality
U.S. Environmental Protection Agency (EPA) Region 6
Sub-state Planning Districts
Crosscutters
Other Interested Parties

FROM:  Joe Freeman, Chief, Financial Assistance Division

SUBJECT: Meeting Announcement on *Draft FY 2011 Intended Use Plan/Project Priority List* for the Clean Water State Revolving Fund (CWSRF)

The Oklahoma Water Resources Board (OWRB) will hold a public meeting to receive comments on the *Draft FY 2011-15 CWSRF Project Priority List* (attached) and *Draft FY 2011 Intended Use (Strategic) Plan* on Thursday, June 17, 2010, at 10:00a.m. at 3800 North Classen Blvd. Oklahoma City.

The CWSRF was initiated by the 1987 Federal Clean Water Act amendments to provide a renewable funding source to assist states in meeting infrastructure and pollution runoff control needs to protect human health and water resources. Eligible entities may receive below market interest rate financing for planning, engineering, and construction activities associated with wastewater collection and treatment works, stormwater, abandoned site remediation, water/energy efficiency, green infrastructure, innovative green projects and nonpoint source pollution control activities.

As a result of this Intended Use Plan, the OWRB intends to apply for FFY 2011 Federal capitalization grant and potentially issue new revenue bonds. It is anticipated that these funds, combined with current program assets, will be available to provide over \$150.9 million in requested loans during FY 2011. To date, 25 proposed projects have been placed on the FY 2011 Fundable portion of the Project Priority List. Additional projects may be added and/or modified throughout the year, as funds are available.

A copy of the draft plan is available at the OWRB's Oklahoma City office and online at <http://www.owrb.ok.gov>. To submit a proposed project for funding, or for further information contact: Jennifer Wasinger, Assistant Chief, Financial Assistance Division, Oklahoma Water Resources Board at (405)530-8800.

CLEAN WATER STATE REVOLVING FUND

DRAFT

FY 2011 Intended Use Plan



**Financial Assistance Division
Oklahoma Water Resources Board**

Mission

The mission of the Oklahoma Water Resources Board is to effectively and efficiently manage, protect and improve the water resources of the state and plan for Oklahoma's long-range water needs in a responsive, innovative, and professional manner.



Contents

Overview of the Oklahoma Comprehensive Water Plan	4
Community Impact Measure Project	5
Executive Summary	6
<i>American Recovery and Reinvestment Act</i>	6
Proposed FY 2011 Projects	7
Integrated Priority Ranking System for Wastewater and Nonpoint Source Projects	8
Additional Subsidization	9
Green Project Reserve (GPR)	9
<i>GPR Eligibility</i>	10
<i>GPR Review</i>	10
Reporting Requirements	10
Davis-Bacon Requirements	10
Oklahoma’s Innovative Financing Opportunities	11
Long-Term and Short-Term Goals	12
<i>Long-Term Goals</i>	12
<i>Short-Term Goals</i>	12
Clean Water SRF Activities to be Supported	13
<i>Allocation of Funds to Eligible Entities</i>	13
<i>CWSRF Financing Plan, Loan Type & Terms</i>	14
<i>CWSRF Financing - How it Works</i>	14
<i>30-Year CWSRF Financing</i>	14
<i>Changes in Environmental Review Requirements</i>	15
<i>Administrative Cost of the Clean Water SRF</i>	15
Capitalization Grants, Assurances and Specific Proposals	15
Criteria and Method of Distribution of Funds	16
<i>Types of Borrowers Served and Financial Assistance Needed</i>	16
<i>Sources and Commitments of Unrestricted Funds</i>	16
<i>Reallocation of Bond Proceeds</i>	17
<i>Allocation of Funds Among Projects</i>	17
<i>Federal Capitalization Grant Payment Schedule</i>	17
<i>Fund Disbursement Schedule</i>	18
Transfer Authority between Clean Water and Drinking Water SRF’s	18
Cross-Collateralization of the CWSRF and DWSRF Revenue Bond Structure	19
Investment Authority Between Clean Water and Drinking Water SRF	20
Public Review & Future IUP Amendments	20
Future of Oklahoma’s CWSRF Financing	21
Draft Fiscal Year 2011 Oklahoma Clean Water State Revolving Fund Project Priority List	22
Overview of American Recovery and Reinvestment Act	23
Appendix A: FY2011-2014 Clean Water SRF Project Priority List	Appx. A-1
Appendix B: Charts 1-6	
1. <i>FY 2011 Intended Use Projects & Administrative Costs</i>	Appx. B-1
2. <i>Projected Environmental Benefits of Proposed FY 2011 Projects</i>	Appx. B-2
3. <i>Binding Commitment Requirements with Respect to Federal Payments by Fiscal Qtr</i>	Appx. B-3
4. <i>Federal Cap. Grant Payment Schedule by State & Federal Fiscal Qtr</i>	Appx. B-4
5. <i>FY 2011 Unrestricted Fund Sources by State Fiscal Qtr</i>	Appx. B-5
6. <i>Actual and Projected CWSRF Disbursement Schedule by State Fiscal Qtr</i>	Appx. B-6
Appendix C: Cross-Collateralization Flow Chart	Appx. C-1
Appendix D: Green Infrastructure Reserve Checklist	Appx. D-1
Appendix E: EPA FY2011 Procedures, Attachment 2 Part A	Appx. E-1
Appendix F: Public Meeting Notice	Appx. F-1
Appendix G: OWRB SAAP Program	Appx. G-1



"When the well's dry, we know the worth of water."

Benjamin Franklin

J.D. STRONG
INTERIM EXECUTIVE DIRECTOR



BRAD HENRY
GOVERNOR

STATE OF OKLAHOMA
WATER RESOURCES BOARD

Serving as Oklahoma's water agency for more than 50 years, the Oklahoma Water Resources Board (OWRB) has been instrumental in leading the state toward sensible and protective water quality standards, comprehensive infrastructure financing, and improved water availability management. The OWRB and its partners are in the final stages of the update of Oklahoma's Comprehensive Water Plan, which will result in accurate and timely water-related data, intensive studies of available water and future needs, and a defensible permitting process that recognizes both the inevitability of drought and the need for water conservation.

From a broader viewpoint, the OWRB continues to expand the nature and magnitude of its water management projects while embracing new and innovative technologies. At the same time, the agency strives to identify common objectives of our state, federal and local partners, thus providing Oklahoma citizens with maximum results at minimum cost. Our Financial Assistance Division plays an important role in this vital water planning effort.

With enthusiasm and confidence, we are striving to create a secure water future for Oklahoma.

Sincerely,

J.D. Strong
Interim Executive Director



Financial Assistance Staff



ABOVE:

Back Row L to R: Tony Mensah, Yohanes Sugeng, Byju Sudhakaran, Matt Cogburn, Ben Balasko, Shelly Bacon, Tamara Griffin

Middle Row L to R: Barry Fogerty, Kathy Koon, Sonia Mock, Anita Ray, Angela Thompson, Simeon Stoitzev, Robert Lindenberger

Front Row L to R: Joe Freeman (Division Chief), Daniel Hughes, Kate Burum, Mike Melton, Laura Oak, Vivek Rajaraman, Jennifer Wasinger (Assistant Division Chief),



Groundbreaking for Piedmont's Sanitary Sewer Improvements funded by a ARRA loan of \$2.5 million.

J.D. STRONG
INTERIM EXECUTIVE DIRECTOR



BRAD HENRY
GOVERNOR

STATE OF OKLAHOMA
WATER RESOURCES BOARD

The Financial Assistance Division of the Oklahoma Water Resources Board is dedicated to assisting communities and rural water districts in maintaining adequate water and wastewater facilities. Since the approval of the first grant in 1983, we have provided approximately 60% of all the financing for Oklahoma's water and wastewater infrastructure needs. To date we have funded over \$2.1 billion dollars with our loan and grant programs, which in turn leads to an interest savings of over \$720 million for our communities and rural water districts. With dual goals of maintaining sound financing and environmental protection, the Financial Assistance Division is proud of our natural AAA ratings on all of our bond issues and our use of innovative methods to meet Oklahoma's infrastructure needs.

The American Recovery and Reinvestment Act of 2009 brought with it additional funding to both the Clean Water and Drinking Water State Revolving Fund Programs. The over \$62 million in funds were leveraged with \$183.5 million in below market rate loan funds for a total investment of \$242.9 million in Oklahoma water and wastewater infrastructure. These funds assisted Oklahoma communities large and small in addressing their critical infrastructure needs.

As we move into FY 2011, we will continue to fund traditional water and wastewater projects but again have the opportunity to fund green infrastructure, water/energy efficiency, and innovative green projects. We look forward to continuing our role in helping Oklahoma build its future!

Sincerely,

Joe Freeman, Chief
Financial Assistance Division



Overview of the Oklahoma Comprehensive Water Plan

Oklahoma faces a myriad of water challenges, not the least of which are unavoidable drought cycles. If Oklahoma is to reach its potential for economic growth while securing optimum quality of life for its people, Oklahoma citizens must assume a direct role in shaping policy that guides the management, development, and protection of water resources.

As part of its broad responsibility to enhance the quality of life and general welfare, the state has the specific

obligation to plan for the use of water and natural resources in a manner that will best serve the many needs of the people of Oklahoma. The Oklahoma Comprehensive Water Plan (OCWP), the state's long-range water use and management strategy, was first published in 1980 and updated in 1997. The Oklahoma Legislature, in 2006, appropriated funds to the Oklahoma Water Resources Board for the Plan's second update.

While Oklahoma's current Water Plan, published in 1997, provides an indispensable inventory of the state's water supplies, projects future needs, and offers recommendations to deal with impending water policy questions, state citizens require a more detailed strategy to meet the many new challenges posed by increased usage and competition for available water supplies. With public opinion and legal obligations in mind, policy makers must achieve a balance between economic development on the one hand and recreational and environmental needs on the other.

Water Plan Goals

- Provide safe and dependable water supply for all Oklahomans while improving the economy and protecting the environment.
- Provide information so that water providers, policy-makers, and water users can make informed decisions concerning the use and management of Oklahoma's water resources.

Oklahoma Comprehensive Water Plan Process



The OWRB and its planning partners began the statewide assessment of current and future water supply needs as well as an inventory of both rural and urban water infrastructure. In addition, research has already begun on many important water policy issues, including some that dominated discussion at the local input meetings. Numerous studies will provide decision makers with much of the information required to establish state water policy for the next 50 to 100 years. These studies are being accomplished through partnerships with various local, state, and federal agencies and organizations, as well as consultants.



OCWP

Community Impact Measure Project

Four Oklahoma communities receiving American Recovery and Reinvestment Act (ARRA) funds for water/wastewater projects through the Clean Water State Revolving Fund (CWSRF) participated in a pilot study to measure the specific impacts of infrastructure investments. The initial phase of the study, which was jointly funded through OCWP and U.S. Environmental Protection Agency ARRA monies, focused on the personal and professional opinions of 36 civic leaders, water professionals, and citizens in Ardmore, Grove, Piedmont, and Norman.

Faculty and graduate student researchers from the University of Oklahoma interviewed each of the participants regarding the benefits gained through local water and wastewater infrastructure projects. The interview data were then compiled and evaluated according to the following perceived benefits: economic growth, property value increases, waterborne illness reduction, recreational benefits, energy savings, phosphorus reduction, greenhouse gas emission reduction, quality of life benefits, sustainability, and monetary savings to citizens (from using the SRF program and from not delaying projects).

This close-up look at the effects of water/wastewater investment allowed researchers to determine what mattered most to stakeholders about water and wastewater infrastructure. The result was a report outlining the measures in a way where they could be used by local leaders to assess competing projects and community priorities and carry on informed dialog with citizens about them.

Phase II of the project, which is expected to begin in July of 2010, will be to expand the avenue for working with Oklahoma entities that received assistance through the ARRA as well as entities considering future investments. Information gathered during Phase I will be translated into a computer program, which will then be utilized to help calculate the impacts of enhanced infrastructure investment.



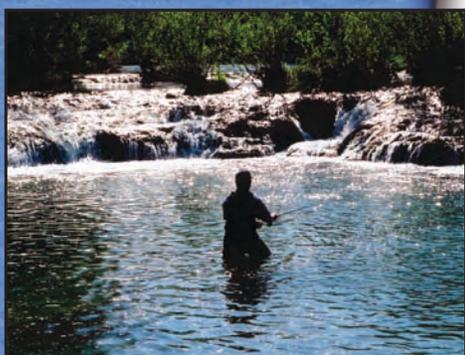
Rehabilitation of a lift station at the Norman Wastewater Treatment Plant to increase maximum pumping capacity. This \$8.5 million project, funded through CWSRF ARRA, included enlargement of the existing flow equalization basin, a pump station, an emergency generator, associated yard piping, and electrical and instrumentation improvements. The new facility will help eliminate five existing pumping stations in northern Norman. During the Community Impact Measure Project, community stakeholders in Norman were asked about the overall benefits gained from these types of infrastructure investments.

Water is crucial to the social, economic, and environmental well-being of any community, yet the considerable impacts of water and wastewater infrastructure investments are often not well understood by citizens and even civic leaders. While it is generally accepted that those investments provide various social, environmental, and economic benefits, the specific impacts have never before been measured.

The final software program will be available on the OWRB website in 2011 and will allow communities to self-quantify the social, economic, and environmental benefits of infrastructure investments. Additionally, Phase II will include an Oklahoma-specific primer and resource guide that will provide direction for communities about developing more sustainable systems.

The end result of the Community Impact Measure Project will be more educated citizens and community leaders when it comes to making water and wastewater infrastructure decisions in Oklahoma.

Executive Summary



The Clean Water State Revolving Fund (CWSRF) loan program was established by the 1987 Clean Water Act amendments to provide a renewable financing source for statewide wastewater infrastructure and polluted runoff control needs while protecting the State's surface and ground waters. Launched by \$14.5 million in State appropriated seed monies and, \$170 million in subsequent state match notes and revenue bonds, the program has capitalized over \$256 million in federal grant funds to commit over \$853 million in low-interest construction and refinancing loans since 1990.

The CWSRF owes its success largely to 1) its "revolving" aspect, as loan repayments and investment earnings are continually recycled to fund new projects; 2) ongoing commitments of federal funds; 3) financing strategy, which provides loans at 40% below market interest rate; and 4) ease of today's loan application and approval process. During Fiscal Year (FY) 2011, the OWRB will continue offering financing at approximately 40% below market rate. Standard 20-year maximum term loans will be available, as well as, the potential for a new 30-year option for disadvantaged communities.

In addition to providing substantial savings to communities across the state, the loans committed through the CWSRF contribute greatly to protecting human health, water quality, and economic viability of Oklahoma's water resources; since these projects are designed to reduce or eliminate polluted wastewater discharges, rehabilitate decaying collection systems, consolidate on-site systems into new collection systems, or recycle treated wastewater.

To further maintain the health of the State's waters, the program may also fund eligible projects to reduce polluted runoff from urban and agricultural land, including, but not limited to, urban stormwater control, agricultural best practices implementation, forest and stream bank erosion control, wetland construction and maintenance, water and wastewater efficiency, green infrastructure, innovative green projects and abandoned industrial site assessment and clean-up.

An estimated \$19.0 million will be available to borrowers for FY 2011 projects. To date, 25 projects have been requested, totaling \$150.9 million. Funding requests for the 5-year period (through year 2015) total \$268.0 million. See Appendix A - FY 2011-2015 Clean Water State Revolving Fund Project Priority List - for a complete listing of projects.

