

CLEAN WATER STATE REVOLVING FUND INTENDED USE PLAN

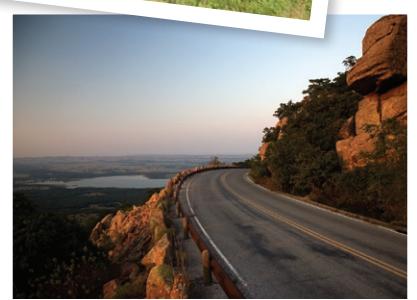
July 1, 2011



Financial Assistance Division
Oklahoma Water Resources Board

Mission

The mission of the OWRB is to enhance the quality of life for Oklahomans by managing, protecting, and improving the state's water resources to ensure clean, safe, and reliable water supplies, a strong economy, and a healthy environment.



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**“When the well’s dry,
we know the worth of water.”**

Benjamin Franklin

J.D. STRONG
EXECUTIVE DIRECTOR



MARY FALLIN
GOVERNOR

STATE OF OKLAHOMA
WATER RESOURCES BOARD

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 management of water usage.

We, along with our partners, are in the final stages of developing Oklahoma's Comprehensive Water Plan, which will be presented to Oklahoma's Governor and Legislature in early 2012. We are extremely proud of the work completed thus far, which has been developed using a tandem approach of robust public input and detailed technical studies and is expected to result in accurate and timely water-related data, intensive studies of available water and future needs, and more defensible permitting decisions that recognize both the inevitability of drought and the need for water conservation.

From a broader viewpoint, the OWRB continues to expand the nature and scope of its water management projects while embracing new and innovative technologies. At the same time, the agency and our state, federal and local partners work closely to identify common objectives, 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 continue to create a secure water future for Oklahoma.

Sincerely,

A handwritten signature in black ink, appearing to read "J.D. Strong".

J.D. Strong
Executive Director



Financial Assistance Staff



ABOVE:

Back Row L to R: Tony Mensah, Sonia Mock, Yohanes Sugeng, Robert Lindenberger, Simeon Stoitzev, Kathy Koon, Tamara Griffin, Vivek Rajaraman

Middle Row L to R: Anita Ray, Kate Burum, Laura Oak, Barry Fogerty, Angela Thompson

*Front Row L to R: Justin Hodge, Shelly Bacon, Daniel Hughes, Joe Freeman, Jennifer Wasinger, Byju Sudhakaran
(not pictured Matt Cogburn)*



OWRB's Financial Assistance Staff educate 4th and 5th graders about water and wastewater topics at the 2011 Sciencefest event held at the Oklahoma City Zoo

J.D. STRONG
EXECUTIVE DIRECTOR



MARY FALLIN
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 1983, we have provided approximately 60% of all the financing for Oklahoma's water and wastewater infrastructure needs. To date we have funded over \$2.4 billion dollars with our loan and grant programs, which in turn leads to an interest savings of over \$850 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.

As we move into FY 2012, 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,

A handwritten signature in black ink that reads "Joe Freeman".

Joe Freeman, Chief
Financial Assistance Division



2012 Update of the Oklahoma Comprehensive Water Plan



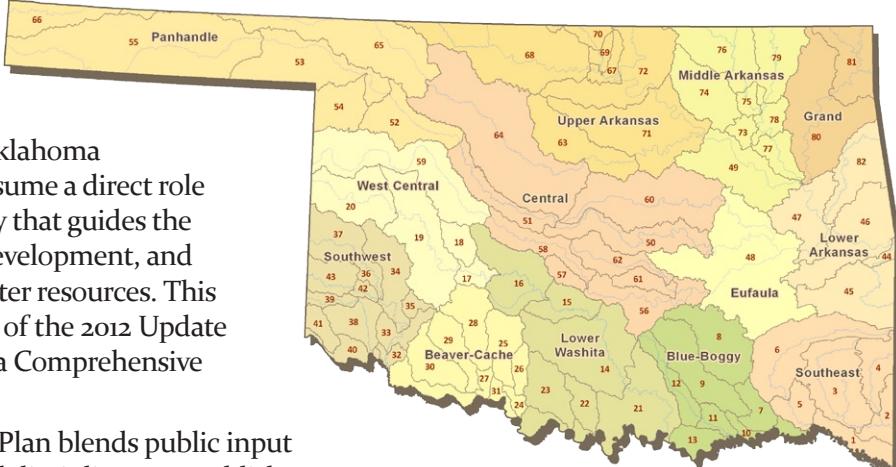
The 2012 Oklahoma Comprehensive Water Plan (OCWP) Update, a 5-year effort conducted by the Oklahoma Water Resources Board, is nearing completion. During the final year of development, and prior to formal submittal to the Governor and State Legislature in February 2012, the OWRB and its planning partners will continue to solicit important input from stakeholders, citizens and others with a vested interest in the future of Oklahoma's water resources.

Oklahoma faces a myriad of water challenges. If Oklahoma is to reach its potential for economic growth while securing optimum

The 2012 OCWP Update includes the best and most comprehensive state hydrologic, water use and water quality data currently available.

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. This is a primary goal of the 2012 Update of the Oklahoma Comprehensive Water Plan.

This new Water Plan blends public input with science, technology, engineering, and related disciplines to establish a sound and progressive water future for Oklahoma citizens. It will heighten understanding of the state's water resources to an unprecedented level, resulting in significant improvements to current water management policy. The final plan will be both well-vetted and based upon sound science—one that can be defended as fair and objective, enhancing the success of water-related decision making.



From the outset, the OWRB has focused foremost on an updated Water Plan that is "FIT" (Fair – Inclusive – Transparent).

Final Steps

Following a final round of regional statewide public input and feedback meetings, beginning in April, the nine-member Water Board will review and formally approve each of the 13 Watershed Planning Region Technical Reports. Staff will then present the preliminary draft of the OCWP for the Board's review in August. At the Board's September meeting, the public will be invited to comment on the draft OCWP prior to formal consideration and approval of the final Water

The OCWP process includes an unprecedented level of openness, collaboration, and public involvement, especially in development of water policy recommendations.

To date, the OWRRI has hosted 86 local, regional, and statewide water planning meetings and engaged thousands of Oklahomans in the public input process. Collectively, participants have invested almost 30,000 hours in the process so far.

Plan at the October Board meeting. The Oklahoma Comprehensive Water Plan will be officially unveiled at the Governor's Water Conference in mid-October in advance of submittal to the Governor and State Legislature in February 2012.

Upcoming OCWP Schedule

April-May 2011:

- Regional Feedback and Implementation Meetings

August 2011:

- Preliminary Water Board review of draft OCWP

September 2011:

- Final Water Board review and public comment on draft OCWP

October 2011:

- Formal Water Board consideration and adoption of OCWP
- OCWP unveiled at 32nd Annual Governor's Water Conference

February 2012:

- Formal submittal of OCWP to Governor and State Legislature

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 began in July of 2010, expands the opportunity to evaluate the benefits of infrastructure investments of Oklahoma communities that received assistance through ARRA. The evaluation tool will be in the form of a computer program which will allow communities to self-quantify the social, economic and environment benefits

of their infrastructure investments. When completed, it is also expected to be a beneficial tool for communities considering future infrastructure projects.

The end result of the Community Impact Measure Project will be a computer model which will allow decisions makers to better articulate the benefits of infrastructure investments through OWRB as well as other financing programs. It is

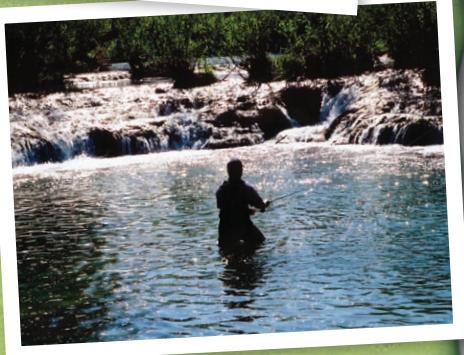


Rehabilitation of a lift station at the Norman Wastewater Treatment Plant to increase maximum pumping capacity. This \$8.5 million project, funded through CWSRF ARRA, included enlargement of the existing flow equalization basin, a pump station, an emergency generator, associated yard piping, and electrical 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.

expected that the model will be field tested using ARRA communities during the Summer of 2011 and available for use by the public in Fall 2011.

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 until now...

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 \$272 million in federal grant funds to commit over \$1 billion 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) 2012, 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 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 communities; 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.

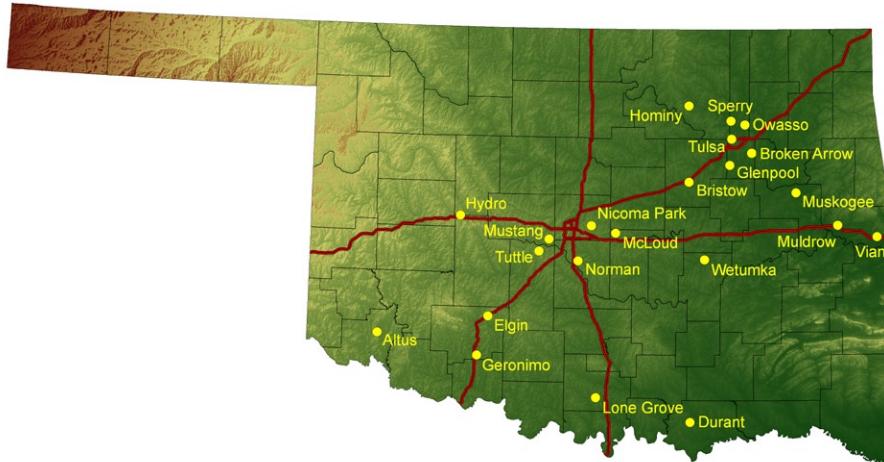
To further maintain the health of the State's waters, the program may also fund eligible projects to reduce polluted runoff from urban and agricultural land, including, but not limited to, urban stormwater control, agricultural best practices implementation, forest and stream bank erosion control, wetland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

To date, 22 projects have been requested, totaling \$130.2 million. Funding requests for the 5-year period (through year 2016) total \$301.2 million. See Appendix A - FY 2012-2016 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 2012.