As a condition of a federal agreement with the EPA the OWRB, as administrator of the CWSRF, must submit an annual plan for the use of federal funds awarded and a strategy for managing the program, in accordance with the Clean Water Act (CWA) Section 606(c). The following document is the State of Oklahoma's CWSRF Intended Use Plan (IUP) for funds to be made available during State FY 2011.

American Recovery and Reinvestment Act (ARRA)

Activities Between February 2009 and February 2010
The last 18 months were exciting times for the Oklahoma CWSRF program. The American Recovery and Reinvestment Act provided a substantial



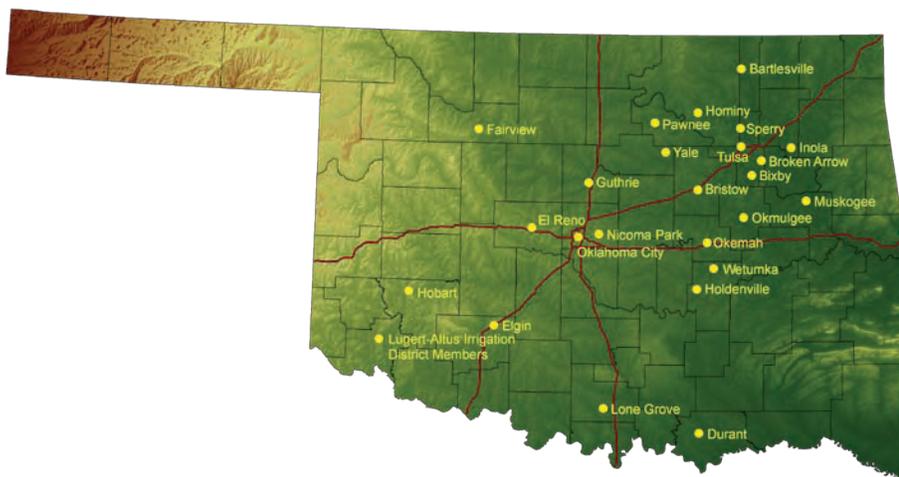
increase in funding for our program. The OWRB submitted the initial application and revised FY 2009 IUP for ARRA funding to EPA on February 24, 2009. The OWRB received the ARRA award on April 22, 2009 with the funds obligated to the first ARRA five projects in April 2009 and the first loan closing on May 15, 2009. Between April 2009 and January 2010, 34 projects went to bid, closed and were under contract. Oklahoma was one of the first three states in the Nation to meet the ARRA congressional deadlines. In total, over \$30 million in ARRA funds were leveraged with over \$70 million in loan funds for a total assistance amount of over \$107 million. The ARRA principal forgiveness combined with the subsidized loan funds is expected to save the borrowers over \$74.5 million. A detailed summary of Oklahoma's CWSRF ARRA Program can be found on page 23.

Proposed FY 2011 Projects

(Clean Water Act Section 212 Wastewater Systems and 319 Non-point Source Pollution Control Activities)

The OWRB has received FY 2011 requests for 25 wastewater construction and non-point source pollution runoff control projects totaling over \$150.9 million. Page 22 and Appendix A provide a listing of these fundable and planning/contingency projects, along with effluent discharge requirements, EPA "needs category", target approval dates, and construction start and end dates; pursuant to CWA Section 606(c)(3). This plan may be amended if the financing strategy changes or additional projects are identified.

Proposed FY 2011 CWSRF Projects



Projects shall conform to a State-approved 208 Water Quality Management Plan or 319 Non-point Source (NPS) Management Plan to be considered for funding. Based on initial environmental reviews no proposed projects are anticipated to require a formal Environmental Impact Statement study.

Appendix B Chart 2 provides projected environmental benefits of proposed projects based on project type, water quality restoration, and water quality protection factors. Appendix B, Chart 3, entitled "Select Binding Commitments with Respect to Federal Payments," identifies projects





CWSRF interest rates are equal to 60% of the Municipal Market Data AAA scale spot rates for each year through maturity plus 55 basis points, calculated 10 days before loan closing. An additional .50% administrative fee is added.



that meet the requirements of the capitalization grant, including federal crosscutting laws and authorities. These projects may receive loan funds from capitalization grant monies, state matching funds, CWSRF bonds, interest and investment earnings, and monies repaid to the fund by previous borrowers, called "2nd round monies." Proposed loans not listed on Appendix B Chart 3, generally do not receive capitalization grant monies, but instead receive 2nd round funds or leveraged funds.

In the event that projects identified for funding in the IUP are unable to proceed during the current funding year, delayed projects may be bypassed so that other projects, which are ready to proceed, may be funded based on the priority ranking system.

Integrated Priority Ranking System for Wastewater & Nonpoint Source Projects

The OWRB continues to utilize Oklahoma's approved CWSRF Integrated Ranking System which is set forth in Oklahoma Administrative Code Title 785 Chapter 50. The System ranks projects for funding based on human health protection, the Federal Clean Water Act's "fishable/ swimmable" goals, Oklahoma's Water Quality Standards (OWQS) and Antidegradation Policy, and Oklahoma's NPS Management Program.

Historically, proposed water quality projects receive points in four major areas: 1) "project type factor;" 2) "water quality restoration factor;" 3) "water quality protection factor;" and 4) "readiness to proceed factor." These four areas incorporate additional points if a project is located in a "Top Ten" priority watershed or in a watershed designated as a "high quality water," for example. Beginning in FY 2011, Project Priority List includes fifth area entitled "Programmatic Priority Factor." The Programmatic Priority Factor provides a maximum of one hundred (100) priority bonus points to projects that address specific programmatic priorities set forth by the Environmental Protection Agency or OWRB and detailed in the Annual Intended Use Plan. For FY 2011 the Programmatic Priority Factor will be targeted towards projects which include green components and are eligible under the Green Project Reserve.

The "ready to proceed factor" varies as projects are ready to proceed to construction. Projects that have completed engineering, environmental and financial application can receive up to an additional 400 points through the ranking process. If a project encounters delays it may be bypassed using Oklahoma's CWSRF bypass procedures. Per OWRB Chapter 50 Rules, a tie breaking procedure shall be utilized when two or more projects have equal points under the Project Priority System and are in competition for funds.

Rule changes to the Integrated Priority Ranking System may be considered during the FY 2011 rule cycle, if necessary.

Additional Subsidization

The FY 2010 Appropriations Law (P.L. 111-88) states that "...That not less than 30 percent of the funds made available under this title to each State for Clean Water State Revolving Fund capitalization grants.....shall be used by the State to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), except that for the Clean Water State Revolving Fund capitalization grant appropriation this section shall only apply to the portion that exceed \$1,000,000,000."

Approximately \$2.5 million of funds in accordance with the FY 2010 Appropriations Bill have been earmarked for additional subsidization in the form of principal forgiveness. The principal forgiveness will be targeted first to projects eligible under the Green Project Reserve and second to disadvantaged communities as defined through the 30 year financing negotiation under the Oklahoma Drinking Water State Revolving Fund. As funding is available, it is proposed that 15% of a project's costs up to \$500,000 or the cost of the green component of the project whichever is less. The remaining funds will be available in the form of a below market interest rate CWSRF loan. Since the additional subsidization is tied to the Green Project Reserve at this time the OWRB has not identified sufficient projects to meet the subsidization threshold. An amended project list will be provided to EPA prior to funding of projects with additional subsidization.

Green Project Reserve (GPR)

The FY 2010 Appropriations Bill states that "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....shall be used by the State for projects to address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities." This requirement continues the framework set forth under ARRA.

Oklahoma is committed to the implementation of sustainable or green infrastructure. Projects that incorporate green infrastructure, water or energy efficiency improvements or other environmentally innovative practices will receive bonus points under the CWSRF Integrated Priority Ranking System.

OWRB has and will continue to conduct an active solicitation of GPR projects including notification of interest groups and program stakeholders, publication on related websites, and presentation during related conferences. At this time, however, OWRB has not identified sufficient projects to meet the 20 percent threshold. An amended GPR project list will be submitted to EPA prior to funding of GPR projects. This list will also be posted on the CWSRF website at <http://www.owrb.ok.gov/financing/loan/cwsrflans.php>.





GPR Eligibility

OWRB intends to utilize the "Procedures for Implementing Certain provisions of the EPA's Fiscal Year 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs" issued on April 21, 2010 for determining the eligibility of projects under the GPR. Attachment 2 Part A of the Procedures (Appendix E) details the guidance for states to determine project eligibility. For each GPR category, the guidance details those projects that are clearly eligible (categorical), those that are not eligible, as well as those which require a business case to justify eligibility.

GPR Review

All projects listed on the FY 2011 Project Priority List are being evaluated to determine if projects or elements of projects could be eligible under the GPR. Staff engineers will consult with each community's project engineer in an effort to further refine and determine the actual expenditures toward green infrastructure elements included on the CWSRF Project Priority List. OWRB has developed a checklist which is included as Appendix D which will serve in part as the "business case" for inclusion of project or component of a project in the GPR. Final business cases and a description of categorically eligible projects will be available for public viewing at <http://www.owrb.ok.gov/financing/loan/cwsrfloans.php> within the quarter in which the loan is made.



Reporting Requirements

The OWRB will report quarterly on the utilization of funds under the FY 2011 Intended Use Plan. The major reporting vehicle will be the CWSRF Benefits Reporting Database. Reporting will include basic how the additional subsidies are utilized, use of funds under the GPR, basic data elements and environmental benefits. This information will also be included in the Annual Report for FY 2011.



Davis-Bacon Requirements

The FY 2010 Appropriations Bill states that : "For fiscal year 2010 the requirements of section 513 of the Federal Water Pollution Control Act (22 U.S. C. 1372) shall apply to the construction of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund as authorized by title VI of that Act (22 U.S. C. 1381 et seq.), or with assistance made available under section 205(m) of that Act (33 U.S.C. 1285(m)), or both." Compliance procedures are found in the EPA memorandum of November 30, 2009 and further defined via Attachment 6 of EPA's April 21, 2010 "Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs."



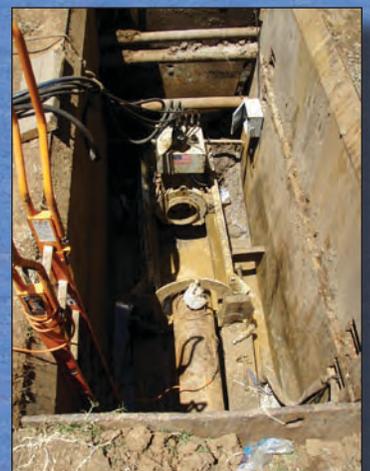
Oklahoma's Innovative Financing Opportunities

The 2000 National Water Quality Inventory reports siltation, nutrients, bacteria, metals, and oxygen-depleting substances are among the top causes of water quality impairment in America's lakes, rivers, wetlands, and estuaries. While municipal and industrial wastewater discharges contribute significant pollutant loads to river systems, the Inventory indicates that pollution transported from urban and agricultural land by runoff has become the leading source of water quality impairment. Consequently, CWSRF funding for polluted runoff control projects continues to gain momentum nationwide. States have used the CWSRF to fill gaps in federal grant funding and provide required local match for Clean Water Act Section 319 and the U.S. Farm Bill projects.

Oklahoma's Non-point Source (NPS) Management Program and Non-point Source Assessment Report, 2000-2015, 2006 Update identifies that 521 waterbodies are impaired based on the draft 2004 303 (d) list. To address this situation, the Program plan presents an aggressive long-term goal of beneficial use attainment and maintenance for all listed water bodies by 2020. Short-term goals call for drastically reducing NPS loading in the "top-ten" priority watersheds; further identifying pollutant sources; increasing water education programs; drafting watershed restoration action strategies for priority waters; and identifying alternative funding sources to implement practices for achieving long-term goals. Oklahoma's CWSRF integrated priority ranking system allows prioritization of project funding based on the State's human health and water quality goals.

The CWSRF program can fund virtually any pollution control project that is included in the NPS Management Program. Projects previously funded nationwide include: on-site sewage treatment, agriculture Best Management Practices (BMPs), wetland protection/rehabilitation/construction, stormwater management, landfill leachate control, source water protection, and habitat protection through stream bank restoration, land purchase, or conservation easements. State law requires that prior to committing funds for NPS projects, the Oklahoma Conservation Commission (OCC) or the Department of Environmental Quality (DEQ), whichever agency has jurisdiction, submit written concurrence that a proposed project: 1) meets a critical local or state need, as defined in the NPS Management Program; 2) is needed to comply with the NPS Management Program; 3) is designed to prevent, reduce, or halt pollution of the waters of the state; 4) is cost-effective; and 5) will be awarded on a cost-share basis, as required. Oklahoma will continue to work with municipalities to adopt watershed approaches to protect their water/wastewater infrastructure.

Brownfields are abandoned or under-used industrial or commercial sites which may create health and safety risks due to environmental contamination. CWSRF funding can be used for projects to correct or prevent water quality problems associated with Brownfields, including, but not limited to, polluted runoff abatement, groundwater contamination correction, petroleum contamination remediation, and urban storm water



controls. Example projects include well capping or abandonment, wetlands construction, contaminated sediment, and underground storage tank excavation and disposal.

Two Clean Water Act programs, the National Pollution Discharge Elimination System's urban storm water permitting program and the NPS Management Program, can be used to control polluted urban runoff. Proposed project activities not regulated under the storm water permitting program must be included in the State's NPS Management Program plan to be eligible to receive CWSRF financing.

In FY 2011 OWRB will initiate a "Link Deposit" pilot project within the Lugart Altus Irrigation District to assist producers with the installation of more efficient irrigation equipment with the result being the reduction runoff. If successful, OWRB will work closely with OCC to identify statewide opportunities for additional NPS related projects. Additionally, OWRB will continue to work closely with OCC on the identification and review of the proposed GPR projects.

Long-term and Short-term Goals

Long-term Goals

The CWSRF continues to maintain long-term goals to ensure it assists the State in meeting Clean Water Act and State water quality goals and ensure the long-range integrity of the fund.

- Assist borrowers in complying with the enforceable requirements of the Clean Water Act to reach the goal of eliminating discharge of pollutants into the State's waters.
- Assist in the maintenance, restoration and protection of beneficial uses identified in Oklahoma's Water Quality Standards to provide for the propagation of fish and wildlife and the protection of water and recreational resources in and on waters of the State.
- Support EPA's Watershed Approach and Strategic Plan and assist the State in meeting water quality goals identified in the Continuing Planning Process and Non-point Source Management Program to reduce or eliminate water quality threats in Oklahoma's priority watersheds.
- Maintain the fiscal integrity of the fund to ensure it remains viable and self-perpetuating to meet the long-range water quality needs of the State.
- Maintain the perpetuity of the CWSRF through maintaining net assets equal to federal capitalization grants and state matching funds

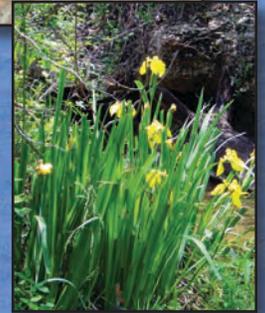
Short-term Goals

The State will pursue short-term goals in an effort to continually improve the CWSRF program.

- Provide financing to communities listed in this plan that are under NPDES enforcement orders to meet deadlines for municipal compliance in accordance with CWA Section 301(l)(1).