Proposed FY 2012 Projects (Clean Water Act Section 212 Wastewater Systems and 319 Non-point Source Pollution Control Activities)

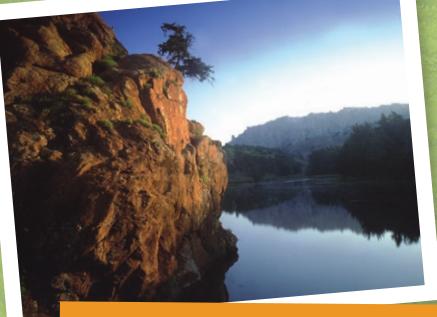
The OWRB has received FY 2012 requests for 22 wastewater construction and/or non-point source pollution runoff control projects totaling over \$130.2 million. Page 25 and Appendix A provide a listing of these fundable and planning/contingency projects, along with effluent discharge requirements, EPA "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.



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 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.





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.



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.

Proposed water quality projects receive points in five areas: 1) "project type factor;" 2) "water quality restoration factor;" 3) "water quality protection factor;" 4) "programmatic priority factor;" and 5) "ready to proceed factor." These five areas incorporate additional points if a project is located in a "Top Ten" priority watershed or in a watershed designated as "high quality water," for example.

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 2012 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. If warranted, amendments to the rules governing the Integrated priority Ranking System may be considered during the autumn 2011 – spring 2012 rulemaking period.

Green Project Reserve (GPR)

As referenced in the FY 2011 Continuous Appropriations Act, 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." We anticipate that similar language will be included in the FY 2011 Appropriations Bill.

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, water reuse and sustainability will receive bonus points under the CWSRF Integrated Priority Ranking System. OWRB continues to conduct an active solicitation of GPR projects including notification of interest groups and program stakeholders, publication on related websites, and conference/seminar presentations.

Until additional guidance is provided by EPA, 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" (Procedures) issued on April 21, 2010 for determining the eligibility of projects under the GPR. Attachment 2 Part A of the Procedures (Appendix D) 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.

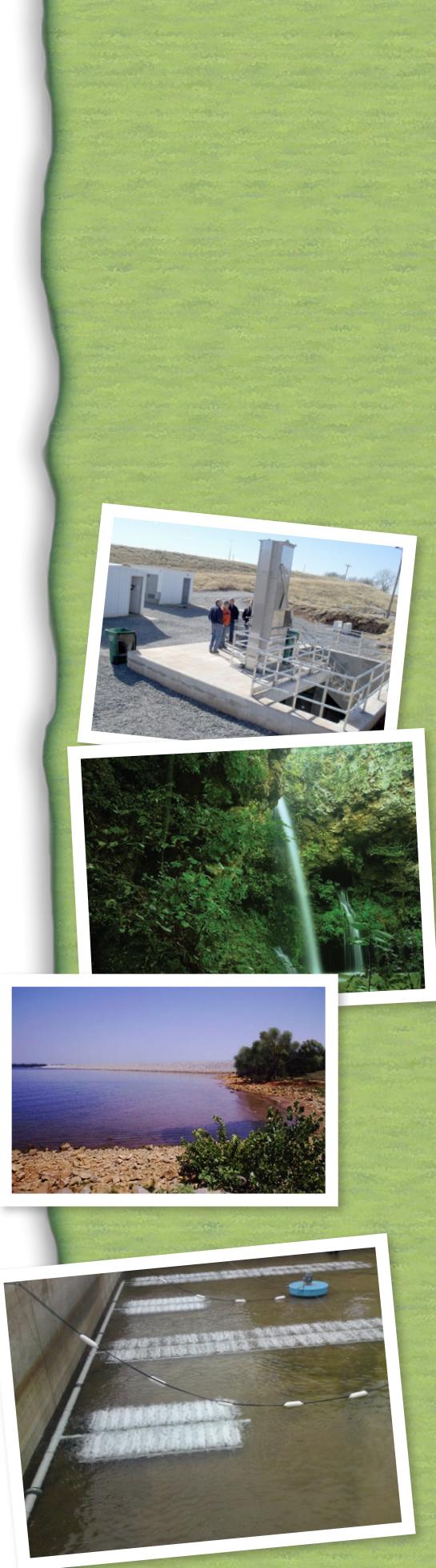
All projects listed on the FY 2012 Project Priority List are currently being evaluated to determine if components can be eligible under the GPR Guidelines. Staff engineers will consult with each community's project engineer in an effort to further refine and determine the actual expenditures toward green infrastructure elements included on the CWSRF Project Priority List. Additionally, 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/greenreserve.php> within the quarter in which the loan is made.

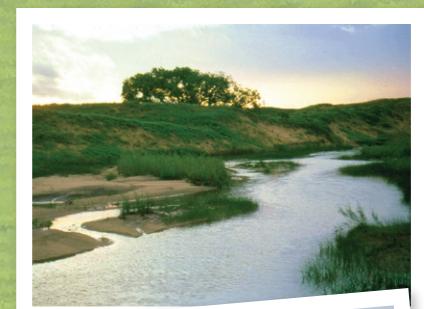
At this time, OWRB has not identified sufficient projects to meet the GPR threshold. An amended GPR project list will be submitted to EPA as part of an amended Project Priority List prior to funding of GPR projects. This list will also be posted on the CWSRF website <http://www.owrb.ok.gov/financing/loan/cwsrfloans.php>.

Additional Subsidization

As referenced in the FY 2011 Continuous Appropriations Act, 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."

As principal forgiveness will be targeted first to projects eligible under the Green Project Reserve and second to disadvantaged communities as defined through the CWSRF 30 year financing strategy. It should be noted, however, that in many cases the communities in Oklahoma implementing "green" projects are also categorized as disadvantaged.





For projects that meet the GPR guidelines and as additional subsidization funds are available, 15% of a project's loan costs or the cost of the project's green elements (whichever is less) may be forgiven. The principal forgiveness amount, however, is capped at \$500,000. The remaining project funds will be available in the form of a below market interest rate CWSRF loan.

Oklahoma did not utilize all of the additional subsidization required by the FY 2010 Appropriations Act. Consequently, in FY 2012 the remaining FY 2010 funds as well as the required FY 2011 Continuing Appropriations Act funds will be used for additional subsidization. At this time, OWRB has not identified sufficient projects to meet the Additional Subsidization threshold. An amended GPR project list with additional subsidization amounts will be submitted to EPA as part of an amended Project Priority List prior to funding of GPR projects. This list will also be posted on the CWSRF website at <http://www.owrb.ok.gov/financing/loan/cwsrfloans.php>.

Implementation of EPA's Sustainability Policy

EPA's Sustainability Policy was finalized on February 12, 2011. The primary direction of the policy is "...encouraging communities to develop sustainable systems that employ effective utility management practices to build and maintain the level of technical, financial and managerial capacity necessary to ensure long-term sustainability." The previous statement summarizes measures currently utilized in Oklahoma to encourage system sustainability and green infrastructure as well as to provide technical assistance to small and disadvantaged communities. It is these measures which make the CWSRF program in Oklahoma successful.

OWRB has current procedures in place to determine an Entity's financial and managerial capability. Initially, OWRB financial staff performs a financial analysis of each Entity's loan application to ensure adequate financial and accounting data, legal documents, contracts, proposals, and other applicable records and documents have been submitted to facilitate the required financial credit analysis. To qualify for a loan from OWRB, an Entity must meet our minimum debt coverage requirement of 1.25 times. If an Entity does not meet our debt coverage requirement, we notify them and request that they raise rates, pledge additional revenues, and/or decrease expenses to meet the requirement of 1.25 times. A loan is not recommended for approval until the Entity meets OWRB's debt coverage requirement.

Projects considered for funding are also technically reviewed by taking into account all the alternatives considered including advantages and disadvantages of all the alternatives, cost effective analysis of all the alternatives, the cost effectiveness of the proposed alternative, and the water and energy efficiency of the proposed project. The proposed designed is further reviewed to ensure that it takes into account the entire system or area, and the best practice to meet the objectives or goals of the project.

After loan approval and closing, OWRB collects monthly operating statements

to ensure that an Entity is meeting the debt coverage requirement on a monthly basis; annual audits to ensure an Entity is meeting the debt coverage requirement on an annual basis and complying with loan covenants; property, liability, workers compensation, and fidelity bond insurance verifications on an annual basis to ensure Entity is being properly managed and insured; and the Entity's water and/or sewer operator's license to ensure the Entity's system is being operated and maintained by a licensed operator.