- Provide financing to assist communities in eliminating water pollution problems, improve water quality in the State's waters, and build sewage facilities needed to maintain surface water and groundwater quality standards.
- Work with State/local agencies to identify current gaps in the State's NPS, storm water, and Brownfields funding, identify potential CWSRF-eligible projects, and develop appropriate financing strategies, as necessary.
- Meet the needs of current and potential borrowers by developing and implementing a CWSRF marketing strategy based upon the customer satisfaction survey conducted in FY 2007.
- Provide 25% of all CWSRF loans to communities of less than 10,000 population for assistance in building more affordable sewage treatment works or implementing NPS pollution control activities.
- Obtain maximum capitalization of the fund for the State in the shortest time possible.
- Gain approval of FY 2011 CWSRF capitalization grant appropriations and have grant funds awarded within the 2nd quarter of FFY 2011.
- Generate sufficient investment and loan interest earnings to retire revenue bonds.
- Gain EPA approval to reserve transfer authority of an amount equal to 33% of the Drinking Water (DW) SRF capitalization grant between the DWSRF and the CWSRF.
- Complete a revenue bond issue to meet funding shortfalls and to provide matching funds for Federal capitalization grants, as necessary.
- Solicit projects that address green infrastructure, water or energy efficiency improvements or other environmentally innovative activities



Clean Water SRF Activities to Be Supported

Allocation of Funds to Eligible Entities

The OWRB utilizes a six-step process to prescribe how available funds will be allocated between eligible wastewater construction or pollution control and refinancing projects, as follows:

1. Identify borrowers that are ready to proceed with projects during FY 2011;
2. Set-aside 25% of all funds for small communities (<10,000 population) that are ready to proceed;
3. Determine the amount of financing needed by borrowers that are ready to proceed;
4. Identify the sources of funds available to provide the requested assistance;
5. Determine if financing requested is consistent with amount of funds available; and
6. Identify those projects from the 5-year Project Priority List, in priority order, for which OWRB will commit available unrestricted funds.



CWSRF Financing Plan, Loan Types, and Terms

The CWSRF may finance up to 100% of project costs for items eligible under program requirements, defined in OWRB rules (OAS 785-50-9), including, but not limited to, engineering planning and design, financial advisors, loan closing, construction, land acquisition (if the land is an “integral” part of the wastewater treatment process), and pollution run off controls through “best management practices”.

The CWSRF financing plan provides three major elements: 1) a pool of funds to meet the funding demand, which is well above that anticipated, to be available directly from capitalization grants; 2) below market rate financing and program incentives to help communities meet applicable federal/state pollution control laws; and 3) flexibility and perpetuity of the CWSRF to meet future wastewater needs.

To meet these goals in a cost-effective manner, the program offers the CWSRF Loan, described below. The OWRB retains the right to determine which loan type should be utilized in any individual instance in order to protect the fiscal integrity of the CWSRF.

CWSRF Loan — How It Works

The CWSRF loan is used for the construction of wastewater infrastructure improvements, storm water and Brownfield activities, structural or nonstructural NPS projects, and refinancing of eligible existing debt. Traditionally, the OWRB offered these loans to small communities and, in connection with the Series 2004 (Master Trust), elected to make all new construction loans permanent fixed-rate financings of 2.6% plus 0.5% administrative fee. The interest rate on each loan funded with cash funds reflects the current rate of 60% of Municipal Market Daily (mmd) AAA scale spot rates through maturity plus 55 basis points. The current loan interest rate is calculated approximately 10 days prior to loan closing; however, terms may change for any FY 2011 bond proceeds. A 0.5% administrative fee is charged on the unpaid loan balances.

The OWRB has implemented a policy to provide low-interest loans to small communities (<10,000 population) from bond proceeds or CWSRF 2nd round funds, including unrestricted funds from loan repayments and investment earnings, which are continually recycled to fund new water quality projects.

30-Year CWSRF Financing

The OWRB intends to begin offering extended 30-year financing for disadvantaged communities beginning July 1, 2010. The CWSRF Program has adopted the “disadvantaged community” definition as defined by the Drinking Water State Revolving Fund 30-year financing program. A “disadvantaged community” means those communities with a median household income that is 85% of the national median household income according to the United States Census Bureau. The extended financing will assist communities that have difficulty making higher debt service payments.



A disadvantaged community will be eligible as long as the financing does not exceed the design life of the project and meets the other requirements as required by EPA.

Changes in Environmental Review Requirements

In accordance with a 2007 revision of EPA's National Environmental Policy Act requirements in 40 CFR Part 6 (stating CWSRF program environmental review requirements), OWRB made and submitted revisions to EPA for review on May 5, 2010. The revisions will become effective upon approval by the Governor of Oklahoma. Additional revisions may be made during FFY 2011 in order to further streamline the process for CWSRF loan recipients.

Administrative Cost of the Clean Water SRF

To administer the program, the OWRB utilizes a 4% set-aside from the federal capitalization grant, authorized by the Clean Water Act Amendments of 1987, along with an annual loan administration fee equal to 0.5% on unpaid loan balances. The annual loan administration fee and the initial application fee, are deposited into the Administrative Fund, held outside the CWSRF, and are used solely for the purpose of administering the CWSRF, including long-term loan servicing and other authorized purposes. The FY 2011 program administrative budget is expected to be \$1.7 million, with an estimated \$700,000 from the 4% set-aside fund from awarded capitalization grants and \$1.0 million from the Administrative Fund.

Capitalization Grants, Assurances and Specific Proposals

The CWSRF Operating Agreement, between the State of Oklahoma and EPA, incorporates required assurances, certifications, and specific requirements of the following Clean Water Act sections:

602(a) Environmental Reviews The State of Oklahoma will conduct an environmental review, execute, and distribute a determination using the State Environmental Review Process, as specified in Attachment 3 of the Operating Agreement, 40 CFR 35.3140 and program rules.

602(b)(3) Binding Commitments The State of Oklahoma will enter into binding commitments for 120% of each quarterly federal payment within one year of receipt of that payment.

602(b)(4) Expeditious and Timely Expenditures The State of Oklahoma will expend all funds in the CWSRF in a timely and expeditious manner.

602(b)(5) First Use for Enforceable Requirements The State of Oklahoma will fund all National Municipal Policy projects that were not in compliance or were on enforceable schedules. Prior to the award of the first capitalization grant in 1989, the State certified that all projects listed as National Municipal Policy Projects (under enforcement actions) had been previously funded. This requirement was, therefore, considered to be met.



Loan Application Amount Fee

\$ 249,999 or less	\$ 100.00
\$ 250,000 - 999,999	\$ 250.00
\$1,000,000 or more	\$ 500.00



602(b)(6) Compliance with Title II Requirements The State of Oklahoma met the specific statutory requirements for publicly owned wastewater treatment projects constructed before October 1, 1994 with funds directly made available by federal capitalization grants.

EPA Order No. 5700.7, Environmental Results under EPA Assistance Agreements The State of Oklahoma agrees to complete the one-page Environmental Benefits Assessment worksheet, effective January 1, 2005, for all binding commitments (final loan agreements) and include copies of the completed worksheet or a summary of the table of the worksheet in the state's Annual Report.

To implement provisions of the federal capitalization grants the OWRB has promulgated technical review regulations and procedures in accordance with state law. Any future rule changes will be promulgated as a part of the normal rule-making process or emergency rulemaking, as needed.

Criteria and Method of Distribution of Funds

The following process is used to develop the distribution of funds: (1) analyze the type of community served and financial assistance needed; (2) identify funding sources and spending limits; (3) allocate funds among projects; (4) develop a capitalization grant payment schedule used for making timely commitment of funds to projects selected to receive assistance; and (5) develop a disbursement schedule to distribute funds to loan recipients for project costs as they are incurred.

Type of Borrowers Served and Financial Assistance Needed

Under State law eligible borrowers include any duly constituted and existing political subdivision of the State including counties, cities, towns, municipalities, sewer districts, public trusts or authorities, and state agencies.

Federal regulators also allow the program to provide third party loans to other borrowers through link deposit investments and pass-through loans with EPA approval. Other states are using this lending option to provide low-interest financing to farmers and homeowners who implement recognized best management practices to control non-point pollution threatening "Waters of the State."

Sources and Commitments of Unrestricted Funds

Appendix B-5 identifies sources and commitments of all CWSRF unrestricted funds, or funds which are not currently obligated to loans or to pay off existing debt and which may be used for loans to communities. It is anticipated that approximately \$19.0 million of existing unobligated funds will be available during FY 2011. Approximately \$162.0 million in fund commitments have been identified, leaving approximately \$143.0 million wastewater infrastructure funding needs.

The OWRB anticipates that all new loans will be funded from Revolving

Fund, Series 2004 bond proceeds or existing unobligated cash balances or proceeds from a possible Series 2011 bond issue. Under the new financing strategy of OWRB, new loans that are funded from cash reserves may be reimbursed with proceeds from the next bond issue. In 2007 the OWRB passed a Reimbursement Resolution detailing that all new loans listed on the priority list, at that time, would be available to be refunded back to the OWRB from the proceeds of the next bond issue. Projected debt service for the Series 2004 bond issue and anticipated investment and interest earnings is detailed in Appendix B-5.

Reallocation of Bond Proceeds

The OWRB has developed a two step strategy in order to utilize existing bond proceeds from our Revolving Fund Revenue Bonds, Series 2004 to fund state match requirements for current clean water capitalization grants. The first aspect of the strategy includes reallocation bond proceeds from the Leverage Bond component of this bond issue to the State Match component since this was permitted in the original documents. The second aspect is to utilize the reallocated State Match Bond components to fund borrower draws immediately. This has allowed for the origination of unspent bond proceeds in a more expeditious manner, consistent with Federal Tax law.

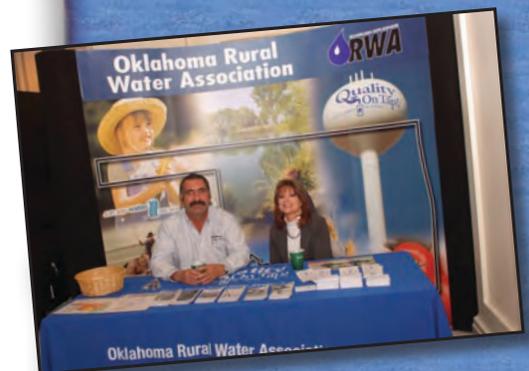
This combined plan has provided multiple benefits for our program 1.) the immediate satisfaction of Oklahoma’s CWSRF ULO’s, 2.) compliance with the reasonable expectations requirement for spending bond proceeds in a timely manner, and 3.) delaying the need for future bond issues.

Allocation of Funds Among Projects

Appendix B-1 details the allocation of funds among the various types of projects, along with EPA’s project types or “needs categories,” treated effluent discharge permit requirements, binding commitment, construction start and initiation of operations dates. Projects scheduled for funding have been or will be reviewed, for consistency with proposed plans and approved under Clean Water Act Sections 205(j), 208, 303(e), 319 and 320, as amended. Prior to receiving a loan commitment, documented evidence of this review is placed on file.

Federal Capitalization Grant Payment Schedule

The proposed federal capitalization grant payment schedule (Appendix B-3) is based on the state’s projection of binding commitments for selected projects that may be funded with federal funds, and therefore meet the requirements of the federal capitalization grant, including all federal crosscutting laws and authorities. This chart is based on the assumption that the FY 2009 and FY 2010 capitalization grant funds will be awarded by EPA during the 3rd quarter SFY 2010 and FY 2011 capitalization grant funds in the 2nd quarter of FY 2011. The cumulative EPA/ACH System draws of federal payments will not exceed 83.33 percent for selected projects that utilize federal capitalization grant and state matching funds. Appendix B-5 presents sources and timing of all capital into the CWSRF.





Fund Disbursement Schedule

Fund disbursement schedules are based on projected binding commitment date (OWRB Board approval), construction start/loan closing date (beginning of disbursements), and construction completion (initiation of operation) date included in Appendix B-1. Construction invoices are generally submitted by the borrower for payment beginning approximately one to three months after entering into a binding commitment.

Transfer Authority Between Clean Water and Drinking Water SRFs

In accordance with the Safe Drinking Water Act (SDWA) SRF funds transfer provisions (Section 302), the state hereby reserves the authority "to transfer an amount up to 33 percent of the FY 2011 Drinking Water SRF program capitalization grant[s] to the CWSRF program or an equivalent amount from the CWSRF program to the Drinking Water SRF program." During FY 2011 Oklahoma may request to transfer funds in order to assure adequate capacity to meet funding demands for both programs.



Prior to any transfer of funds, the capitalization grant agreement will be amended if necessary, a copy of the previously obtained Attorney General's opinion certifying that state law permits the state to transfer funds will be submitted; and transfers will be made by direction of the Governor, in accordance with SDWA Section 302. Upon completion of any transfer of funds, this Intended Use Plan will be amended to reflect the amount of such transfer.



The OWRB deems it to be in the best interest of Oklahoma to fully meet the funding demands of both the CWSRF and the DWSRF loan programs during FY 2011. Therefore, a transfer of funds from the CWSRF to the DWSRF, if necessary, represents the best use of CWSRF and DWSRF program funds. If the entire unused reserved amount of transfer authority is transferred from the CWSRF to the DWSRF during FY 2011, the following impacts on the CWSRF are expected:

1. The transfer of funds is not anticipated to impair the OWRB's ability to fund all projects on the FY 2011 CWSRF Project Priority List. The transfer of funds will have no impact on set-aside funds;
2. The long-term impact on the CWSRF may result in a reduction of leveraging capacity, meaning at some future date the OWRB may not have adequate program funds to meet the total demand for CWSRF funding, unless funds are transferred back from the DWSRF. Currently, the SDWA requires states to request transfer authority on a year-to-year basis, limiting the ability to transfer funds in future years. Funds transferred between programs during FY 2011 or in future years may not be available for return to the SRF fund of origin if a permanent extension of transfer authority is not granted.



Cross-Collateralization of the CWSRF and DWSRF Revenue Bond Structure

The Master Trust Agreement dated as of October 1, 2003, provides a bond structure that allows for cross-collateralization of the CWSRF and the DWSRF in order to provide additional bond security and ratings enhancement for both programs. With cross-collateralization, excess CWSRF revenues (revenues pledged to repayment of CWSRF bonds over and above what is needed to make actual debt service payments) would be available to cure any DWSRF bond payment default or reserve fund deficiency (Appendix C). Likewise, excess DWSRF revenues would be available to cure any CWSRF bond payment default or reserve fund deficiency. Pursuant to federal regulations, cross-collateralization support cannot extend to debt specifically issued for the purpose of providing state matching funds.

The Master Trust Agreement provides adequate safeguards to ensure that future CWSRF or DWSRF bond issue will comply with this limitation. Revenues pledged to the repayment of CWSRF bonds include: principal and interest payments received on local loans made from proceeds of the bond issue and from other CWSRF program loans; and investment earnings on funds and accounts within the bond indenture, including a reserve fund comprised of CWSRF program assets (cash). The Master Trust Agreement and each series bond indenture require that revenues be pledged sufficient to cover the debt service requirement for each payment date at least 1.1 times. Accordingly, a cash flow surplus is anticipated for each period absent a borrower default on a local loan. This surplus flows through a Deficiency Fund in the Master Trust Agreement that makes the surplus available to other series of CWSRF and DWSRF bonds.

The order of priority for surplus CWSRF pledged revenues is:

1. Other CWSRF bond issue debt service payment deficiencies;
2. Any DWSRF bond issue debt service payment deficiencies (but not DWSRF state match bonds);
3. Other CWSRF bond issue reserve fund deficiencies;
4. Any DWSRF bond issue reserve fund deficiencies (but not DWSRF unrestricted reserve funds that secure DWSRF state match bonds);
5. To replenish and repay the DWSRF for any surplus DWSRF pledged revenues that were previously utilized to cure a CWSRF bond issue debt service or reserve fund deficiency;
6. All remaining funds are released back to the CWSRF Loan Account.