If an Entity does not meet debt coverage requirements based on annual audits, OWRB sends a letter notifying them of the deficiency and give them 30 days to make the necessary changes to meet the requirement. OWRB continually monitors Entities not meeting debt coverage and contacts them for updates as necessary for progress updates.

Davis-Bacon Requirements

As referenced in the FY 2011 Continuous Appropriations Act, 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." We anticipate that similar language will be included in the FY 2011 Appropriations Bill.

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."

Reporting Requirements

The OWRB will report as required by the capitalization grant on the utilization of funds under the FY 2012 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 2012.

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 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
- Encourage communities to develop sustainable systems that employ effective utility management practices to build and maintain the level of technical, financial and managerial capacity necessary to ensure long-term sustainability.

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)(l).
- 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, stormwater, green infrastructure and Brownfields funding, identify potential CWSRF-eligible projects, and develop appropriate financing strategies, as necessary.
- 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 2012 CWSRF capitalization grant appropriations and have grant funds awarded within the 2nd quarter of FFY 2012.
- 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.



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 2012;
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”.

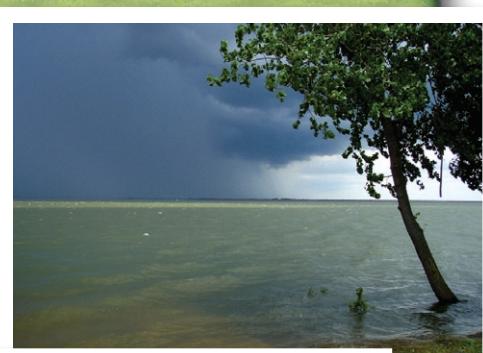
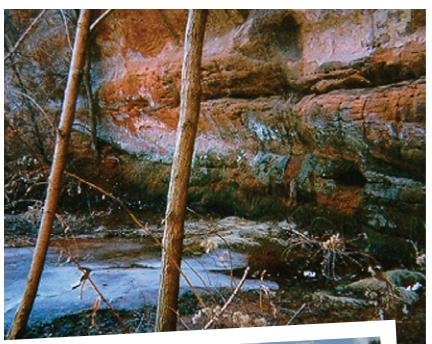
The CWSRF financing plan provides three major elements: 1) a pool of funds to meet the funding demand, which is well above that anticipated, to be available directly from capitalization grants; 2) below market rate financing and program incentives to help communities meet applicable federal/state pollution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

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. 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 future bond proceeds. A 0.5% administrative fee is charged on the unpaid loan balances.

While the traditional CWSRF loan has an amortization period of 20 years after construction has been completed, the OWRB began offering extended 30-year financing for disadvantaged communities 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" is defined as 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 as long as the financing does not exceed the design life of the project. The CWSRF program will continually evaluate the program's capacity to ensure that it does not decrease by more than 10% due to the offering of extended term financing.

Additionally, 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.

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 April 4, 2011. The revisions will become effective upon approval by the Governor of Oklahoma. Additional revisions may be made during FFY 2012 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 2012 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) Expedited 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.

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) create a capitalization grant payment schedule used for making timely commitment of funds to projects selected to receive assistance; and (5) establish a disbursement schedule to distribute funds to loan recipients for project costs as they are incurred.

Type of Borrowers Served and Financial Assistance Needed

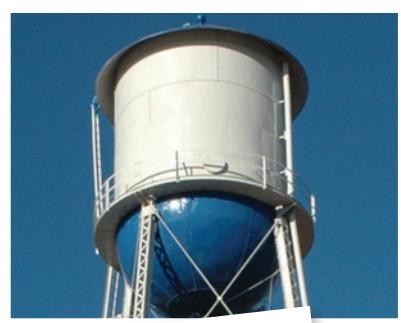
Under State law eligible borrowers include any duly constituted and existing political subdivision of the State including counties, cities, towns, municipalities, sewer districts, public trusts or authorities, and state agencies.

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."



Loan Application Amount Fee

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



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 \$16.4 million of existing unobligated funds will be available during FY 2012. Approximately \$149.3 million in fund commitments have been identified, leaving approximately \$133.6 million wastewater infrastructure funding needs.

The OWRB anticipates that all new loans will be funded from Revolving Fund, Series 2011 bond proceeds or existing unobligated cash balances or proceeds. Under the OWRB's financing strategy, new loans that are funded from cash reserves may be reimbursed with proceeds from the Series 2011 or future bond issues. In January 2011, OWRB passed a Reimbursement Resolution detailing the loans listed on the priority list which would be available to be refunded back to the OWRB from the proceeds of the Series 2011 or future bond issues. Debt service for the Series 2011 bond issues and investment/interest earnings is detailed in Appendix B-5.

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 2011 capitalization grant funds will be awarded by EPA during the 1st quarter SFY 2012 and FY 2012 capitalization grant funds in the 1st quarter of SFY 2013. 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 2012 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 2012, 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.

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 2012. 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 2012, 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 2012 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 2012 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 possible investment would include funds from second round principal repayments and investment earnings that are currently being held by the Oklahoma State Treasurer. The funds would 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 2012, 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:

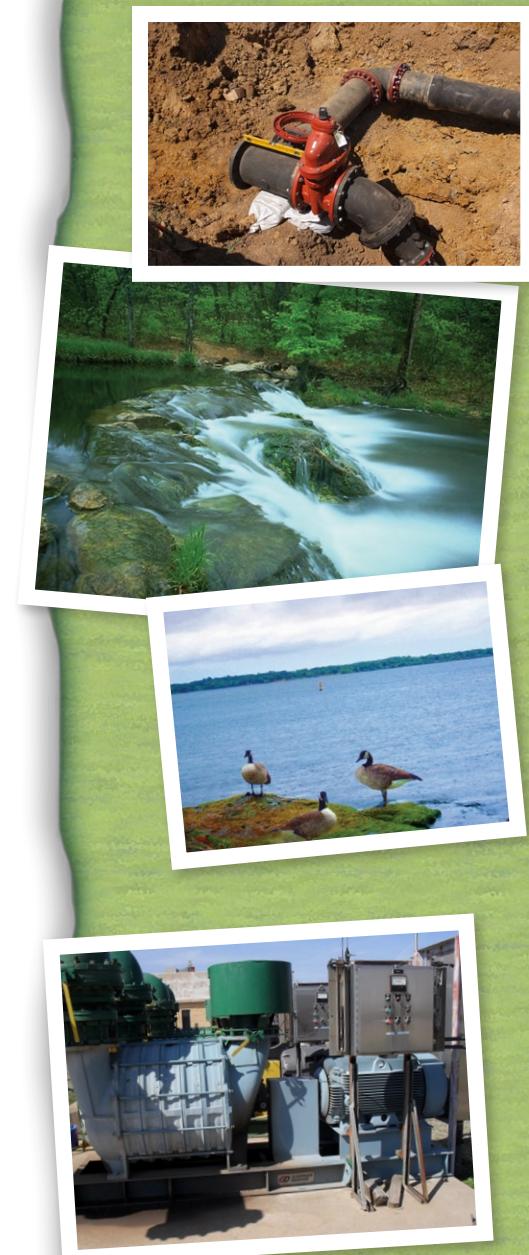
- The indebtedness may be in the form of a loan or bond purchase and will not exceed three years in duration.
- The amount will not exceed a \$12 million balance at any time.
- The interest rate will be equivalent to the interest that would have been earned had OWRB invested in traditional institutions.
- 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 2012 CWSRF Draft Intended Use Plan and Project Priority List will be held on June 2, 2011 following public notice through a press release issued on April 29, 2011 to print media statewide, statewide publication in The Oklahoman on May 1, 2011, and OWRB web posting on April 28, 2011 (Appendix E). The Draft FY 2012 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 April 29, 2011. The public comment period was open through June 10, 2011 and no comments were received.



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.

As Oklahoma's Comprehensive Water Plan (OCWP) moves into the implementation phase, a large part of the recommendations will be geared towards providing assistance to Oklahoma communities to ensure sustainable systems which are able to meet future demands. The OCWP will provide vital information for communities to better understand their infrastructure needs and allow them to prioritize critical need areas where inadequate treatment and/or delivery create a barrier between water and its users and limit local economic development. Existing state and federal funding programs, including the OWRB's CWSRF Program, will play an integral role in helping meet the growing infrastructure needs in Oklahoma.



Fiscal Year 2012

Oklahoma Clean Water State Revolving Fund

Project Priority List

Fundable List

Name	Project No.	Target B.C. Date	Priority List Amount (\$)	Project Description
Nicoma Park DA	ORF-09-0035	08/09/11	\$160,000	New Sewer Collection System (Cat. IVA)
Muldrow PWA	ORF-11-0007	10/11/11	\$3,215,000	Wastewater Treatment Facility Improvements (Cat. II)
Elgin PWA	ORF-10-0005	08/09/11	\$3,364,000	Total Retention Lagoon Improvements & Rehab and New Aeration Lagoons(Cat. I & IIIB)
Lone Grove W&ST	ORF-04-0011	02/14/12	\$12,000,000	New WWTP, Lift Station and Force Mains (Cat. II, IIIB, & IVB)
Muskogee UA	ORF-11-0008	08/13/11	\$12,775,000	Wastewater Collection System Rehabilitation (Cat. IIIB)
Tulsa MUA	ORF-11-0005	08/09/11	\$16,700,000	Lower Bird Creek WWTP Expansion (Cat. II)
Owasso PWA	ORF-10-0014	08/09/11	\$2,940,000	New Liftstation and Upgrade to Existing Force Main and Existing Appurtenances (Cat. IVB)
Hydro PWA	ORF-12-0001	12/13/11	\$3,500,000	New WWTP (Cat. II)
Glenpool USA	ORF-11-0002	08/09/11	\$3,750,000	WWTP Upgrade and Rehabilitation (Cat. I)
Bristow PWA	ORF-12-0002	03/13/12	\$1,050,000	WWTP Improvements (Cat. II)
Tulsa MUA	ORF-12-0003	10/11/11	\$26,472,000	Sanitary Sewer and WWTP Rehabilitation and Improvements (Cat. I, IIIA, & IIIB)
Wetumka PWA	ORF-12-0004	02/14/12	\$3,500,000	New WWTP (Cat. I)
Vian PWA	ORF-11-0006	10/11/11	\$1,555,000	New FEB (Cat. II)
Altus MA	ORF-12-0005	04/10/12	\$1,951,250	WWTP Improvements and Grey Water Irrigation System (Cat. II & X)
Geronimo PWA	ORF-12-0006	07/12/11	\$1,500,000	Wastewater Treatment Facility Rehabilitation (Cat. IIIB)
Hominy PWA	ORF-12-0007	01/10/12	\$600,000	WWTP Improvements (Cat. II)
Sparry USA	ORF-12-0008	03/13/12	\$443,900	New Sanitary Sewer Line and Appurtenances to Serve Unsewered Area (Cat. IVA)
Norman UA	ORF-12-0009	01/10/12	\$26,000,000	WWTP Improvements (Cat. II)
Tuttle PWA	ORF-12-0010	12/13/11	\$2,000,000	New Sewer Main and Additional Lagoon and Appurtenances (Cat. I & IVB)
McCloud PWA	ORF-12-0011	05/08/12	\$1,750,000	New Collection Line (Cat. IVA)
Broken Arrow MA	ORF-12-0012	03/13/12	\$4,000,000	Truck Sewer Replacement (Cat. IIIB)
Durant CUA	ORF-12-0013	04/10/12	\$1,025,000	Sludge Belt Filter (Cat. II)
TOTAL				130,251,150

Status of American Recovery and Reinvestment Act (ARRA) Projects

The American Recovery and Reinvestment Act provided a substantial increase in funding for Oklahoma's CWSRF 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 projects in April 2009 with 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 \$31 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. As of April 1, 2011, \$27.2 of Oklahoma's \$31 million in CWSRF ARRA funds have been expended with construction contracts complete for 21 of the 34 projects. Projects continuing to draw ARRA funds include Green Infrastructure project which based on their nature take longer to construct and monitor successful implementation.



OWRB ARRA FUNDING





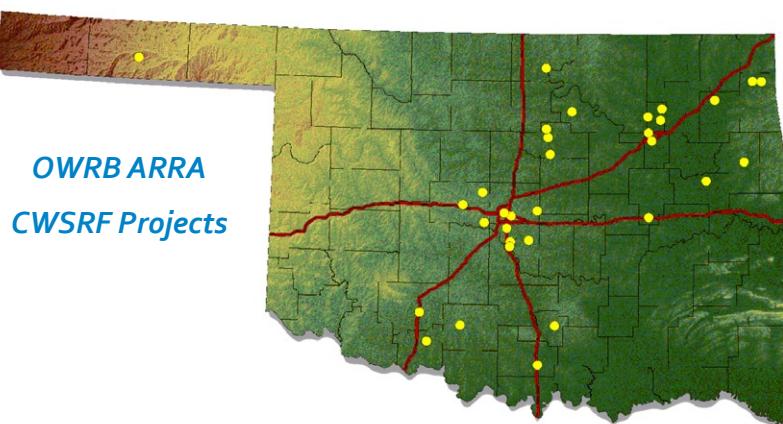
**Oklahoma Water Resources Board
Clean Water State Revolving Fund**

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	\$27,219,996
Number of Projects Addressing Issues in "Disadvantaged" Communities	27

OWRB ARRA Project Types:

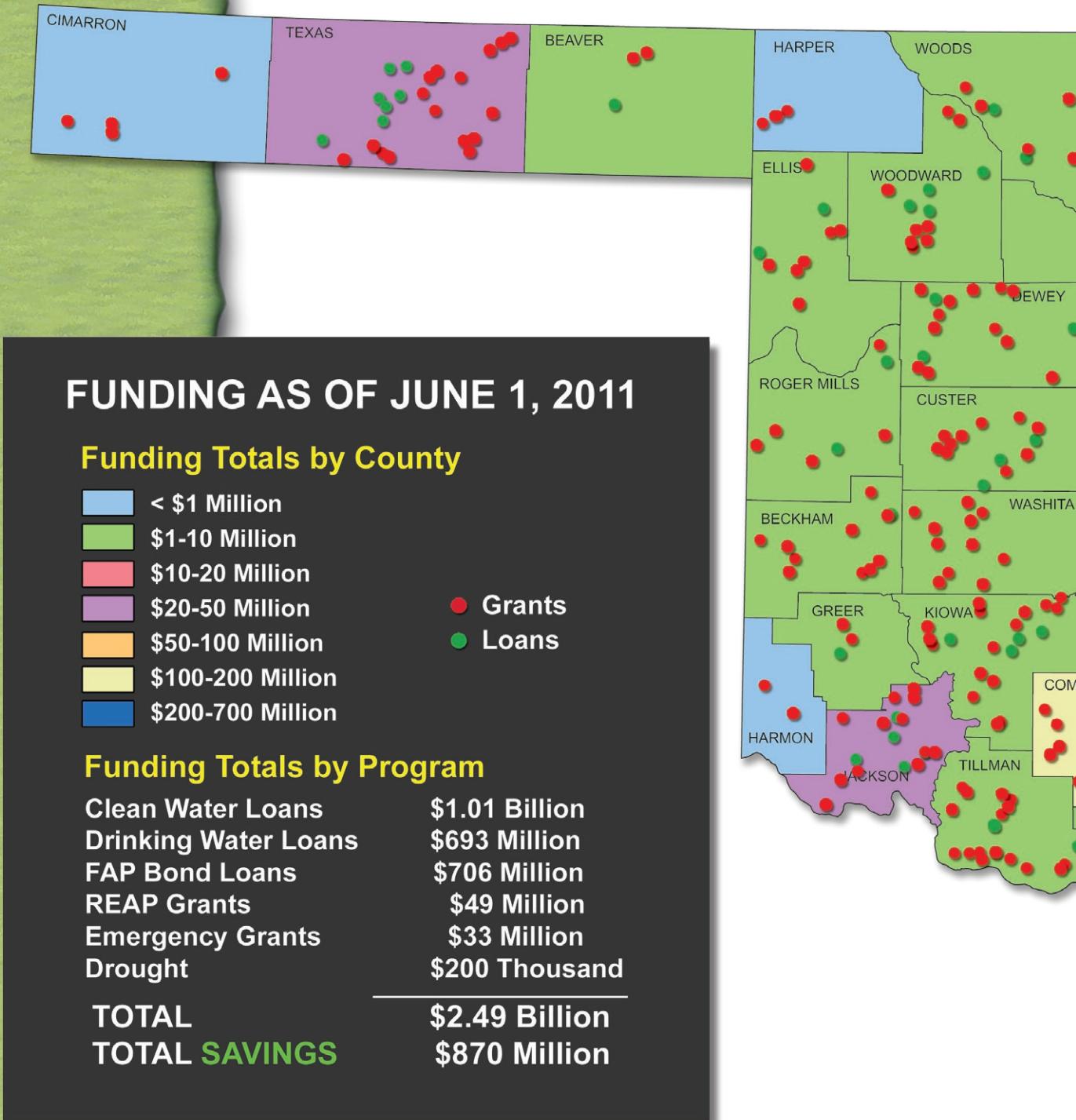
- New wastewater treatment plants
- Wastewater treatment plant upgrades and rehabilitation
- Sewer line replacement
- New collection lines
- Stormwater detention basins
- Riparian restoration to improve water quality (Green project)
- "Green" roofs for energy savings and water quality improvement (Green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