The order of priority for surplus DWSRF pledged revenues is similarly structured, as such any surplus CWSRF pledged revenues that are utilized to cure a DWSRF bond issue debt service or reserve fund deficiency will ultimately be repaid to the CWSRF through operation of the Master Trust Agreement.



Investment Authority Between Clean Water and Drinking Water SRF

Special permission was received from the EPA, in accordance with the Federal Water Quality Act of 1987, to invest in the DWSRF a portion of the CWSRF.

The investment includes funds from second round principal repayments and investment earnings that are currently being held by the Oklahoma State Treasurer. The funds will be replenished with proceeds from a DWSRF bond issue as soon as enough DWSRF loans have originated that in the aggregate total a desired bond issue size. During FY 2011, Oklahoma may request an investment of funds in order to assure adequate capacity to meet funding demands for the DWSRF program.

The funds are restricted by several EPA provisions including:

- The indebtedness may be in the form of a loan or bond purchase and will not exceed three years in duration.
- The amount will not exceed a \$12 million balance at any time.
- The interest rate will be equivalent to the interest that would have been earned had OWRB invested in traditional institutions.
- OWRB will provide results of their DWSRF investment in the Annual Reports.
- EPA will be informed of the total outstanding balance and informed of the terms each time an indebtedness instrument is signed.

OWRB deems it to be in the best interest of Oklahoma to fully meet funding demands of the DWSRF. The traditional method of funding DWSRF loans with undedicated pool long-term bonds is no longer a viable option because of the requirements of the Tax Increase Prevention and Reconciliation Act of 2005.

Therefore, staff requested and was granted special permission from the EPA for this investment in order to provide an efficient and economical interim financing alternative to serve our borrowers.

Public Review and Future IUP Amendments

The OWRB has met the requirements under Section 1452(b)(1) of the SDWA through the public review and comments process. A public meeting to review this FY 2011 CWSRF Draft Intended Use Plan and Project Priority List will be held on June 17, 2010 following public notice through a press release issued on May 14, 2010 to print media statewide, statewide publication in *The Oklahoman* on May 16, 2010, and OWRB web posting on May 14, 2010 (Appendix F). The Draft FY 2011 IUP and Priority List were posted on the OWRB's webpage and a notice distributed to public wastewater authorities currently listed on the IUP, state and federal agencies, and other stakeholders on May 14, 2010. The public comment period will be held open through June 25, 2010.



Future changes in the IUP may be required and shall be made in accordance with procedures provided in 40 CFR Part 35, Subpart K, and the OWRB CWSRF Regulations. Minor revisions to this plan, required for administrative purposes for example, shall be made by the OWRB without public notice and will be reported to EPA in the Annual Report.

Future of Oklahoma's CWSRF Financing

The future of the Oklahoma Clean Water State Revolving Fund continues to be bright. The OWRB is committed to provide Oklahoma communities assistance by offering low interest loans to upgrade wastewater systems. Fundable projects include but are not limited to waste water treatment, plant upgrades, collection lines, water and energy efficiency, green infrastructure, innovative environmental projects, brownfields assessment and watershed management.

In FY 2010 EPA partnered with the U.S. Department of Housing and Urban Development and the U.S. Department of Transportation in the development of "livability principles." The EPA's vision for CWSRF role in this project is one of directing SRF funding to projects which support sustainable systems and that help build or maintain the technical, financial and managerial capacity of the recipient. As Oklahoma's Comprehensive Water Plan moves into the implementation phase, a large part of the implementation recommendations will be geared towards providing assistance to Oklahoma communities to ensure sustainable systems which are able to meet future demands. Over the next twelve months the OWRB will develop an Oklahoma specific primer and resources guide which will build provides direction for communities as to how to develop a more sustainable system. The results of the Oklahoma specific primer and resources guide will be memorialized in the Integrated Priority Ranking System for FY 2012.

The Oklahoma's Comprehensive Water Plan (OCWP) will assist in providing vital information to better understand Oklahoma's water and wastewater infrastructure needs. This understanding will allow planners and financiers to prioritize critical need areas where inadequate treatment and/or delivery create a barrier between water and its users and limit local economic development. As the OCWP moves toward implementation it will recommend the utilization of existing state and federal funding programs, including the OWRB's Financial Assistance Program, to meet the growing infrastructure needs in Oklahoma.



Draft Fiscal Year 2011 Oklahoma Clean Water State Revolving Fund Project Priority List

Fundable List

Name	Project No.	Target B.C. Date	Priority List Amount (\$)	Project Description
Hobart PWA	ORF-07-0007	07/13/10	1,381,000	New Collection Sewer System (Cat. IVA)
Nicoma Park DA	ORF-09-0035	07/13/10	160,000	New Sewer Collection System (Cat. IVA)
Inola PWA	ORF-06-0011	10/12/10	1,800,000	WWTP Improvements and New Interceptor (Cat. IIIB & IVB)
Okmulgee MA	ORF-09-0012	07/13/10	5,300,000	Sanitary Sewer Line Replacement to Correct for I&I (Cat. IIIA)
Broken Arrow MA	ORF-09-0033	07/13/10	5,735,000	Lift Station, Forcemain, and Trunk Sewer Replacement and New Collection Lines (Cat. IIIB & IVA)
Pawnee PWA	ORF-10-0003	09/14/10	6,450,000	New SBR WWTP (Cat. II)
Bartlesville MA	Unassigned	07/13/10	1,600,000	Wastewater System Rehab and I&I Coor (Cat. IIIB & IIIA)
Guthrie PWA	Unassigned	08/10/10	5,000,000	Wastewater Collection System Replacement (Cat. IIIB)
Yale WST	Unassigned	11/09/10	2,100,000	WWTP Improvements (Cat IIIB)
Bristow PWA	Unassigned	04/12/11	1,050,000	WWTP Improvements (Cat. IIIB)
El Reno MA	Unassigned	09/14/10	7,225,229	Sanitary Sewer Line Replacement to Correct for I&I, New Irrigation Pivots, & Sanitary Sewer Rehab (Cat. I, IIIA, IIIB & X)
Tulsa MUA	Unassigned	02/08/11	52,180,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and Interceptor Sewer System Rehab (Cat. I, IIIA, IIIB)
Lone Grove W&ST	ORF-04-0011	01/11/11	2,800,000	New WWTP, Lift Station and Force Mains (Cat. II, IIIB, & IVB)
Muskogee UA	ORF-10-0002	07/13/10	6,940,000	Coody Creek Phase II Sewer Line Replacement (Cat. IIIB)
Wetumka PWA	Unassigned	12/14/10	3,500,000	New WWTP (Cat. I)
Fairview UA	Unassigned	08/10/10	1,200,000	Lagoon Rehabilitation (Cat. IIIB)
Oklahoma City WT	Unassigned	08/10/10	33,500,000	WWTP Improvements including new FEB, Pump Station Improvements, New Relief Line (Cat. IIIB & IVB)
Elgin PWA	Unassigned	07/13/10	2,750,000	Total Retention WWTP Improvements (Cat. 1)
Bixby PWA	Unassigned	08/10/10	2,750,000	Sanitary Sewer System Improvements, New Laterals, Bio-retention Facility, and New Interceptor and Pump Station (Cat. IIIB, IVA, IVB, VI)
Durant CUA	Unassigned	08/10/10	2,100,000	Sewerline Replacement and Sludge Belt Filter (Cat. IIIB)
Holdenville PWA	Unassigned	12/14/10	1,150,000	Rehabilitation of Manholes and New Sanitary Sewer Line and Rehabilitation (Cat. IIIB & IVA)
Okemah UA	Unassigned	10/12/10	2,700,000	WWTP Improvements (Cat. IIIB)
Hominy PWA	Unassigned	10/12/10	600,000	WWTP Improvements (Cat. IIIB)
Sperry USA	Unassigned	01/11/11	432,000	New Sanitary Sewer Line and Appurtenances to Serve Unsewered Area (Cat. IVA)
Lugert-Altus Irrigation District Members	Unassigned	08/10/10	500,000	Irrigation Equipment Upgrade for Water Efficiency - Link Deposit Pilot (Cat. VII)
TOTAL				\$150,903,229



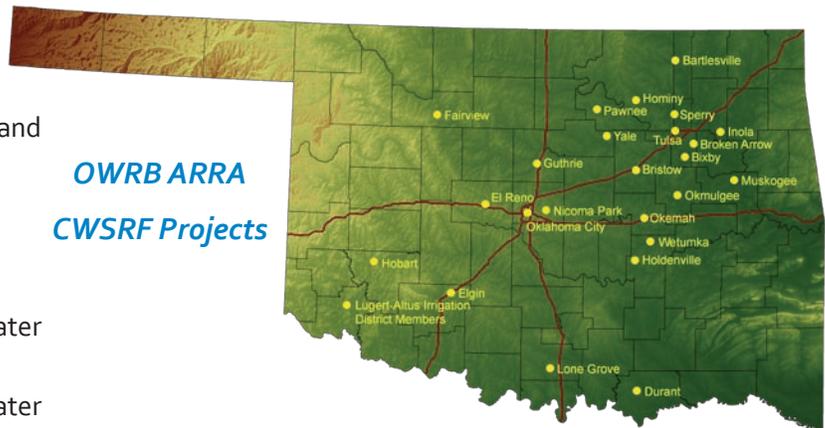
**Oklahoma Water Resources Board
Clean Water State Revolving Fund**

American Recovery and Reinvestment Act Overview

Total ARRA Award	\$31,662,100
Available for Infrastructure Improvements	\$30,395,616
Number Infrastructure Projects with Funds Obligated	34 for \$30,395,616
Number of Entities with Infrastructure Projects under Contract	34 for \$30,395,616
Leveraged Funds (SRF Funds) Associated with Obligated ARRA Funds	\$76,712,589
Total Funds Obligated to ARRA Projects (ARRA and SRF):	\$107,108,205
Savings to Oklahoma Communities Based on ARRA Funds	\$51,502,332
Total Savings to Oklahoma Communities based on Leveraged funds (ARRA and SRF)	\$74,516,108
ARRA Funds Expended as of April 30, 2010	\$14,777,178
Leveraged Funds Expended on ARRA Projects as of April 30, 2010	\$14,640,773
Number of Projects Addressing Issues in "Disadvantaged" Communities	27

OWRB ARRA Project Types:

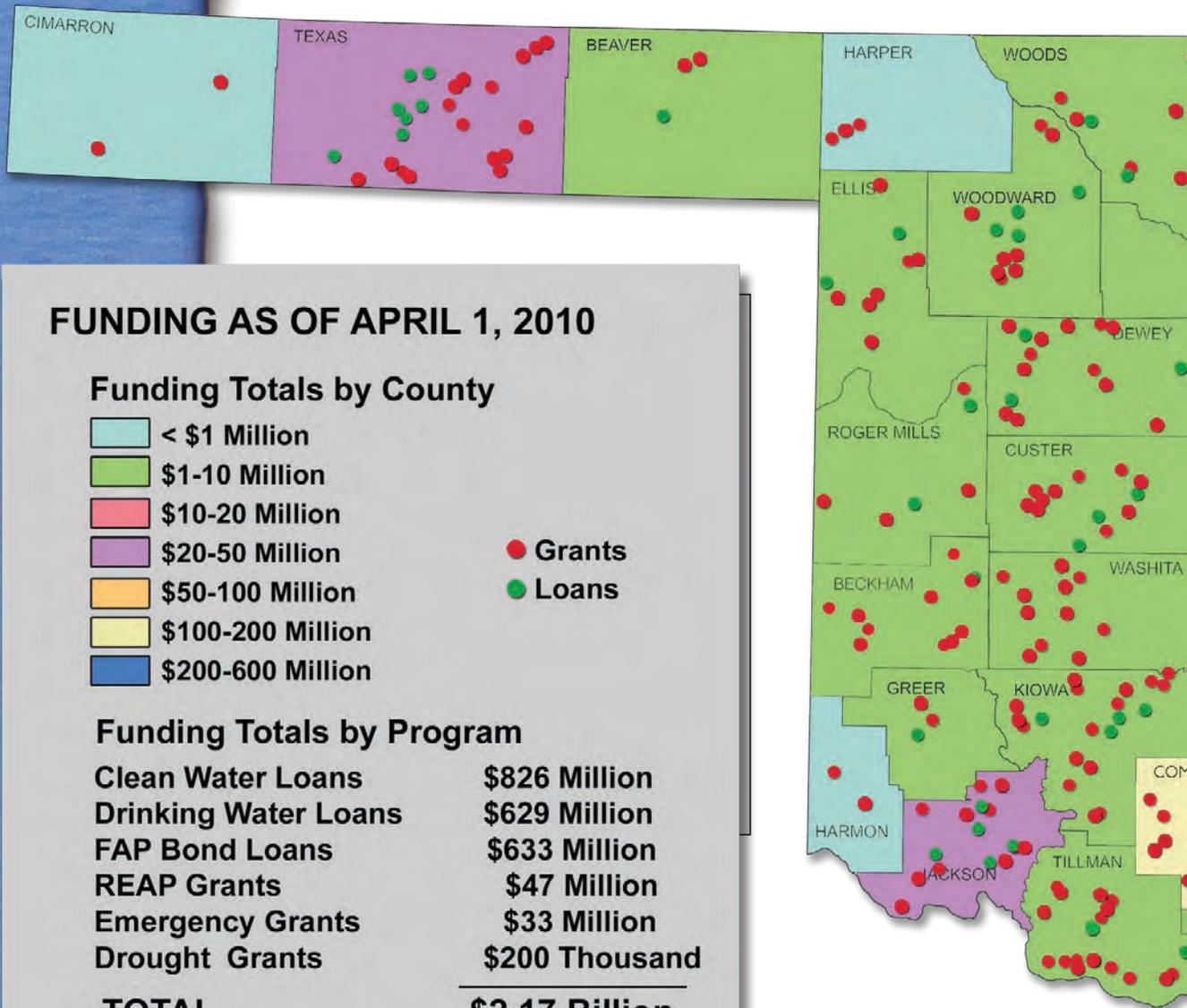
- New wastewater treatment plants
- Wastewater treatment plant upgrades and rehabilitation
- Sewer line replacement
- New collection lines
- Stormwater detention basins
- Riparian restoration to improve water quality (Green project)
- "Green" roofs for energy savings and water quality improvement (Green project)



Financial Assistance

Loan and Grant

Loans and Grants approved



Acknowledgements

The Staff of the Financial Assistance Division would like to thank all the Oklahoma cities and rural water districts for their help in making our programs a success.

This publication would not have been possible without the help of the following individuals:

James Leewright & Owen Mills, *OWRB Graphic Artists*

Darla Whitley, *OWRB Public Information Manager*

Bary Fogerty, *OWRB Photographer*

and

Oklahoma Scenic Byways Program



FUN FACT *There is the same amount of water on Earth as there was when the Earth was formed. The water from your faucet could contain molecules that dinosaurs drank.*



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The Oklahoma Water Resources Board
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Oklahoma City, Oklahoma 73118



STATE OF OKLAHOMA
Appendix A. FY 2011-2015 Clean Water SRF Project Priority List
 Prepared for the EPA - Effective July 1, 2010 - June 30, 2011
 DRAFT May 14, 2010

OPDES Permit #	Loan Type	Name	Disadvantaged Community Y/N	Project No.	Target B.C. Date	Priority List Amount	Project Description
FY 2011 Fundable Projects (July 2010 - June 2011)							
1	OK0028649	LC Hobart PWA	Y	ORF-07-0007	07/13/10	1,381,000	New Collection Sewer System (Cat. IVA)
2	OK00 NONE	LC Nicoma Park DA	Y	ORF-09-0035	07/13/10	160,000	New Sewer Collection System (Cat. IVA)
3	OK0033618	LC Inola PWA	Y	ORF-06-0011	10/12/10	1,800,000	WWTP Improvements and New Interceptor (Cat.IIIB & IVB)
4	OK0028134	LC Okmulgee MA	Y	ORF-09-0012	07/13/10	5,300,000	Sanitary Sewer Line Replacement to Correct for I&I (Cat. IIIA)
5	OK0040053	LC Broken Arrow MA	N	ORF-09-0033	07/13/10	5,735,000	Lift Station, Forcemain, and Trunk Sewer Replacement and New Collection Lines (Cat. IIIB & IVA)
6	OK0026654	LC Pawnee PWA	Y	ORF-10-0003	09/14/10	6,450,000	New SBR WWTP (Cat. II)
7	OK0030333	LC Bartlesville MA	Y	Unassigned	07/13/10	1,600,000	Wastewater System Rehab and I&I Coor (Cat. IIIB & IIIA)
8	OK0027715	LC Guthrie PWA	Y	Unassigned	08/10/10	5,000,000	Wastewater Collection System Replacement (Cat. IIIB)
9	OK0028509	LC Yale WST	Y	Unassigned	11/09/10	2,100,000	WWTP Improvements (Cat IIIB)
10	OK0032549	LC Bristow PWA	Y	Unassigned	04/12/11	1,050,000	WWTP Improvements (Cat. IIIB)
11	OK0027111	LC El Reno MA	Y	Unassigned	09/14/10	7,225,229	Sanitary Sewer Line Rehab to Correct for I&I, New Irrigation Pivots, & Sanitary Sewer Rehab (Cat. I, IIIA, IIIB & X)
12	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	Unassigned	02/08/11	52,180,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and Interceptor Sewer System Rehab (Cat. I, IIIA, IIIB)
13	OK0034266	LC Lone Grove W&ST	Y	ORF-04-0011	01/11/11	2,800,000	New WWTP, Lift Station and Force Mains (Cat. II, IIIB, & IVB)
14	OK0029131	LC Muskogee UA	Y	ORF-10-0002	07/13/10	6,940,000	Coody Creek Phase II Sewer Line Replacement (Cat.IIIB)
15	OKG582226 OKG580005	LC Wetumka PWA	Y	Unassigned	12/14/10	3,500,000	New WWTP (Cat. I)
16	OK0020079	LC Fairview UA	Y	Unassigned	08/10/10	1,200,000	Lagoon Rehabilitation (Cat. IIIB)
17	OK0027553	LC Oklahoma City Water Trust	Y	Unassigned	08/10/10	33,500,000	WWTP Improvements including new FEB, Pump Station Improvements, New Relief Line (Cat. IIIB & IVB)
18	N/A	LC Elgin PWA	Y	Unassigned	07/13/10	2,750,000	Total Retention WWTP Improvements (Cat. I)
19	OK0036153 OK0026913	LC Bixby PWA	N	Unassigned	08/10/10	2,750,000	Sanitary Sewer System Improvements, New Laterals, Bio-retention Facility, and New Interceptor and Pump Station (Cat. IIIB, IVA, IVB, VI)
20	OK0039063	LC Durant CUA	Y	Unassigned	08/10/10	2,100,000	Sewerline Replacement and Sludge Belt Filter (Cat. IIIB)
21	OK0028428	LC Holdenville PWA	Y	Unassigned	12/14/10	1,150,000	Rehabilitation of Manholes and New Sanitary Sewer Line and Rehabilitation (Cat. IIIB & IVA)
22	OK0020737	LC Okemah UA	Y	Unassigned	10/12/10	2,700,000	WWTP Improvements (Cat. IIIB)
23	OK0027618	LC Hominy PWA	Y	Unassigned	10/12/10	600,000	WWTP Improvements (Cat. IIIB)
24	OK0033464	LC Sperry USA	Y	Unassigned	01/11/11	432,000	New Sanitary Sewer Line and Appurtenances to Serve Unsewered Area (Cat. IVA)
25	None	GPR Lugert-Altus Irrigation District Member	Y	Unassigned	08/10/10	500,000	Irrigation Equipment Upgrade for Water Efficiency - Link Deposit Pilot (Cat. VII)
FY 2012 Planning/Contingency Projects (July 2011 - June 2012)							
1	NS-OK0026221 SS-OK0026239	LC Tulsa MUA		Unassigned	10/11/11	32,375,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor Sewer System and New Collection System (Cat. I, IIIA, IIIB, IVA, IVB)
FY 2013 Planning/Contingency Projects (July 2012 - June 2013)							
1	NS-OK0026221 SS-OK0026239	LC Tulsa MUA		Unassigned	10/10/12	31,200,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor Sewer System and New Collection System (Cat. I, IIIA, IIIB, IVA, IVB)
FY 2014 Planning/Contingency Projects (July 2013 - June 2014)							
1	NS-OK0026221 SS-OK0026239	LC Tulsa MUA		Unassigned	10/09/13	35,480,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor Sewer System and New Collection System (Cat. I, IIIA, IIIB, IVA, IVB)
FY 2015 Planning/Contingency Projects (July 2014 - June 2015)							
1	NS-OK0026221 SS-OK0026239	LC Tulsa MUA		Unassigned	10/08/14	18,090,000	Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor Sewer System and New Collection System (Cat. I, IIIA, IIIB, IVA, IVB)

Loan Totals (All Loans)	
FY 11	\$150,903,229
FY 12	\$32,375,000
FY 13	\$31,200,000
FY 14	\$35,480,000
FY 15	\$18,090,000
TOTALS	\$268,048,229

LC = Long-term Construction Loan
 NC = Non-Construction Loan
 R = Refinance
 GPR = Green Reserve Project

CHART 1. FY 2011 Oklahoma CWSRF Intended Use Projects and Administrative Costs
(Beginning July 1, 2010)

PART 1. Section 212 Publicly Owned Treatment Works Projects

	TYPE ¹	PROJECT NAME/ COMMUNITY	PROJECT NUMBER	ASSISTANCE AMOUNT (\$)	2000 CENSUS POPULATION	DISCHARGE PERMIT REQUIREMENTS ²											NEEDS CATEGORIES ³							BINDING COMMIT- MENT DATE ⁴	CONSTRUCT START DATE ⁵	INITIATION OF OPERATION DATE ⁶			
						CBOD	BOD	TSS	NH3-N	P	Min. DO	Fecal	I	II	IIIA	IIIB	IVA	IVB	VI	VII	X								
1	LC	Hobart PWA	ORF-07-0007	1,381,000	3,997	10.0		15.0	6.0		5.0										X					07/13/10	09/11/10	09/11/11	
2	LC	Nicoma Park DA	ORF-09-0035	160,000	2,415	ND	ND	ND	ND	ND	ND	ND									X					07/13/10	09/11/10	09/11/11	
3	LC	Inola PWA	ORF-06-0011	1,800,000	1,589		30.0	90.0													X		X			10/12/10	12/11/10	12/11/11	
4	LC	Okmulgee MA	ORF-06-0011	5,300,000	13,022	8.0		15.0	2.0		6.0									X						07/13/10	09/11/10	09/10/12	
5	LC	Broken Arrow MA	ORF-09-0013	5,735,000	74,859		30.0	30.0													X	X				07/13/10	09/11/10	09/10/12	
6	LC	Pawnee PWA	ORF-10-0003	6,450,000	2,230			20.0	30.0	8.0		5.0								X						09/14/10	11/13/10	11/12/12	
7	LC	Bartlesville MA	Unassigned	1,600,000	34,748		10.0	15.0	2.0												X	X				07/13/10	09/11/10	09/11/11	
8	LC	Guthrie PWA	Unassigned	5,000,000	9,925		30.0	90.0													X					08/10/10	10/09/10	10/09/11	
9	LC	Yale WST	Unassigned	2,100,000	1,342	10.0	15.0	15.0	6.0		4.0										X					11/09/10	01/08/11	01/08/12	
10	LC	Bristow PWA	Unassigned	1,050,000	4,325	15.0		30.0	3.0		5.0										X					04/12/11	06/11/11	06/10/12	
11	LC	El Reno MA	Unassigned	7,225,229	16,212	ND	ND	ND	ND	ND	ND	ND									X				X	09/14/10	11/13/10	11/12/12	
12	LC	Tulsa MUA	Unassigned	52,180,000	393,049	10.0	15.0	30.0	3.0		6.0									X	X	X		X		02/08/11	04/09/11	04/08/13	
13	LC	Lone Grove W&ST	ORF-04-0011	2,800,000	4,631	10.0		15.0	4.0		5.0									X	X		X			01/11/11	03/12/11	03/11/12	
14	LC	Muskogee UA	ORF-10-0002	6,940,000	38,310		30.0	30.0													X					07/13/10	09/11/10	09/10/12	
15	LC	Wetumka PWA	Unassigned	3,500,000	1,451			30.0	30.0											X						12/14/10	02/12/11	02/11/13	
16	LC	Fairview UA	Unassigned	1,200,000	2,733	10.0		15.0	2.0		3.0										X					08/10/10	10/09/10	10/09/11	
17	LC	Oklahoma City Water Trust	Unassigned	33,500,000	506,132	5.2		8.7	0.9		7.0										X		X			08/10/10	10/09/10	10/08/12	
18	LC	Elgin PWA	Unassigned	2,750,000	1,210		30.0	90.0												X						07/13/10	09/11/10	09/11/11	
19	LC	Bixby PWA	Unassigned	2,750,000	13,336		30.0	90.0													X	X	X	X		08/10/10	10/09/10	10/09/11	
20	LC	Durant CUA	Unassigned	2,100,000	13,549	10.0		15.0	2.0		5.0										X					08/10/10	10/09/10	10/09/11	
21	LC	Holdenville PWA	Unassigned	1,150,000	9,925	10.0		15.0	2.0		5.0										X	X				12/14/10	02/12/11	02/12/12	
22	LC	Okemah UA	Unassigned	2,700,000	4,732	10.0		15.0	2.0		3.0										X					10/12/10	12/11/10	12/11/11	
23	LC	Hominy PWA	Unassigned	600,000	2,584			14.0	30.0	12.0		3.0									X					10/12/10	12/11/10	12/11/11	
24	LC	Sperry USA	Unassigned	432,000	1,645		30.0	90.0														X				01/11/11	03/12/11	03/11/12	
Total--212				150,403,229																									

PART 2. Section 319 Nonpoint Source Mgmt. Projects

1	GPR	Lugert-Altus Irrigation District Members	Unassigned	500,000
Total-- NPS Cat. VII				\$500,000

PART 3. Section 320 Estuary Program Projects

Total-- No Estuaries				\$0
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PART 4. CWSRF Program Administrative Costs

Total-- 4% Program Admin. Fees Banked				1,000,000
TOTAL PARTS 1 through 4				\$151,903,229

¹ R = Refinancing LC = Long-term Construction Loan HG = Hardship Grant NC = Non-construction GPR = Green Project Reserve

² ND = No Discharge NA = Not Applicable A = Administrative Cost

³ I = Secondary Treatment, II = Advanced Treatment, IIIA = Inflow/Infiltration Correction, IIIB = Major Sewer System Rehab., IVA = New Collection System, IVB = New Interceptor, VI = Urban Stormwater, VII = Nonpoint source pollution control activities, X = Conveyance of Recycled Water

⁴ "Binding Commitment Date" is target date for OWRB board approval and commitment of funds (prior to loan closing).

⁵ Estimated based on assumption that construction start is 60 days following Binding Commitment Date.

⁶ Construction time estimated based on cost of project: <\$500,000 = 2 quarters or 183 days; \$500,000-\$3.5 million = 4 quarters or 365 days; >\$3.5 million = 8 quarters or 730 days.

Chart 2. Projected Environmental Benefits for Proposed FY 11 CWSRF Loans Page 1 of 2

PROJECT	Hobart PWA	Nicomar Park DA	Inola PWA	Okmulgee MA	Broken Arrow MA	Pawnee PWA	Bartlesville PWA	Guthrie PWA	Yale WST	Bristow PWA	El Reno MA	Tulsa MUA	Lone Grove W&ST	Muskogee UA	Wetumka PWA	Fairview UA	OKC Water Trust
Project Number	ORF-07-0007	ORF-09-0035	ORF-06-0011	ORF-09-0012	ORF-09-0033	ORF-09-0003	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned	ORF-04-0011	ORF-10-0002	Unassigned	Unassigned	Unassigned
Binding Commitment Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
Population	3,997	2,415	1,589	13,022	74,859	2,230	34,748	9,925	1,342	4,325	16,212	393,049	4,631	38,310	1,451	2,733	506,132
Assistance Amount Total	\$1,381,000	\$1,600,000	\$1,800,000	\$5,300,000	\$5,735,000	\$6,450,000	\$1,600,000	\$5,000,000	\$2,100,000	\$1,050,000	\$7,225,229	\$52,180,000	\$2,800,000	\$6,940,000	\$3,500,000	\$1,200,000	\$33,500,000
Category I												\$16,700,000					
Category II													\$700,000				
Category IIIA				\$5,300,000			\$1,000,000				\$1,815,352						
Category IIIB			\$800,000		\$4,465,000		\$600,000	\$5,000,000	\$2,100,000	\$1,050,000	\$2,276,236	\$35,480,000	\$420,000	\$6,940,000		\$1,200,000	\$28,500,000
Category IVA	\$1,381,000	\$1,600,000			\$1,270,000												\$5,000,000
Category IVB			\$1,000,000										\$1,680,000				
Category VI																	
Category VII																	
Category X											\$3,133,641						
Waterbody name	Unnamed Trib to Elk Ck.	Choctaw Cr. (through Choctaw Facility)	Verdigris R.	Okmulgee Ck.	Arkansas R.	Black Bear Ck.	Caney R.	Cimarron R.	Mud Ck, Cimarron R.	Little Deep Fork Ck.	Unnamed Trib to N. Canadian R.	Arkansas R. & Bird Ck	Untrib, Hickory Ck.	Arkansas R.	Untrib, Wewoka Ck.	Sand Ck	Chisholm Ck & South Canadian R.
Affected Waterbody I.D.	ok31150000030030	ok 520520000030	ok 121500020120	ok 5207000010290	ok 1204410010080	ok 620100030010	ok 121400020010	ok 620910010010	ok 620900010380	ok 520700060130	ok 520530000070	ok120420010010 ok121300010010	ok 311100020010	ok 120400010260	ok 520500020010	ok 620920010020	ok620910040100 ok520200000010
PROJECT TYPE FACTOR																	
Consent Order or Enforceable NPDES Permit Schedule	X		X	X		X	X	X	X		X	X	X	X	X	X	X
Eliminate or reduce documented health threat or NPDES violation within watershed that is a water supply	X		X	X		X	X	X	X		X	X	X	X	X	X	X
Eliminate or reduce documented health threat or NPDES violation																	
All other projects sustaining or reducing current degree of treatment, increasing capacity, reliability, or efficiency, reclaim/reuse water, or reduce documented water quality threat		X			X					X							
WATER QUALITY RESTORATION FACTOR																	
Affects 303d listed stream		X			X	X		X			X	X	X	X	X		X
Top-ten NPS Priority Watershed						X					X	X					
Project implements water quality plan			X			X			X		X	X	X				X
WATER QUALITY PROTECTION FACTOR																	
Appendix A water																	
Outstanding Resource Water																	
High Quality Water																	
Sensitive Water Supply													X				
Scenic River																	
Cultural Significance																	
Appendix B water																	
Waters with recreational and/or ecological significance	X	X	X	X	X		X	X	X	X		X	X	X	X	X	X
Source water protection area																	
Groundwater vulnerability							X										
Low			X	X						X		X	X				
Moderate															X	X	X
High Quality Water								X									
Very High	X	X			X	X			X		X	X		X			X