Financial Assistance

Loan and Grant Programs

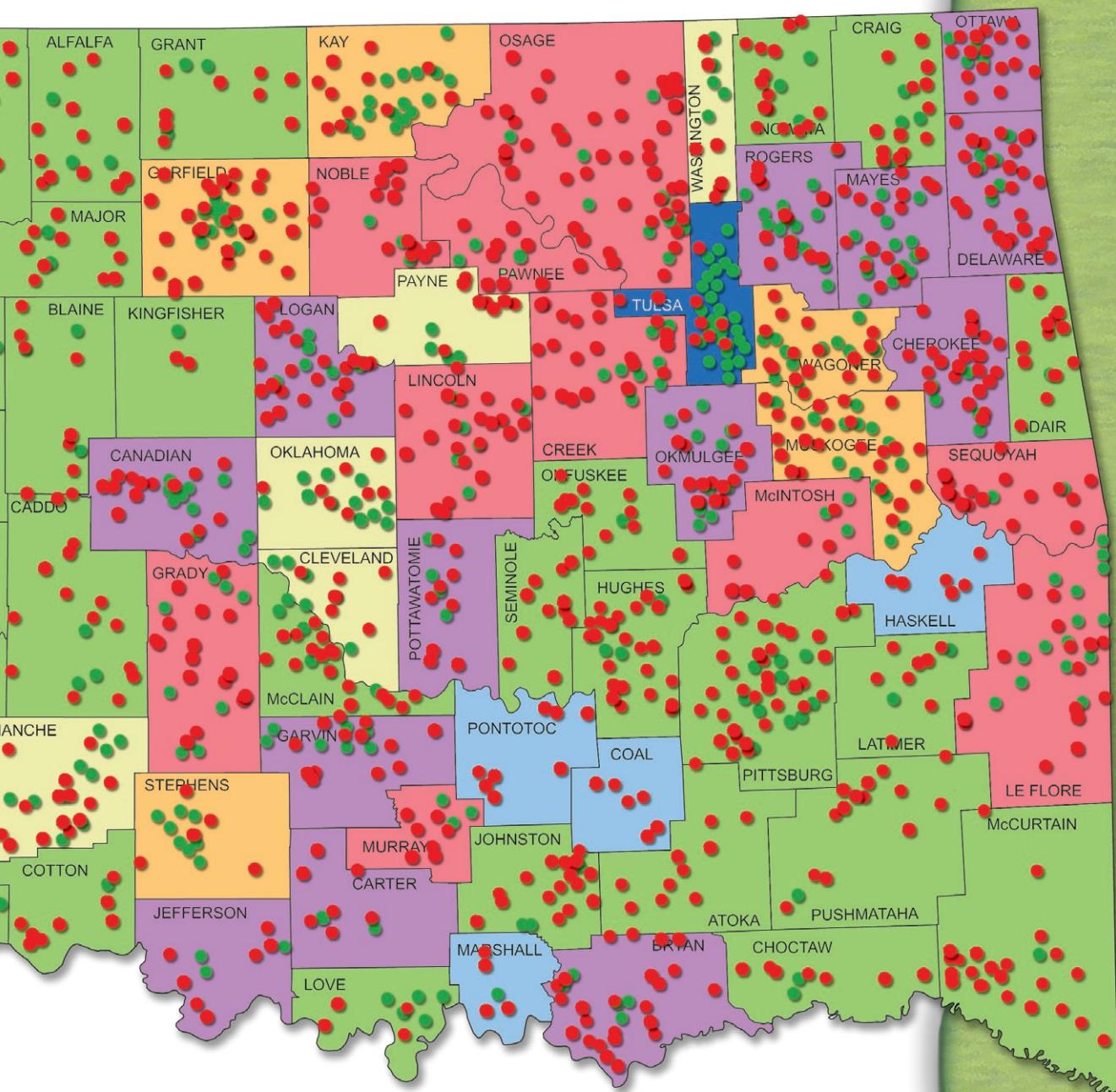
Loans and Grants approved



Entance Program

Recipient Status

ovided as of June 1, 2011



OWRB Clean Water State Revolving Fund

FY 2012 Intended Use Plan

Appendices

Appendix A: FY 2012 – 2016 Clean Water SRF Project Priority List

Appendix B: Charts 1 – 6

Chart 1: FY 2012 Intended Use Projects and Administrative Costs

Chart 2: Projected Environmental Benefits of Proposed FY 2012

Chart 3: Binding Commitment Requirements with Respect to Federal Payments by Fiscal Quarter

Chart 4: Federal Capitalization Grant Payment Schedule by State and Federal Fiscal Quarter

Chart 5: FY 2012 Unrestricted Fund Sources by State Fiscal Quarter

Chart 6: Actual and Projected CWSRF Disbursement Schedule by State Fiscal Quarter

Appendix C: Cross-Collateralization Flow Chart

Appendix D: EPA FY 2010 Green Project Reserve Procedures and OWRB Checklist

Appendix E: Public Meeting Notice

Appendix F: OWRB Declaration of Authority

Appendix G: OWRB SAAP Program Project List

STATE OF OKLAHOMA
Appendix A. FY 2012-2016 Clean Water SRF Project Priority List
Prepared for the EPA - Effective July 1, 2011 - June 30, 2012
July 1, 2011

Rank	OPDES Permit #	Loan Type	Name	Disadvantaged Community Y/N	Project No.	Target B.C. Date	Priority List Amount	Project Description
FY 2012 Fundable Projects (July 2011 - June 2012)								
1	435	None	LC Nicoma Park DA	Y	ORF-09-0035	08/09/11	\$160,000 New Sewer Collection System (Cat. IVA)	
2	340	OK0032573	LC Muldrow PWA	Y	ORF-11-0007	10/11/11	\$3,215,000 Wastewater Treatment Facility Improvements (Cat. II)	
3	380	None	LC Elgin PWA	Y	ORF-10-0005	08/09/11	\$3,364,000 Total Retention Lagoon Improvements & Rehab and New Aeration Lagoons(Cat. I & IIIB)	
4	290	OK0034266	LC Lone Grove W&ST	Y	ORF-04-0011	02/14/12	\$12,000,000 New WWTP, Lift Station and Force Mains (Cat. II, IIIB, & IVB)	
5	290	OK0029131	LC Muskogee UA	Y	ORF-11-0008	08/13/11	\$12,775,000 Wastewater Collection System Rehabilitation (Cat. IIIB)	
6	285	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	ORF-11-0005	08/09/11	\$16,700,000 Lower Bird Creek WWTP Expansion (Cat. II)	
7	280	OK0020303	LC Owasso PWA	N	ORF-10-0014	08/09/11	\$2,940,000 New Liftstation and Upgrade to Existing Force Main and Existing Appurtenances (Cat. IVB)	
8	280	OK0028185	LC Hydro PWA	Y	ORF-12-0001	12/13/11	\$3,500,000 New WWTP (Cat. II)	
9	270	OK0027138	LC Glenpool USA	N	ORF-11-0002	08/09/11	\$3,750,000 WWTP Upgrade and Rehabilitation (Cat. I)	
10	240	OK0032549	LC Bristow PWA	Y	ORF-12-0002	03/13/12	\$1,050,000 WWTP Improvements (Cat. II)	
11	195	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	ORF-12-0003	10/11/11	\$26,472,000 Sanitary Sewer and WWTP Rehabilitation and Improvements (Cat. I, IIIA, & IIIB)	
12	185	OKG582226 OKG580005	LC Wetumka PWA	Y	ORF-12-0004	02/14/12	\$3,500,000 New WWTP (Cat. I)	
13	180	OK0021512	LC Vian PWA	Y	ORF-11-0006	10/11/11	\$1,555,000 New FEB (Cat. II)	
14	145	OK0028045	LC Altus MA	Y	ORF-12-0005	04/10/12	\$1,951,250 WWTP Improvements and Grey Water Irrigation System (Cat. II & X)	
15	160	None	LC Geronimo PWA	Y	ORF-12-0006	07/12/11	\$1,500,000 Wastewater Treatment Facility Rehabilitation (Cat. IIIB)	
16	170	OK0027618	LC Hominy PWA	Y	ORF-12-0007	01/10/12	\$600,000 WWTP Improvements (Cat. II)	
17	145	OK0033464	LC Sperry USA	Y	ORF-12-0008	03/13/12	\$443,900 New Sanitary Sewer Line and Appurtenances to Serve Unsewered Area (Cat. IVA)	
18	145	OK0026239	LC Norman UA	Y	ORF-12-0009	01/10/12	\$26,000,000 WWTP Improvements (Cat. II)	
19	140	OK0029173	LC Tuttle PWA	Y	ORF-12-0010	12/13/11	\$2,000,000 New Sewer Main and Additional Lagoon and Appurtenances (Cat. I & IVB)	
20	140	OK0029009	LC McLoud PWA	Y	ORF-12-0011	05/08/12	\$1,750,000 New Collection Line (Cat. IVA)	
21	135	OK0040053	LC Broken Arrow MA	N	ORF-12-0012	03/13/12	\$4,000,000 Truck Sewer Replacement (Cat. IIIB)	
22	130	OK0039063	LC Durant CUA	Y	ORF-12-0013	04/10/12	\$1,025,000 Sludge Belt Filter (Cat. II)	
FY 2013 Planning/Contingency Projects (July 2012 - June 2013)								
1	195	NS-OK0026221	LC Tulsa MUA	Y	Unassigned	10/09/12	\$43,920,000 Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor (Cat. I, IIIA, IIIB, & IVB)	
2	185	OK0029131	LC Muskogee UA	Y	Unassigned	09/11/12	\$24,710,000 Wastewater Collection System Rehabilitation (Cat. IIIB)	
3	175	OK0026816	LC Mustang IA	N	Unassigned	03/12/13	\$7,480,000 Phase II WWTP Expansion and Improvements (Cat. II & IIIB)	
FY 2014 Planning/Contingency Projects (July 2013 - June 2014)								
1	195	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	Unassigned	10/08/13	\$41,365,000 Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor (Cat. I, IIIA, IIIB, & IVB)	
FY 2015 Planning/Contingency Projects (July 2014 - June 2015)								
1	195	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	Unassigned	10/07/14	\$24,065,000 Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor (Cat. I, IIIA, IIIB, & IVB)	
FY 2016 Planning/Contingency Projects (July 2015 - June 2016)								
1	195	NS-OK0026221 SS-OK0026239	LC Tulsa MUA	Y	Unassigned	10/06/15	\$29,440,000 Sanitary Sewer and WWTP Rehabilitation and Improvements and New Interceptor (Cat. I, IIIA, IIIB, & IVB)	