* Approximated Cost Breakou

Chart 2. Projected Environmental Benefits for Proposed FY 11 CWSRF Loans Page 2 of 2

PROJECT	Elgin PWA	Bixby PWA	Durant CUA	Holdenville PWA	Okemah UA	Hominy PWA	Sperry USA	Lugert Allus Irrigation District Members
Project Number	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned	Unassigned
Binding Commitment Year	2011	2011	2011	2011	2011	2011	2011	2011
Population	1,210	13,336	13,549	9,925	4,732	2,584	1,645	
Assistance Amount Total	\$2,750,000	\$2,750,000	\$2,100,000	\$1,150,000	\$2,700,000	\$600,000	\$432,000	\$500,000
Category I	\$2,750,000							
Category II								
Category IIIA								
Category IIIB		\$1,072,500	\$2,100,000	\$1,150,000	\$2,700,000	\$600,000		
Category IVA		\$220,000					\$432,000	
Category IVB		\$1,210,000						
Category VI		\$247,500						
Category VII								\$500,000
Category X								
Waterbody name	Trib to Ninemile Beaver Ck	Arkansas R.	Caney Ck.	Bird Ck	Battle Ck.	Penn Ck.	Hominy Ck	Salt Fork of Red R.
Affected Waterbody ID.	ok 311210000130	ok 120420010010	ok 410700000100	ok 520800010050	ok 520500010290	ok 121300040290	ok 121300040010	ok 311600020010
PROJECT TYPE FACTOR								
Consent Order or Enforceable NPDES Permit Schedule	X			X	X	X		
Eliminate or reduce documented health threat or NPDES violation within watershed that is a water supply	X							
Eliminate or reduce documented health threat or NPDES violation				X	X	X		
All other projects sustaining or reducing current degree of treatment, increasing capacity, reliability, or efficiency, reclaim/reuse water, or reduce documented water quality threat		X	X				X	
WATER QUALITY RESTORATION FACTOR								
Affects 303d listed stream		X					X	X
Top-ten NPS Priority Watershed								
Project implements water quality plan								
WATER QUALITY PROTECTION FACTOR								
Appendix A water								
Outstanding Resource Water								
High Quality Water								
Sensitive Water Supply								
Scenic River								
Cultural Significance								
Appendix B water								
Waters with recreational and/or ecological significance	X	X			X	X	X	
Source water protection area								
Groundwater vulnerability								
Low			X		X			X
Moderate								
High Quality Water								
Very High	X	X		X		X	X	

* Approximated Cost Breakou

CHART 3. Binding Commitment Requirements with Respect to Federal Payments by Federal Fiscal Quarter

(Beginning July 1, 2010)

This table lists "select binding commitments," those wastewater construction projects that meet the requirements of the federal capitalization grant, including all federal crosscutting laws and authorities. These projects may receive loan proceeds from any source within the CWSRF, including capitalization grant/State matching funds, bond funds, or "2nd round" funds (loan repayments). Refinancing loans are not included on this table.

PROJECT NAME/COMMUNITY SERVED	PROJECT NUMBER	BINDING COMMITMENT DATE	Federal FY 2010	Federal FY 2011				TOTALS
			QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	
Okmulgee MA	ORF-09-0012	07/13/10	5,300,000					5,300,000
Broken Arrow MA	ORF-09-0033	07/13/10	5,735,000					5,735,000
Bartlesville MA	Unassigned	07/13/10	1,600,000					1,600,000
El Reno MA	Unassigned	09/14/10		7,225,229				7,225,229
Tulsa MUA	Unassigned	02/08/11			52,180,000			52,180,000
Muskogee UA	ORF-10-0002	07/13/10	6,940,000					6,940,000
Oklahoma City Water Trust	Unassigned	08/10/10	33,500,000					33,500,000
Bixby PWA	Unassigned	08/10/10	2,750,000					2,750,000
Durant CUA	Unassigned	08/10/10	2,100,000					2,100,000
Capitalization Grant Administration	N/A	N/A	264	334	218	100	48	964
(1) Annual Select Binding Commitment Totals			57,925,264	7,225,563	52,180,218	100	48	117,331,193
(2) Cumulative Binding Commitment Totals ¹			784,702	58,709,966	65,935,529	118,115,747	118,115,847	118,115,895
(3) Fiscal Year Select Binding Commitment Totals			57,925,264	N/A	N/A	N/A	59,405,929	
(4) CAP Grant Award & State Match			9,836	16,461	19,200	0	0	45,497
(5) Cumulative Required Binding Commitment Totals			294,385	304,221	320,682	339,882	339,882	
(6) Binding Commitment Totals as a Percentage of Required Binding Commitment Totals			266.6%	19298.5%	20561.0%	34752.0%	34752.0%	34752.0%

¹ Projections

CHART 4. Federal Capitalization Grant Payment Schedule by State & Federal Fiscal Quarter

NOTE FROM AUDIT GUIDE: The payment schedule identifies the dates that capitalization grant funds will be available to the state. The state generally has one year after the payment to obligate the funds, which is known as making "binding commitments" to loan recipients. Binding commitments made must equal 120% of the payments received one year earlier, which accounts for both the federal and state shares of the SRF.

Actual & Projected Increases in SRF Federal Letter of Credit (\$000)

State Fiscal Year		LETTER OF CREDIT AWARD											
		FY89-99	FY 01	FY 01	FY 02	FY 05 ¹	FY 06	FY 07	FY 08	FY 09	FY 09	FY 10	FY 11
			QTR 4	QTR 4	QTR 4	QTR 1	QTR 1	QTR 1	QTR 1	QTR 1	QTR 4	QTR 4	QTR 3
Federal Fiscal Year		FY00	FY01	FY02	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 10	
		QTR 3	QTR 3	QTR 3	QTR 4	QTR 4	QTR 4	QTR 4	QTR 4	QTR 3	QTR 3	QTR 2	
89	16,875.4	16,875.4											
90	7,862.0	7,862.0											
91	16,580.6	16,580.6											
92	15,697.7	15,697.7											
93-1	15,528.5	15,528.5											
94	9,632.6	9,632.6											
95	9,951.2	9,951.2											
96	16,300.4	16,300.4											
97	4,986.1	4,986.1											
98	10,879.1	10,879.1											
99	10,880.0	10,880.0											
00	10,996.7		10,996.7										
01	10,746.8			10,746.8									
02	10,770.7				10,770.7								
03	10,700.7					10,700.7							
04	10,720.4						10,720.4						
05	8,693.8							8,693.8					
06	7,046.3								7,046.3				
07	8,634.3									8,634.3			
08	5,453.1									5,453.1			
09	5,453.1										5,453.1		
ARRA	31,662.1										31,662.1		
10	16,461.0											16,461.0	
11	16,000.0												16,000.0
Total	256,051.7		10,996.7	10,746.8	10,770.7	10,700.7	10,720.4	8,693.8	7,046.3	14,087.4	31,662.1	21,914.1	16,000.0
Cumulative Grant Awards			146,170.4	156,917.1	167,687.8	178,388.5	189,109.0	197,802.8	204,849.1	218,936.5	250,598.6	272,512.7	288,512.7

CHART 5 FY 2011 Unrestricted Fund Sources

This chart presents sources of "unrestricted funds," or funds which are not currently obligated to loans or to pay off existing debt, including state match notes, bond issues, interest, etc., and which may be used for loans to communities during FY 2011.

(Beginning July 1, 2010)

SOURCES OF FUNDS	TOTALS
BEGINNING UNRESTRICTED BALANCE (FY 10 Carryover)	-224,221,274.12
2009 CAPITALIZATION GRANT PAYMENTS	5,453,100.00
2010 CAPITALIZATION GRANT PAYMENTS	16,461,000.00
2011 CAPITALIZATION GRANT PAYMENTS	16,000,000.00
STATE MATCH DEPOSITS**	4,315,060.00
PROPOSED 2011 BOND ISSUE	175,000,000.00
RELEASE OF 2004 BOND RESERVE FUNDS	2,562,252.00
LOANS:	
Interest Earnings	4,460,490.42
Principal Repayments	14,970,627.65
INVESTMENT INCOME-TREASURY	
State Treasurer's Cash Management Program Interest (recycled funds)	1,109,678.11
Lawton Investment Principal/Interest	652,893.00
Investment Earnings 2004 Bond Proceeds *	2,285,899.88
Short-Term Investment Earnings-BancTrust	6,318.93
TOTAL SOURCES	19,056,045.87

FUND COMMITMENTS	TOTALS
LOAN OBLIGATIONS - ON FY 2011 PRIORITY LIST	150,903,229.00
OWRB ADMINISTRATIVE EXPENSES	700,000.00
BOND INTEREST for 2004 CWSRF Bonds:	4,840,250.00
BOND PRINCIPAL for 2004 CWSRF Bonds:	5,640,000.00
TOTAL FUND COMMITMENTS	162,083,479.00

ADDITIONAL FUNDS NEEDED***	-143,027,433.13
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* Funds are restricted for 2004 Bond debt service and arbitrage rebate liability

** Total amount of state matching funds for the 09 and 10 Cap Grants are reduced by \$67,760 which was overmatch provided from the 2004 Bond Issue

CHART 6. Actual & Projected CWSRF Disbursement Schedule by State Fiscal Year (\$000)

Beginning July 1, 2010

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08-'10)			Projected (State FY '11) ²				OUT YEARS	
					FY 08	FY09	FY10	FY 11					
								QTR 1	QTR 2	QTR 3	QTR 4		
SELECT PROJECTS													
1	TULSA	ORF-04-0014	09/15/06	7,900	01/11/05	4,525	1,007	945	3	3	2	2	15
2	TULSA	ORF-05-0009	03/09/06	3,130	02/14/06	756	970	407	180	135	171	58	175
3	BROKEN ARROW	ORF-05-0006	06/01/07	15,000	06/20/06	3,041	5,353		512	448	392	343	2,401
4	TULSA	ORF-06-0006	12/09/06	17,825	10/10/06	3,029	10,474	1,884	305	267	233	204	1,429
5	LAWTON	ORF-04-0012	08/13/05	10,815	06/14/05	289	253	591	148	129	113	99	693
6	BETHANY	ORF-05-0001	03/08/08	5,190	01/08/08		3,419	1,418	44	39	34	30	207
7	PONCA CITY	ORF-07-0006	12/08/07	5,565	10/09/07	158	1,752	852	350	307	268	235	1,643
8	TULSA NPS	ORF-08-0004	08/09/08	1,250	06/10/08		209		260	195	146	110	329
9	GUYMON	ORF-08-0001	08/09/08	16,400	06/10/08		10,375	5,981	6	5	4	4	26
10	TULSA	ORF-09-0001	05/09/09	11,320	03/10/09			2,875	1,056	924	808	707	4,950
11	MOORE	ORF-08-0002	06/13/09	3,943	04/14/09		880		85	74	65	57	399
12	TULSA	ORF-09-0006	06/13/09	7,350	04/14/09				919	804	703	615	4,308
13	NORMAN	ORF-09-0007	08/08/09	7,640	06/09/09			1,596	756	661	578	506	3,543
14	OWASSO	ORF-09-0003	10/10/09	10,795	08/11/09			1,669	1,141	998	873	764	5,349
15	MUSTANG	ORF-08-0006	06/13/09	6,590	04/14/09		140	4,214	280	245	214	187	1,311
16	GUYMON	ORF-09-0013	12/12/09	1,335	10/13/09			803	133	100	75	56	168
17	OWASSO	ORF-09-0007	10/10/09	4,510	08/11/09			977	442	386	338	296	2,071
18	OKLAHOMA CITY	ORF-09-0021	09/12/09	9,469	07/14/09			2,805	833	729	638	558	3,906
19	LAWTON	ORF-09-0015	11/07/09	12,270	09/08/09				1,534	1,342	1,174	1,027	7,192
20	DEL CITY	ORF-09-0022	10/10/09	1,190	08/11/09			1,041	37	14	12	11	75
21	EL RENO	ORF-09-0025	01/09/10	205	11/10/09			104	51	25	13	6	6
22	MUSKOGEE	ORF-09-0020	10/10/09	1,435	08/11/09			1,111	81	61	46	34	102
23	DUNCAN	ORF-09-0016	11/07/09	340	09/08/09			111	115	57	29	14	14
24	STILLWATER	ORF-09-0024	10/10/09	1,875	08/11/09			106	442	332	249	187	560
25	ARDMORE	ORF-09-0018	11/07/09	1,090	09/08/09			682	102	77	57	43	129
26	PONCA CITY	ORF-09-0011	09/12/09	575	07/14/09			385	48	36	27	20	60
27	TULSA	ORF-10-0001	06/12/10	27,757	04/13/10			195	3,445	6,029	2,261	1,978	13,848
28	MOORE	ORF-08-0002A	07/10/10	42,837	05/11/10				5,355	4,685	4,100	3,587	25,110
29	ENID	ORF-09-0025	07/10/10	39,900	05/11/10				4,988	8,728	6,546	4,910	14,729
30	OKMULGEE	ORF-09-0012	09/11/10	5,300	07/13/10				663	580	507	444	3,107
31	BROKEN ARROW	ORF-09-0033	09/11/10	5,735	07/13/10				717	627	549	480	3,362
32	BARTLESVILLE	Unassigned	09/11/10	1,600	07/13/10				400	300	225	169	506
33	EL RENO	Unassigned	11/13/10	7,225	09/14/10				903	790	691	605	4,235
34	TULSA	Unassigned	04/09/11	52,180	02/08/11				6,523	5,707	4,994	4,370	30,587
35	MUSKOGEE	ORF-10-0002	09/11/10	6,940	07/13/10				868	759	664	581	4,068
36	OKLAHOMA CITY	Unassigned	10/09/10	33,500	08/10/10				4,188	3,664	3,206	2,805	19,637
37	BIXBY	Unassigned	10/09/10	2,750	08/10/10				688	516	387	290	870
38	DURANT	Unassigned	08/10/10	2,100	08/10/10				525	394	295	221	664
NON-SELECT PROJECTS													
1	PAULS VALLEY	ORF-04-0013	09/22/05	900	09/13/05	350	6	197	2	2	1	1	3
2	BEGGS	ORF-05-0005	05/12/07	4,220	03/13/07	418	1,051	1,223	191	167	146	128	896
3	HOBART	ORF-06-0005	05/12/07	1,040	03/13/07	604	386		13	9	7	5	16
4	VINITA	ORF-04-0005	08/31/05	1,183	08/09/07								
5	ROLAND	ORF-08-0003	08/09/08	3,855	06/10/08		1,314	2,187	44	39	34	30	208
6	HARRAH	ORF-08-0008	06/13/09	1,930	04/14/09			1,722	52	39	29	22	66
7	PAWNEE	ORF-08-0005	06/13/09	1,275	04/14/09		50	1,195	8	6	4	3	9
8	ADAIR	ORF-08-0007	07/11/09	1,400	05/12/09			1,036	91	68	51	38	115
9	PERKINS	ORF-09-0002	07/11/09	7,225	05/12/09		495	1,925	601	526	460	402	2,817
10	GROVE	ORF-07-0008	09/12/09	1,900	07/14/09			1,720	45	34	25	19	57
11	COLLINSVILLE	ORF-09-0009	09/12/09	550	07/14/09			236	79	59	44	33	99
12	WALTERS	ORF-09-0005	12/12/09	1,326	10/13/09			357	242	182	136	102	307
13	PIEDMONT	ORF-09-0014	10/10/09	2,515	08/11/09			873	410	308	231	173	519
14	GRAND LAKE	ORF-09-0004	11/07/09	992	09/08/09			117	219	164	123	92	277
15	SULPHUR	ORF-09-0030	02/06/10	10,200	12/08/09			1,350	1,106	968	847	741	5,187
16	HENRYETTA	ORF-09-0029	12/12/09	3,650	10/13/09			470	397	348	304	266	1,864
17	OCC	ORF-09-0028	11/07/09	2,000	09/08/09			2	500	375	281	211	632
18	TULSA CITY-CO	ORF-09-0034	12/12/09	202	10/13/09			89	57	28	14	7	7
19	COMCD	ORF-09-0027	03/13/10	1,501	01/12/10				375	281	211	158	475