Loan Totals (All Loans)

FY 12	\$130,251,150
FY 13	\$76,110,000
FY 14	\$41,365,000
FY 15	\$24,065,000
FY 16	\$29,440,000
TOTALS	\$301,231,150

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

CHART 1. FY 2012 Oklahoma CWSRF Intended Use Projects and Administrative Costs
(Beginning July 1, 2011)

PART 1. Section 212 Publicly Owned Treatment Works Projects

	TYPE	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 OPERATIO N DATE ⁶			
						CBOD	BOD	TSS	NH3-N	P	Min. DO	Fecal	I	II	IIIA	IIIB	IVA	IVB	VI	VII	X				
1	LC	Nicoma Park DA	ORF-09-0035	160,000	2,415	ND	ND	ND	ND	ND	ND											08/09/11	10/08/11	04/08/12	
2	LC	Muldrow PWA	ORF-11-0007	\$3,215,000	3,104	30.0	30.0			4.0			X										10/11/11	08/10/10	08/10/11
3	LC	Elgin PWA	ORF-10-0005	3,364,000	1,210	ND	ND	ND	ND	ND	ND	X			X								08/09/11	10/08/11	10/07/12
4	LC	Lone Grove W&ST	ORF-04-0011	12,000,000	4,631	10.0		15.0	4.0		5.0		X	X			X						02/14/12	04/14/12	04/14/14
5	LC	Muskogee UA	ORF-11-0008	12,775,000	38,310		30.0	30.0															08/13/11	10/12/11	10/11/13
6	LC	Tulsa MUA	ORF-11-0005	16,700,000	393,049	10.0	15.0	30.0	3.0		6.0		X										08/09/11	10/08/11	10/07/13
7	LC	Owasso PWA	ORF-10-0014	2,940,000	18,502	15.0		30.0	3.0		5.0								X				08/09/11	10/08/11	10/07/12
8	LC	Hydro PWA	ORF-12-0001	3,500,000	1,060		30.0	30.0					X										12/13/11	02/11/12	02/10/13
9	LC	Glenpool USA	ORF-11-0002	3,750,000	8,123		30.0	90.0				X											08/09/11	10/08/11	10/07/12
10	LC	Bristow PWA	ORF-12-0002	1,050,000	4,325	15.0		30.0	3.0		5.0		X										03/13/12	05/12/12	05/12/13
11	LC	Tulsa MUA	ORF-12-0003	26,472,000	393,049	10.0	15.0	30.0	3.0		6.0		X	X	X								10/11/11	12/10/11	12/09/13
12	LC	Wetumka PWA	ORF-12-0004	3,500,000	1,451		30.0	90.0				X											02/14/12	04/14/12	04/14/13
13	LC	Vian PWA	ORF-11-0006	1,555,000	1,362	10.0	20.0	15.0	4.0		5.0		X										10/11/11	12/10/11	12/09/12
14	LC	Altus MA	ORF-12-0005	1,951,250	21,447	10.0		15.0	3.5		2.0		X							X			04/10/12	06/09/12	06/09/13
15	LC	Geronimo PWA	ORF-12-0006	1,500,000	959	ND	ND	ND	ND	ND	ND				X								07/12/11	09/10/11	09/09/12
16	LC	Hominy PWA	ORF-12-0007	600,000	2,584		14.0	30.0	12.0		3.0		X										01/10/12	03/10/12	03/10/13
17	LC	Sperry USA	ORF-12-0008	443,900	1,645		30.0	90.0									X						03/13/12	05/12/12	11/11/12
18	LC	Norman UA	ORF-12-0009	26,000,000	95,694	13.0	30.0	30.0	4.5		5.0		X										01/10/12	03/10/12	03/10/14
19	LC	Tuttle PWA	ORF-12-0010	2,000,000	4,294		30.0	90.0				X							X				12/13/11	02/11/12	02/10/13
20	LC	McLoud PWA	ORF-12-0011	\$1,750,000	3,548		30.0	30.0											X				05/08/12	07/07/12	07/07/13
21	LC	Broken Arrow MA	ORF-12-0012	\$4,000,000	74,859		30.0	30.0										X					03/13/12	05/12/12	05/12/14
22	LC	Durant CUA	ORF-12-0013	1,025,000	13,549	10.0		15.0	2.0		5.0		X										04/10/12	06/09/12	06/09/13
Total--212						\$130,251,150																			

PART 2. Section 319 Nonpoint Source Mgmt. Projects

Total-- NPS Cat. VII	\$0
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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	\$500,000
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TOTAL PARTS 1 through 4	\$130,751,150
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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, 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 12 CWSRF Loans Page 1 of 2

PROJECT	Nicoma Park DA	Muldrow PWA	Elgin PWA	Lone Grove W&T	Muskogee UA	Tulsa MUA	Owasso PWA	Hydro PWA	Glenpool USA	Bristow PWA	Tulsa MUA
Project Number	ORF-09-0035	ORF-11-0007	ORF-10-0005	ORF-04-0011	ORF-11-0008	ORF-11-0005	ORF-10-0014	ORF-12-0001	ORF-11-0002	ORF-12-0002	ORF-12-0003
Binding Commitment Year	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Population	2,415	3,104	1,210	4,631	38,310	393,049	18,502	1,060	8,123	4,325	393,049
Assistance Amount Total	\$160,000	\$3,215,000	\$3,364,000	\$12,000,000	\$12,775,000	\$16,700,000	\$2,940,000	\$3,750,000	\$3,750,000	\$1,050,000	\$26,472,000
Category I			\$1,682,000			\$16,700,000			\$3,750,000		\$14,087,000
Category II		\$3,215,000			\$4,000,000					\$1,050,000	
Category IIIA											\$1,685,000
Category IIIB			\$1,682,000		\$4,000,000	\$12,775,000					\$10,700,000
Category IV A	\$160,000										
Category IVB					\$4,000,000			\$2,940,000			
Category VI											
Category VII											
Category X											
Waterbody name	Choctaw Cr. (through Choctaw Facility)	Poague Branch, Little Skin Bayou	Trib to Ninemile Beaver Ck	Untrib, Hickory Ck.	Arkansas R.	Arkansas R. & Bird Ck	Skeleton Cr.	Unnamed Ck Trib to Deer Ck	Coal Ck.	Little Deep Fork Ck.	Arkansas R. & Bird Ck
Affected Waterbody I.D.	ok 520520000030	ok 220200	ok 311210000130	ok 311100020010	ok 120400010260	ok120420010010 ok121300010010	ok 620910030240	ok 520620060010	ok 120420020030	ok 520700060130	ok120420010010 ok121300010010
PROJECT TYPE FACTOR											
Consent Order or Enforceable NPDES Permit			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
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											
Affect 303d listed stream	X			X	X	X					X
Top-ten NPS Priority Watershed						X					X
Project implements water quality plan				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	X	X	X	X	X	X	X	X	X	X	X
Source water protection area											
Groundwater vulnerability											
Low		X		X		X			X	X	X
Moderate								X			
High Quality Water											
Very High	X		X		X	X	X				X

* Approximated Cost Breakout

Chart 2. Projected Environmental Benefits for Proposed FY 12 CWSRF Loans Page 2 of 2

PROJECT	Wetumka PWA	Vian PWA	Altus MA	Geronimo PWA	Hominy PWA	Sperry USA	Norman UA	Tuttle PWA	McLoud PWA	Broken Arrow MA	Durant CUA
Project Number	ORF-12-0004	ORF-11-0006	ORF-12-0005	ORF-12-0006	ORF-12-0007	ORF-12-0008	ORF-12-0009	ORF-12-0010	ORF-12-0011	ORF-12-0012	ORF-12-0013
Binding Commitment Year	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
Population	1,451	1,362	21,447	959	2,584	1,645	95,694	4,294	3,548	74,859	13,549
Assistance Amount Total	\$3,500,000	\$1,555,000	\$1,951,250	\$1,500,000	\$600,000	\$443,900	\$26,000,000	\$2,000,000	\$1,750,000	\$4,000,000	\$1,025,000
Category I	\$3,500,000							\$1,500,000			\$1,025,000
Category II		\$1,555,000		\$1,500,000		\$600,000		\$26,000,000			
Category IIIA				\$1,500,000							\$4,000,000
Category IIIB						\$443,900			\$1,750,000		
Category IVA											
Category IVB								\$500,000			
Category VI											
Category VII											
Category X			\$451,250								
Waterbody name	Untrib, Wewoka Ck.	Vain Ck.	Trib of Stinking Ck.	Unnamed Trib to East Cache Ck	Penn Ck.	Hominy Ck	Canadian R.	West Ck.	N. Canadian R.	Arkansas R.	Caney Ck.
Affected Waterbody I.D.	ok 520500020010	ok220200020130_10	ok 311500	ok311300	ok 121300040290	ok 121300040010	ok 520310010010	ok 520610020090	ok 520510000110	ok 1204410010080	ok 410700000100
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	X									
Eliminate or reduce documented health threat or NPDES violation					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	X	X
WATER QUALITY RESTORATION FACTOR											
Affects 303d listed stream	X					X	X		X	X	
Top-ten NPS Priority Watershed											
Project implements water quality plan			X								
WATER QUALITY PROTECTION FACTOR											
Appendix A water											
Outstanding Resource Water											
High Quality Water											
Sensitive Water Supply											
Scenic River											
Cultural Significance											
Appendix B water											
recreational and/or ecological significance	X	X	X		X	X	X	X		X	
Source water protection area											
Groundwater vulnerability			X	X							X
Low											
Moderate	X										
High Quality Water											
Very High		X			X	X	X	X	X	X	

* Approximated Cost Breakout

CHART 3. Binding Commitment Requirements with Respect to Federal Payments by Federal Fiscal Quarter
 (Beginning July 1, 2011)

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 2011					TOTALS
			Federal FY 2011	Federal FY 2012				
			QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	
Tulsa MUA	ORF-11-0005	08/09/11	16,700					16,700
Owasso PWA	ORF-10-0014	08/09/11	2,940					2,940
Muskogee UA	ORF-11-0008	08/13/11	12,775					12,775
Tulsa MUA	ORF-12-0003	10/11/11		26,472				26,472
Altus MA	ORF-12-0005	04/10/12				1,951		1,951
Norman UA	ORF-12-0009	01/10/12		26,000				26,000
Broken Arrow MA	ORF-12-0012	03/13/12		4,000				4,000
Durant CUA	ORF-12-0013	04/10/12			1,025			1,025
Capitalization Grant Administration	N/A	N/A	250	250	250	250	250	1,250
(1) Annual Select Binding Commitment Totals			32,665	26,722	30,250	3,226	250	93,113
(2) Cumulative Binding Commitment Totals ¹		907,631	940,296	967,018	997,268	1,000,494	1,000,744	
(3) Fiscal Year Select Binding Commitment Totals			32,665	N/A	N/A	N/A	60,448	
(4) CAP Grant Award & State Match			6,584	6,584	6,584	0	0	19,752
(5) Cumulative Required Binding Commitment Totals		320,682	327,266	333,850	340,434	340,434	340,434	
(6) Binding Commitment Totals as a Percentage of Required Binding Commitment Totals		283.0%	287.3%	289.7%	292.9%	293.9%	294.0%	

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									
		FY89-01	FY 02	FY 05 ¹	FY 06						
Federal Fiscal Year		QTR 4	QTR 1	QTR 1	QTR 1	QTR 1	QTR 1	QTR 4	QTR 4	QTR 3	
		FY02	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 10	
		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									11,930.0	
12	5,453.1										
Total	256,051.7	156,917.1	10,770.7	10,700.7	10,720.4	8,693.8	7,046.3	14,087.4	31,662.1	21,914.1	11,930.0
Cumulative Grant Awards		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	284,442.7

CHART 5 FY 2012 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 2012.

(Beginning July 1, 2011)

SOURCES OF FUNDS	TOTALS
BEGINNING UNRESTRICTED BALANCE (FY 11 Carryover)	-127,146,505.31
2011 CAPITALIZATION GRANT PAYMENTS	11,930,000.00
2012 CAPITALIZATION GRANT PAYMENTS	5,453,100.00
STATE MATCH DEPOSITS**	0.00
PROPOSED 2012 BOND ISSUE	95,000,000.00
RELEASE OF 2004 BOND RESERVE FUNDS	2,662,198.00
LOANS:	
Interest Earnings	5,644,270.28
Principal Repayments	18,418,551.54
INVESTMENT INCOME-TREASURY	
State Treasurer's Cash Management Program Interest (recycled funds)	449,420.78
Lawton Investment Principal/Interest	643,842.00
Investment Earnings 2004 Bond Proceeds *	2,471,925.60
Short-Term Investment Earnings-BancTrust	105,413.76
TOTAL SOURCES	15,632,216.65

FUND COMMITMENTS	TOTALS
LOAN OBLIGATIONS - ON FY 2012 PRIORITY LIST	\$130,251,150
OWRB ADMINISTRATIVE EXPENSES	500,000.00
BOND INTEREST for 2004 CWSRF Bonds:	4,591,437.50
BOND PRINCIPAL for 2004 CWSRF Bonds:	5,860,000.00
BOND INTEREST for 2011 CWSRF Bonds:	3,856,700.00
BOND PRINCIPAL for 2011 CWSRF Bonds:	4,215,000.00
TOTAL FUND COMMITMENTS	149,274,287.50
ADDITIONAL FUNDS NEEDED***	-133,642,070.85

* Funds are restricted for 2004 Bond debt service and arbitrage rebate liability

** State matching funds for the 2011 Cap Grant provided by 2011 bond issue

*** Will use future cap grants, state match and bond issues to fund future needs.

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

Beginning July 1, 2011

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08-'11)				Projected (State FY '12) ²				OUT YEARS
					FY 08	FY09	FY10	FY 11	FY 12				
SELECT PROJECTS													
1	WOODWARD	ORF-07-0001	08/13/07	1,400	06/12/07	1,400							
2	LAWTON	ORF-04-0012	08/13/05	10,815	06/14/05	241							
3	EL RENO	ORF-09-0025	01/09/10	205	11/10/09			204					
4	GUYMON	ORF-08-0001	08/09/08	16,400	06/10/08		10,376	5,981	42				
5	TULSA	ORF-04-0014	09/15/06	7,900	01/11/05	4,526	1,007	941		178	156	136	119
6	TULSA	ORF-05-0009	03/09/06	3,130	02/14/06	756	1,300	553		130	98	73	55
7	BROKEN ARROW	ORF-05-0006	06/01/07	15,000	06/20/06	5,551	5,353	2,609		186	163	142	124
8	TULSA	ORF-06-0006	12/09/06	17,825	10/10/06	3,029	10,474	2,248		259	227	198	174
9	PONCA CITY	ORF-07-0006	12/08/07	5,565	10/09/07	158	1,752	908	448	287	252	220	193
10	BETHANY	ORF-05-0001	03/08/08	5,190	01/08/08		3,420	1,419	171	23	20	17	15
11	TULSA NPS	ORF-08-0004	08/09/08	1,250	06/10/08		209			260	195	146	110
12	TULSA	ORF-09-0001	05/09/09	11,320	03/10/09			2,875	3,522	615	538	471	412
13	MOORE	ORF-08-0002	06/13/09	3,943	04/14/09		194	3,367		48	42	37	32
14	TULSA	ORF-09-0006	06/13/09	7,350	04/14/09			123	903	790	692	605	4,236
15	MUSTANG	ORF-08-0006	06/13/09	6,590	04/14/09		140	5,118	716	77	67	59	51
16	NORMAN	ORF-09-0017	08/08/09	7,640	06/09/09			2,021	3,047	322	281	246	215
17	OKLAHOMA CITY	ORF-09-0021	09/12/09	9,469	07/14/09			4,140	3,478	231	202	177	155
18	PONCA CITY	ORF-09-0011	09/12/09	575	07/14/09			386	110	20	15	11	8
19	OWASSO	ORF-09-0003	10/10/09	10,795	08/11/09			2,586	5,322	361	316	276	242
20	DEL CITY	ORF-09-0022	10/10/09	1,190	08/11/09			1,041	144	1	0	0	2
21	OWASSO	ORF-09-0007	10/10/09	4,510	08/11/09			1,352	1,863	162	142	124	108
22	MUSKOGEE	ORF-09-0020	10/10/09	1,435	08/11/09			1,234	93	27	20	15	11
23	STILLWATER	ORF-09-0024	10/10/09	1,875	08/11/09			888	866	30	23	17	13
24	OWASSO	ORF-09-0003A	10/10/09	1,785	08/11/09			753	651	95	71	54	40
25	DUNCAN	ORF-09-0016	11/07/09	340	09/08/09			106	214	10	5	2	1
26	LAWTON	ORF-09-0015	11/07/09	12,270	09/08/09			2,210	6,093	496	434	380	332
27	ARDMORE	ORF-09-0018	11/07/09	1,090	09/08/09			294	478	79	60	45	34
28	GUYMON	ORF-09-0013	12/12/09	1,335	10/13/09			804	499	8	6	4	3
29	TULSA	ORF-10-0001	06/12/10	27,757	04/13/10					3,470	6,072	2,277	1,992
30	MOORE	ORF-08-0002A	07/10/10	42,837	05/11/10					6,497	5,355	3,873	3,389
31	ENID	ORF-09-0019	07/10/10	39,900	05/11/10					11,686	3,527	6,172	4,629
32	OKMULGEE	ORF-09-0012	08/07/10	5,100	06/08/10					736	545	477	418
33	BARTLESVILLE	ORF-10-0004	09/11/10	1,700	07/13/10						425	319	239
34	BROKEN ARROW	ORF-09-0033	09/11/10	5,735	07/13/10						717	627	549
													3,362