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08- '10)			Projected (State FY '11) ²				OUT YEARS
					FY 08	FY09	FY10	FY 11				
								QTR 1	QTR 2	QTR 3	QTR 4	
20	University of Oklahoma	ORF-09-0031	56.5	10/13/09				28	14	7	4	4
21	OK State University	ORF-09-0032	2,000	10/13/09				500	375	281	211	633
22	HOBART	ORF-07-0007	1,381	07/13/10				345	259	194	146	437
23	NICOMA PARK	ORF-09-0035	160	07/13/10				40	30	23	17	51
24	INOLA	ORF-06-0011	1,800	10/12/10				450	338	253	190	570
25	PAWNEE	ORF-10-0003	6,450	09/14/10				806	705	617	540	3,781
26	GUTHRIE	Unassigned	5,000	08/10/10				625	547	479	419	2,931
27	YALE	Unassigned	2,100	11/09/10				525	394	295	221	664
28	BRISTOW	Unassigned	1,050	04/12/11				263	197	148	111	332
29	LONE GROVE	ORF-04-0011	2,800	01/11/11				700	525	394	295	886
30	WETUMKA	Unassigned	3,500	12/14/10				438	383	335	293	2,052
31	FAIRVIEW	Unassigned	1,200	08/10/10				300	225	169	127	380
32	ELGIN	Unassigned	2,750	07/13/10				688	516	387	290	870
33	HOLDENVILLE	Unassigned	1,150	12/14/10				288	216	162	121	364
34	OKEMAH	Unassigned	2,700	10/12/10				675	506	380	285	854
35	HOMINY	Unassigned	600	10/12/10				150	113	84	63	190
36	SPERRY	Unassigned	432	01/11/11				108	81	61	46	137
37	LUGERT-ALTUS	Unassigned	500	08/10/10				125	94	70	53	158
PROGRAM ADMINISTRATION FEES (Capitalization Grant 4% Set-Aside)												
Program Admin. (4%)	88-89 GRT.	N/A	675	N/A								
Program Admin. (4%)	90 GRANT	N/A	314	N/A								
Program Admin. (4%)	91 GRANT	N/A	663	N/A								
Program Admin. (4%)	92 GRANT	N/A	628	N/A								
Program Admin. (4%)	93 GRANT	N/A	621	N/A								
Program Admin. (4%)	94 GRANT	N/A	385	N/A								
Program Admin. (4%)	95 GRANT	N/A	398	N/A								
Program Admin. (4%)	96 GRANT	N/A	652	N/A								
Program Admin. (4%)	97 GRANT	N/A	199	N/A								
Program Admin. (4%)	98 GRANT	N/A	435	N/A								
Program Admin. (4%)	99 GRANT	N/A	435	N/A								
Program Admin. (4%)	00 GRANT	N/A	439	N/A								
Program Admin. (4%)	01 GRANT	N/A	429	N/A								
Program Admin. (4%)	02 GRANT	N/A	430	N/A								
Program Admin. (4%)	03 GRANT	N/A	428	N/A								
Program Admin. (4%)	04 GRANT	N/A	428	N/A								
Program Admin. (4%)	05 GRANT	N/A	348	N/A								
Program Admin. (4%)	06 GRANT	N/A	281	N/A	32							
Program Admin. (4%)	07 GRANT	N/A	345	N/A		127						
Program Admin. (4%)	08 GRANT	N/A	218	N/A			150	68				
Program Admin. (4%)	ARRA	N/A	1,266	N/A			1,000	266				
Program Admin. (4%)	09 GRANT	N/A	218	N/A					218			
Program Admin. (4%)	10 GRANT	N/A	658	N/A						100	48	510
TOTALS			487,218.4	N/A	13,202	38,261	48,984	50,937	50,506	39,077	32,526	191,143
PAYMENTS TO SELECT PROJECTS			392,831.2	N/A	11,798	34,832	33,135	39,119	41,170	31,689	26,615	161,787
PAYMENTS TO NON-SELECT PROJECTS			83,494.2	N/A	1,372	3,302	14,699	11,484	9,118	7,288	5,863	28,846
PAYMENTS TO ADMIN.			8,751.0	N/A	32	127	1,150	334	218	100	48	510

**FOR ALL PROJECTS RECEIVING ASSISTANCE FROM THE 2008 THROUGH 2010
 (INCLUDES BOTH FIRST AND SECOND ROUND FUNDS)**

	FY	FY	FY	FY 2010				OUT YEARS
	2008	2009	2010	QTR 1	QTR 2	QTR 3	QTR 4	
CWSRF PROGRAM TOTALS	13,202	38,261	48,984	50,937	50,506	39,077	32,526	191,143
CUMULATIVE TOTALS	13,202	51,463	100,447	151,384	201,890	240,967	273,493	464,636

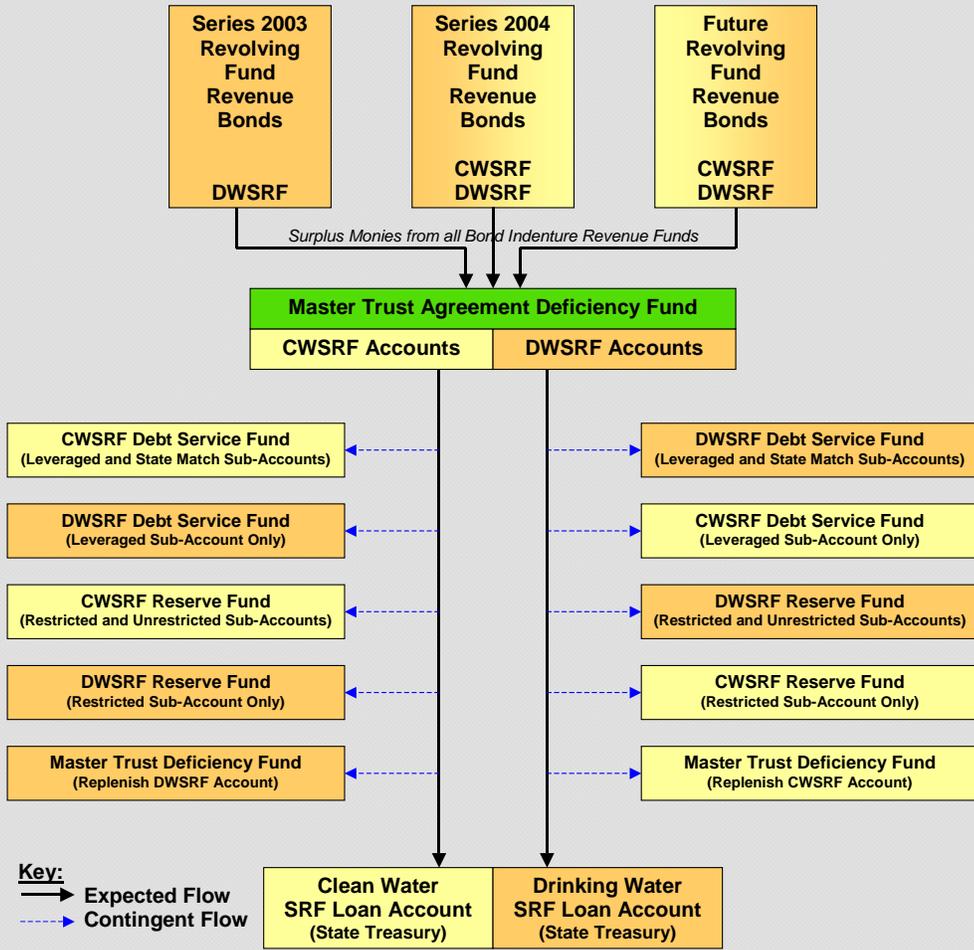
1 Estimated projecting loan closing 2 months following board approval date

2 Estimated assuming loan amount: < \$500,000 = 2 quarters; \$500,001 - \$3,500,000 = 4 quarters; and > \$3,500,000 = 8 quarters

Clean Water and Drinking Water State Revolving Funds

Cross-Collateralization
under the
Master Trust Agreement

Oklahoma Water Resources Board





ORF-000
Rev-05/10

Oklahoma Clean Water State Revolving Fund Green Project Reserve (GPR) Checklist

Purpose

The Oklahoma Water Resources Board (OWRB) Clean Water State Revolving Fund (CWSRF) loan program's GPR checklist is a tool to aid loan applicants and consultants in determining the green components of any given project, identifying both green performance targets and submittal materials that will be used for the implementation of the green components. It is also a tool to aid OWRB staff in tracking the implementation of the GPR throughout Oklahoma.

How to Use the Checklist

The following checklist is provided as a resource for CWSRF loan program applicants and consultants. The CWSRF loan program may accept components and technologies other than those listed in the attachment EPA CWSRF GPR Specific Guidance upon OWRB staff review and approval. Applicants are encouraged to introduce additional innovative green technologies in the proposed projects. The Checklist should be provided to the consultants by Loan applicants' staff at the earliest possible stage of the project planning process, ideally during pre-application consultation.

How to Submit the Checklist

It is the applicant's responsibility to obtain the necessary approvals and permits, and to properly design, build and effectively operate and maintain the proposed facilities covered in the Engineering Report (ER) or planning document. Loan applicants should return a completed copy of the checklist with their ER. The completion of the Checklist is equally valuable for projects that do not meet the GPR, since it will help OWRB staff to track the implementation of the various features within the GPR.

Contact for more Information: Jennifer Wasinger, Assistant Chief, FAD or Your OWRB project engineer @405-530-8800

I. CWSRF Loan Applicant Information

Loan Number (if assigned): _____
Applicant Name: _____
Project Name/Location: _____
Latest date this list was last updated by the Applicant: _____

II. Categories

Please mark, from the categories below, all the GPR components that are proposed for the project.

1. Energy Efficiency Components:

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.

Projects that achieve a 20% reduction in energy consumption are categorically eligible for GPR, energy savings < 20% requires a business case. (Sample business cases are in attachment)

N/A Yes

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | a. Site plan for facilities includes sustainable building components. |
| <input type="checkbox"/> | <input type="checkbox"/> | b. The design includes an energy reduction plan with at least a 20% reduction goal |
| <input type="checkbox"/> | <input type="checkbox"/> | c. The Treatment Facility participates in EPA energy star program ¹ |
| <input type="checkbox"/> | <input type="checkbox"/> | d. Project utilizes high efficiency fixtures, energy star components in heating, ventilating, and air conditioning (HVAC) equipment, Power Smart technology |
| <input type="checkbox"/> | <input type="checkbox"/> | e. Project utilizes a SCADA system to reduce overall energy consumption by 20% and enhance process control. (Please show in business case the energy and cost saved in \$\$\$numbers) |
| <input type="checkbox"/> | <input type="checkbox"/> | f. Use of renewable energy alternatives (e.g., geothermal, solar, off grid, Hydro Wind) (Categorical) |
| <input type="checkbox"/> | <input type="checkbox"/> | g. Project proposes to use high efficiency pumps (achieve 20% reduction in energy consumption) (categorical-documentation required) |
| <input type="checkbox"/> | <input type="checkbox"/> | h. 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 (business case required) |
| <input type="checkbox"/> | <input type="checkbox"/> | i. Collection system Infiltration/Inflow (I/I) detection equipment (Categorical) |

2. Water Efficiency Components:

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.

N/A Yes

- a. The project utilizes on site stormwater management/rain harvesting (e.g., green roof, permeable paving, on-site drainage, rain garden) (Categorical)
- b. Recycling and water reuse projects that replace potable sources with non-potable sources, Extra treatment costs and distribution pipes associated with water (Categorical)
- c. The project incorporates water use reduction measures (e.g., low consumption fixtures, grey water systems, and stormwater irrigation measures) (Categorical)
- d. The Treatment Facility participates in EPA's Water sense Program.
- e. Gray water, condensate and wastewater effluent reuse systems (where local codes allow the practice) (Categorical)
- f. Installing any type of water meter in previously unmetered areas
 - (i) If rate structures are based on metered use
 - (ii) Can include backflow prevention devices if installed in conjunction with water meter (Categorical)
- g. Replacing existing broken/malfunctioning water meters, or upgrading existing meters, (Categorical) with:
 - (i) Automatic meter reading systems (AMR), for example Advanced metering infrastructure (AMI), Smart meters
 - (ii) Meters with built in leak detection
 - (iii) Can include backflow prevention devices if installed in conjunction with water meter replacement
- h. Water efficient landscaping (e.g., drought resistant and/or native plantings, use of non-potable water for irrigation, high efficiency irrigation)

3. Green Infrastructure Components:

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.

N/A Yes

- a. Implementation of green streets (combinations of green infrastructure practices in transportation right-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. Vector trucks and other capital equipment necessary to maintain green infrastructure projects. (Categorical)
 - () () b. 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. (Categorical)
 - () () c. Offsite reuse of either treated wastewater or a bio solids treatment process
Significantly reduces residuals disposal.
 - () () d. The project provides enhanced waste diversion facilities
(e.g., on-site recycling, on-site composting) (Categorical)
 - () () e. Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks
(categorical)
 - () () f. The project beneficially utilizes recycled materials. (Categorical)
 - () () g. Low-impact development (LID).
 - () () h. Downspout disconnection to remove stormwater from combined sewers and storm sewers (Categorical)

4. Environmentally Innovative Project (EIP) Component

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.*

- () () a. Utility Sustainability Plan consistent with EPA's SRF sustainability policy.
- () () b. Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry)
 - (i). EPA Climate Leaders: <http://www.epa.gov/climateleaders/basic/index.html>
 - (ii). Registry: <http://www.theclimateregistry.org/>
- () () c. Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.
- () () d Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems

Total Present worth Cost Analysis Component:

To properly evaluate a project’s long-term costs, a Total Present Worth (TPW) cost analysis of feasible alternatives is strongly recommended. TPW cost for each alternative includes Construction Cost, Non construction Cost (e.g., Engineering, Inspection, Legal, Land, Easements, Soils/Foundation Testing, Permits, O& M Manual and Other cost), estimated annual operation and maintenance (O&M) costs during the service life (for example 20 years) discounted to its present value and added to the Construction & Non construction Cost together known as TPW*. The resulting TPW allows participants to assess the true cost of construction projects. **Prepare a comparison of the selected alternative for the project with and without the proposed GPR components.**

**SRF Loan Programs will provide the participant/applicant an estimated interest rate to be used in the life- cycle analysis.*

5. Cost Estimate for Green Project Components:

Provide a cost estimate for the green infrastructure project or components. (Add pages if necessary)

(Description)	(GPR Component)	(Cost \$\$)
i. _____	_____	_____
ii. _____	_____	_____
iii. _____	_____	_____
		Total: _____

6. Please describe the problems with the existing system and explain the technical and financial benefits of using green components included in the project. (Please add pages if necessary)

1. For more information on energy star see http://www.energystar.gov/index.cfm?c=government.wastewater_drinking_water
2. For more information on LEED (Leadership in Energy and Environmental Design) certification see http://www.usgbc.org/LEED/LEED_main.asp
3. For more information on green building see <http://www.epa.gov/greenbuilding/>

Sample calculation for energy and cost savings for SCADA control:

Project #	LS #	kWh Consumption for Current Run Times/yr	Energy Cost/yr	Excessive kWh Consumption/yr	kWh Consumption/yr after SCADA	Energy Cost/yr	Cost Savings	Energy Savings	Eligible Costs			
E1	20	111,521	\$ 104,829.74	7,806	103,715	\$ 97,491.66	\$ 7,338.08	7%	\$ 4,500.00	Efficiency Calc:		
E4	48	50,093	\$ 47,087.42	1,503	48,590	\$ 45,674.80	\$ 1,412.62	3%	\$ 4,500.00			
Sub 1	82	3,335	\$ 3,134.90	200	3,135	\$ 2,946.81	\$ 188.09	6%	\$ 4,500.00	(Total Run Hours - Excess Run Hours)/Total Run Hours		
	109	35,292	\$ 33,174.48	706	34,586	\$ 32,510.99	\$ 663.49	2%	\$ 4,500.00			
Sub 4	17	4,792	\$ 4,504.48	144	4,648	\$ 4,369.35	\$ 135.13	3%	\$ 4,500.00			
Sub 5	27	15,570	\$ 14,635.80	1,246	14,324	\$ 13,464.94	\$ 1,170.86	8%	\$ 4,500.00			
Sub 6	64	170,718	\$ 160,474.92	8,536	162,182	\$ 152,451.17	\$ 8,023.75	5%	\$ 4,500.00			
Sub 8	8	113,280	\$ 106,483.20	3,398	109,882	\$ 103,288.70	\$ 3,194.50	3%	\$ 4,500.00			
Sub 9	49	24,749	\$ 23,264.06	990	23,759	\$ 22,333.50	\$ 930.56	4%	\$ 4,500.00			
	61	27,594	\$ 25,938.36	1,656	25,938	\$ 24,382.06	\$ 1,556.30	6%	\$ 4,500.00			
	74	6,693	\$ 6,291.42	67	6,626	\$ 6,228.51	\$ 62.91	1%	\$ 4,500.00			
	76	27,213	\$ 25,580.22	816	26,397	\$ 24,812.81	\$ 767.41	3%	\$ 4,500.00			
Sub 9b	68	39,127	\$ 36,779.38	2,739	36,388	\$ 34,204.82	\$ 2,574.56	7%	\$ 4,500.00			
Sub 11	34	18,015	\$ 16,934.10	1,081	16,934	\$ 15,918.05	\$ 1,016.05	6%	\$ 4,500.00			
	36	19,590	\$ 18,414.60	1,763	17,827	\$ 16,757.29	\$ 1,657.31	9%	\$ 4,500.00			
	42	12,440	\$ 11,693.60	871	11,569	\$ 10,875.05	\$ 818.55	7%	\$ 4,500.00			
System-Wide TOTALS		680,022	\$ 639,220.68	47,602	632,420	\$ 607,710.50	\$ 31,510.18	7%	\$ 72,000.00			

LS #	Total Run Hours	Excess Run Hours	% Excess										
20	7708	572.1	7%										
48	4645	154	3%										
82	1967.8	119	6%										
109	4961.5	78	2%										
17	584.3	15.9	3%										
27	2574.8	207.5	8%										
64	4984.2	234.2	5%										
8	3022.4	87.1	3%										
49	4419.6	173.1	4%										
61	3986.9	229.4	6%										
74	790.6	6.4	1%										
76	5407.5	169.6	3%										
68	2923.1	211.9	7%										
34	6837.3	411.8	6%										
36	4058.2	356.2	9%										
42	4069.2	283.5	7%										
NOTES:													
Project specs call for SCADA units to consist of:													
	Siemens Intralink LC150 (or similar)												
	MDS iNET900 Data Transmission Unit												
Estimate cost per SCADA unit = \$4,500 per correspondence from local Distributor													
(Municipal Pump & Control)													

Guidance on Energy Efficiency Business Case for Wastewater Pumping Systems for Green Project Reserve

Modifications, retrofits or replacement of existing wastewater pumping systems that achieve a 20% increase in energy efficiency will categorically qualify for the Green Project Reserve (GPR). Projects that do not achieve a 20% increase in energy efficiency can also count towards the GPR if they have a business case showing how the project significantly improves energy efficiency. Information to be included in a business case for wastewater pumping stations is provided below.

Business cases for wastewater pumping systems must include information that demonstrates that energy efficiency is the primary goal of the project. They should clearly show that: 1) the most energy efficient equipment is being used in the project, 2) that energy efficient design and operational considerations and practices are followed, 3) the percent increase in energy efficiency and KWH saved, and 4) why further energy efficiency improvements cannot be achieved.

1) Energy Efficient Equipment : The business case shall demonstrate that selected equipment is of the highest efficiency suitable for the project. The following are examples of standards or guidelines to be met:

- Selection of new or replacement electrical equipment should meet or exceed energy efficiency standards set forth by professional engineering and manufacturers associations such as the National Electrical Manufacturers Association (NEMA).
- If it is not possible to select new electrical equipment that can meet or exceed energy efficiency standards then applicants must provide acceptable evidence of why this could not be achieved, with rationale for selecting alternate equipment if the goal of energy efficiency is to be achieved.

2) Energy Efficient Design Practices and Considerations: The business case shall demonstrate that all energy efficient design practices and considerations suitable for the project were used. The following are general examples of design considerations where energy efficiency could be demonstrated:

- Pumping systems should be designed to operate in their most efficient zone. Pumps should be selected to operate close to the Best Efficiency Point (BEP) on a pump curve defined as the point with maximum efficiency of the pump. Choose pumps that result in the lowest friction head loss and ensure that pumps are properly sized for the pumping system.
- Pumping systems should be designed to reduce flows to be pumped where possible.
- Reduce pipe friction and lower head losses to reduce the energy needed for pumping. Note that repair and replacement of the collection system piping does not qualify as “green” except in the most dramatic infiltration/inflow cases.
- Where appropriate for energy efficiency purposes, use distributed control systems to operate the most efficient combination of pumps, and at the proper pump speeds, for needed flow rates and pressures.

3) Energy Savings: Comparing the energy requirements of the existing system with the energy requirements of the proposed upgrades yields the increase in energy efficiency. Business cases for

energy efficient wastewater pumping projects should calculate the increase in energy efficiency as follows:

$$\frac{\text{kWh/year used prior to the upgrade} - \text{kWh/year used after the upgrade}}{\text{kWh/year used prior to the upgrade}}$$

The answer is expressed as a percentage improvement. The business case should clearly report the kWh/year saved by the project.

4) **Energy Saving Justification:** Business cases that demonstrate significant energy efficiency improvements will utilize all practical opportunities to improve energy efficiency. Consequently, each business case should discuss why the project cannot achieve a higher level of energy efficiency. One possible answer is that prior energy efficiency improvements have elevated the operation to a point where the remaining gains represent a smaller improvement.

Sample Calculation for energy and cost savings for Pumps:

Demonstrating Energy and Cost Savings for Pumps		
Pump Parameter	Comparison Pump	New Pump (Proposed Pump, Spec)
Manufacturer	EPA Region 6 Criteria	
Voltage/ Phase	240/3	
Motor Efficiency, %	89	
Pump Efficiency	72.5	
Power usage, Kw-Hr/Yr	283,021	
Power Cost, \$/Yr	0.09	
Operational Cost, \$/Yr	25472	
Savings, \$/Yr	N/A	
Base Standard Efficiency, %	77	0

New Standard Grade Efficiency: Pumps -72.5%; Motors-89% : $0.725 * 0.89 = 0.65$

Adding 20% efficiency to the standard grade Efficiency:

Base Std. Efficiency, %	77
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ATTACHMENT 2

2010 Clean Water and Drinking Water State Revolving Fund 20% Green Project Reserve: Guidance for Determining Project Eligibility

April 21, 2010

I. Introduction: The Fiscal Year (FY) 2010 Appropriation Law (P.L. 111-88) 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 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs* dated April 21, 2010. 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 111-88 included the language “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: 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 2010 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 2010 Appropriations Act. 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.¹

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

¹ Drinking Water Utilities can apply for CWSRF funding

CWSRF Technical Guidance

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

1.0 GREEN INFRASTRUCUTRE

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

1.2 Categorical Projects

- 1.2-1 Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment or retrofits including: permeable pavement², 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 pavement², 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 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.

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

This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds this may not be the original hydrology.

- 1.2-8 Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).³
 - 1.2-8a Includes constructed wetlands.
 - 1.2-8b May include natural or restored wetlands if the wetland and its multiple functions are not degraded and all permit requirements are met.
- 1.2-9 The water quality portion of projects that employ development and redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.
- 1.2-10 Fee simple purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.

1.3 Projects That Do Not Meet the Definition of Green Infrastructure

- 1.3-1 Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
- 1.3-2 Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins.
- 1.3-3 In-line and end-of-pipe treatment systems that only filter or detain stormwater.
- 1.3-4 Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal/floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
- 1.3-5 Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels. Green infrastructure projects that include pipes to collect stormwater may be justified as innovative environmental projects pursuant to Section 4.4 of this guidance.
- 1.3-6 Hardening, channelizing or straightening streams and/or stream banks.
- 1.3-7 Street sweepers, sewer cleaners, and vactor trucks unless they support green infrastructure projects.

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.

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

1.4-5 Design criteria are available at:

<http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm> and
<http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm> and

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 to more efficient landscape irrigation systems, including moisture and rain sensing controllers.

2.2-8 Retrofit or replacement of existing agricultural irrigation systems to 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.

2.5-5 New water efficient agricultural irrigation system.

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 GPR⁴. Retrofit projects should compare energy used by the existing system or unit process⁵ 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_energymangement.pdf.

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_energymangement.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_portfolioman

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

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

[ger](#)) 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.
 - 3.5-8a 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's SRF sustainability policy.
- 4.2-3 Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry)
 - 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=10WCAP2&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 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs*). An approved business case must be included in the State’s project files and contain clear documentation that the project achieves identifiable and substantial benefits. The following sections provide guidelines for business case development.

5.0 Length of a Business Case

- 5.0-1 Business cases must address the decision criteria for the category of project
- 5.0-2 Business cases should be adequate, but not exhaustive.
 - 5.0-2a There are many formats and approaches. EPA does not require any specific one.
 - 5.0-2b Some projects will require detailed analysis and calculations, while others many not require more than one page.
 - 5.0-2c Limit the information contained in the business case to only the pertinent ‘green’ information needed to justify the project.
- 5.0-3 A business case can simply summarize results from, and then cite, existing documentation – such as engineering reports, water or energy audits, results of water system tests, etc.

5.1 Content of a Business Case

- 5.1-1 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.
- 5.1-2 The cost and financial benefit of the project should be included, along with the payback time period where applicable. (NOTE: Clean Water SRF requires energy efficiency projects to be cost effective.)

5.2 Items Which Strengthen Business Case, but Are Not Required

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

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

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

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

Appendix F

May 16, 2010

*Oklahoma Water Resources Board to Hold Public Meeting on
Clean Water State Revolving Fund FY 2011 Intended Use Plan*

OKLAHOMA CITY - The Oklahoma Water Resources Board will hold a public meeting to receive comments on the Draft FY 2011 Clean Water State Revolving Fund (CWSRF) Project Priority List and Intended Use Plan on Thursday, June 17, 2010, at 10:00a.m. at 3800 North Classen Blvd, Oklahoma City. Eligible public systems may receive below market interest rate financing for construction and improvement of collection and treatment works, stormwater, abandoned site remediation, water/energy efficiency, green infrastructure, innovative green projects and nonpoint source pollution control activities which maintain Oklahoma's surface and groundwater resources.

A copy of the draft plan is available at the above address or www.owrb.ok.gov. To submit a project to be considered for funding or for further information contact: Jennifer Wasinger, Financial Assistance Division, (405)530-8800.

Oklahoma SAAP Grants (ACTIVE)					
Grantee	Amount	EPA Grant Number	NEPA Type & Target/Actual Date	Project Description	Status
<i>FY 2001</i>					
OWRB 3%	\$49,500	XP-976165-01	N/A		
Norman, OK	\$1,597,000	XP-986829-01	EA/FNSI	WWTP Improvements	Project Complete
<i>FY 2002</i>					
OWRB 3%	\$87,000	XP-976298-01	N/A		
Lawton, OK	\$1,940,000	XP-976164-01	EA/FNSI	Sewerline Rehabilitation	Project Complete
Norman, OK	\$873,000	XP-976065-01	EA/FNSI	WWTP Improvements	Project Complete
<i>FY 2003</i>					
OWRB 3%	\$73,700	XP-976165-01	N/A		
Hulbert, OK	\$216,800	XP-976904-01	EPA issued CE in December 2005	Lift station and line improvement	Project Complete
Altus, OK	\$433,700		No CE Received; Joe F. left last message with City Manager a few months ago.	WWTP Improvements	Planning Stage
Midwest City, OK	\$433,700		EPA CE issued July 2008	Water Infrastructure improvement	Project Started
Norman, OK	\$1,301,000	XP-976588-01	EPA CE issued	WWTP Improvements	Project Complete
<i>FY 2004</i>					
OWRB 3%(incr. FY 02)	\$82,100	XP-976298-01	N/A		
Lawton, OK	\$1,446,400	XP-976903-01	EA/FNSI	Water Infrastructure improvement	Project Complete
Norman, OK	\$192,900	XP-976588-01	EPA CE issued	Sludge management system improvements	Project complete
Midwest City, OK	\$192,900		EPA CE issued July 2008	Water Infrastructure improvement	Project Started
Arcadia, OK	\$313,400		No info yet;EID anticipated for last known project	New Wastewater line	Planning Stage
Choctaw, OK	\$313,400		EPA issued CE 08/05/08	WWTP Improvements	Planning Stage
Seminole, OK	\$192,900	XP-976855-01	EA/FNSI; 01/09/2007	Water Infrastructure improvement	Project Complete
<i>FY 2005</i>					
Seminole, OK	\$962,200	XP-966279-01	EA/FNSI; 01/09/2007	Water Infrastructure improvement	Project Complete
Skiatook, OK	\$96,200	XP-966099-01	EPA issued CE Feb. 9, 2006	WWTP Improvements	Project Complete
Marlow, OK	\$96,200	XP-966173-01	CE; 06/09/2006	Water Infrastructure improvement	Project Complete
Meeker, OK	\$77,000	XP-966385-01	CE DRAFT Sent to EPA	Water Infrastructure improvement	Planning stage
Sulphur, OK	\$192,400	XP-966622-01	EA/FNSI	Wastewater Collection System Improvement	Project Complete
<i>FY 2006</i>					
Wewoka, OK	\$266,750		Unknown	Water well drilling	Planning stage
Nicoma Park,OK	\$194,000		EID received	Wastewater collection system	Planning stage
<i>FY 2008</i>					
Ardmore,OK	\$300,000		Unknown	Water and Wastewater Project	Planning stage
<i>FY 2009</i>					
Ardmore, OK	\$1,597,000		Unknown	Water and Wastewater Project	Planning stage