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08-'11)				Projected (State FY '12) ²				OUT YEARS	
					FY 08	FY09	FY10	FY 11	FY 12					
									QTR 1	QTR 2	QTR 3	QTR 4		
35	MOORE	ORF-10-0012	12/11/10	6,637	10/12/10				830	726	635	556	3,890	
36	OKLAHOMA CITY	ORF-10-0011	12/11/10	35,000	10/12/10				62	4,367	3,821	3,344	2,926	20,480
37	OKMULGEE	ORF-10-0013	02/12/11	650	12/14/10				29	155	116	87	65	196
38	BIXBY	ORF-10-0006	03/12/11	2,860	01/11/11					715	536	402	302	905
39	TULSA	ORF-11-0003	06/11/11	23,480	04/12/11					2,935	2,568	2,247	1,966	13,764
40	TULSA	ORF-11-0005	10/08/11	16,700	08/09/11					2,088	1,827	1,598	1,398	9,789
41	OWASSO	ORF-10-0014	10/08/11	2,940	08/09/11					735	551	413	310	930
42	MUSKOGEE	ORF-11-0008	10/12/11	12,775	08/13/11					1,597	1,397	1,223	1,070	7,488
43	TULSA	ORF-12-0003	12/10/11	26,472	10/11/11					3,309	2,895	2,533	2,217	15,517
44	ALTUS	ORF-12-0005	06/09/12	1,951	04/10/12					488	366	274	206	617
45	NORMAN	ORF-12-0009	03/10/12	26,000	01/10/12					3,250	2,844	2,488	2,177	15,241
46	BROKEN ARROW	ORF-12-0012	05/12/12	4,000	03/13/12					500	438	383	335	2,345
47	DURANT	ORF-12-0013	06/09/12	1,025	04/10/12					256	192	144	108	324
	NON-SELECT PROJECTS													
1	GLENCOE	ORF-05-0003	06/30/06	170	12/13/05	5	36							
2	MCLOUD	ORF-04-0008	04/14/07	5,315	02/13/07	4,125	219							
3	TONKAWA	ORF-97-0007	11/14/02	1,070	09/10/02		42							
4	TISHOMINGO	ORF-04-0003	07/18/06	170	10/11/05	166	4							
5	COLLINSVILLE	ORF-06-0009	04/14/07	1,317	02/13/07	1,234	83							
6	CALERA	ORF-10-0010	12/11/10	4,985	10/12/10					4,985				
7	COMCD	ORF-09-0027	03/13/10	370	01/12/10				370					
8	COLLINSVILLE	ORF-06-0009	08/31/05	1,370	02/13/07	1,234	83							
9	ROLAND	ORF-08-0003	08/09/08	3,855	06/10/08				1,314	2,094	417			
10	PAULS VALLEY	ORF-04-0013	09/22/05	900	09/13/05	350	72	131		87	65	49	37	110
11	BEGGS	ORF-05-0005	05/12/07	4,220	03/13/07				1,470	1,491	422	105	91	80
12	HOBART	ORF-06-0005	05/12/07	1,040	03/13/07	604	387			12	9	7	5	15
13	HARRAH	ORF-08-0008	06/13/09	1,930	04/14/09					1,693	187	13	9	7
14	PAWNEE	ORF-08-0005	06/13/09	1,275	04/14/09				50	1,196	7	6	4	3
15	ADAIR	ORF-08-0007	07/11/09	1,400	05/12/09					516	488	99	74	56
16	PERKINS	ORF-09-0002	07/11/09	7,225	05/12/09				495	3,097	2,147	186	162	142
17	GROVE	ORF-07-0008	09/12/09	1,900	07/14/09					1,871	29	0	0	0
18	COLLINSVILLE	ORF-09-0009	09/12/09	550	07/14/09					258	243	73	-6	-4
19	PVIA	ORF-09-0026	11/07/09	839	09/08/09									
20	WALTERS	ORF-09-0005	12/12/09	1,326	10/13/09					572	645	27	21	15
21	PIEDMONT	ORF-09-0014	10/10/09	2,515	08/11/09					1,156	1,247	28	21	16
22	GRAND LAKE	ORF-09-0004	11/07/09	992	09/08/09					310	638	11	8	6
23	SAPULPA	ORF-09-0010	12/12/09	3,969	10/13/09									
24	SULPHUR	ORF-09-0030	02/06/10	10,200	12/08/09					2,029	3,830	543	475	415
25	HENRYETTA	ORF-09-0029	12/12/09	3,650	10/13/09					965	1,368	165	144	126
26	OCC	ORF-09-0028	11/07/09	2,000	09/08/09						4	3	498	374
27	TULSA CITY-CO	ORF-09-0034	12/12/09	279	10/13/09						192	43	22	11
28	COMCD	ORF-09-0027A	01/09/10	800	11/10/09						462	290	12	9

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08-'11)				Projected (State FY '12) ²				OUT YEARS	
					FY 08	FY09	FY10	FY 11	FY 12					
									QTR 1	QTR 2	QTR 3	QTR 4		
29	University of Oklahoma	ORF-09-0031	12/12/09	86.5	10/13/09				60	13	7	3	2	2
30	OK State University	ORF-09-0032	12/12/09	2,000	10/13/09				256	436	327	245	184	552
31	HOBART	ORF-07-0007	08/07/10	570	06/08/10				90	120	90	68	51	152
32	OKEMAH	ORF-10-0007	01/08/11	2,905	11/09/10				726	545	409	306	919	
33	STROUD	ORF-10-0015	02/12/11	660	12/14/10				165	124	93	70	209	
34	GUTHRIE	ORF-10-0008	02/12/11	4,925	12/14/10				92	604	529	463	405	2,833
35	FAIRVIEW	ORF-10-0009	02/12/11	2,040	12/14/10				114	481	361	271	203	609
36	INOLA	ORF-06-0011	03/12/11	2,000	01/11/11					500	375	281	211	633
37	FT GIBSON	ORF-11-0004	06/11/11	1,075	04/12/11					269	202	151	113	340
38	PAWNEE	ORF-10-0003	06/11/11	6,995	04/12/11					874	765	669	586	4,100
39	YALE	ORF-11-0001	06/11/11	2,990	04/12/11					748	561	420	315	946
40	NICOMA PARK	ORF-09-0035	10/08/11	160	08/09/11					80	40	20	10	10
41	MULDROW	ORF-11-0001	12/10/11	3,215	10/11/11					804	603	452	339	1,017
42	ELGIN	ORF-10-0005	10/08/11	3,364	08/09/11					841	631	473	355	1,064
43	LONE GROVE	ORF-04-0011	04/14/12	12,000	02/14/12					1,500	1,313	1,148	1,005	7,034
44	HYDRO	ORF-12-0001	02/11/12	3,500	12/13/11					438	383	335	293	2,052
45	GLENPOOL	ORF-11-0002	10/08/11	3,750	08/09/11					469	410	359	314	2,198
46	BRISTOW	ORF-12-0002	05/12/12	1,050	03/13/12					263	197	148	111	332
47	WETUMKA	ORF-12-0004	02/12/11	3,500	12/14/10					438	383	335	293	2,052
48	VIAN	ORF-11-0006	12/10/11	1,555	10/11/11					194	170	149	130	912
49	GERONIMO	ORF-12-0006	09/10/11	1,500	07/12/11					375	281	211	158	475
50	HOMINY	ORF-12-0007	03/12/12	600	01/12/12					150	113	84	63	190
51	SPERRY	ORF-12-0008	03/12/11	444	01/11/11					222	111	55	28	28
52	TUTTLE	ORF-11-0010	02/11/12	2,000	12/13/11					500	375	281	211	633
53	MCLLOUD	ORF-11-0011	07/17/12	1,750	05/18/12					438	328	246	185	554

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									

PROJECT NAME/ COMMUNITY SERVED	PROJECT NUMBER	CONST. START DATE ¹	ASSIST. AMOUNT	BINDING COMMIT. DATE	Actual (for State FY '08-'11)				Projected (State FY '12) ²				OUT YEARS
					FY 08	FY09	FY10	FY 11	QTR 1	QTR 2	QTR 3	QTR 4	
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						96			376
Program Admin. (4%)	11 GRANT	N/A	640	N/A						96			640
Program Admin. (4%)	12 GRANT	N/A	218	N/A							90		218
TOTALS			758,127	N/A	21,771	28,232	57,210	64,926	53,350	50,867	39,595	33,251	200,313
PAYMENTS TO SELECT PROJECTS			931,754	N/A	15,661	34,226	44,037	46,890	40,073	39,941	30,818	26,146	163,345
PAYMENTS TO NON-SELECT PROJECTS			323,484	N/A	7,719	4,255	18,209	17,745	13,060	10,830	8,681	7,016	35,734
PAYMENTS TO ADMIN.			11,751	N/A	32	127	1,150	334	218	96	96	90	1,234

**FOR ALL PROJECTS RECEIVING ASSISTANCE FROM THE 1990 THROUGH 2012
(INCLUDES BOTH FIRST AND SECOND ROUND FUNDS)**

	FY	FY	FY	FY	FY 2012				OUT YEARS
					QTR 1	QTR 2	QTR 3	QTR 4	
CWSRF PROGRAM TOTALS	21,771	28,232	57,210	64,926	53,350	50,867	39,595	33,251	200,313
CUMULATIVE TOTALS	945,822	974,054	1,031,265	1,096,191	1,149,541	1,200,408	1,240,003	1,273,254	1,473,567

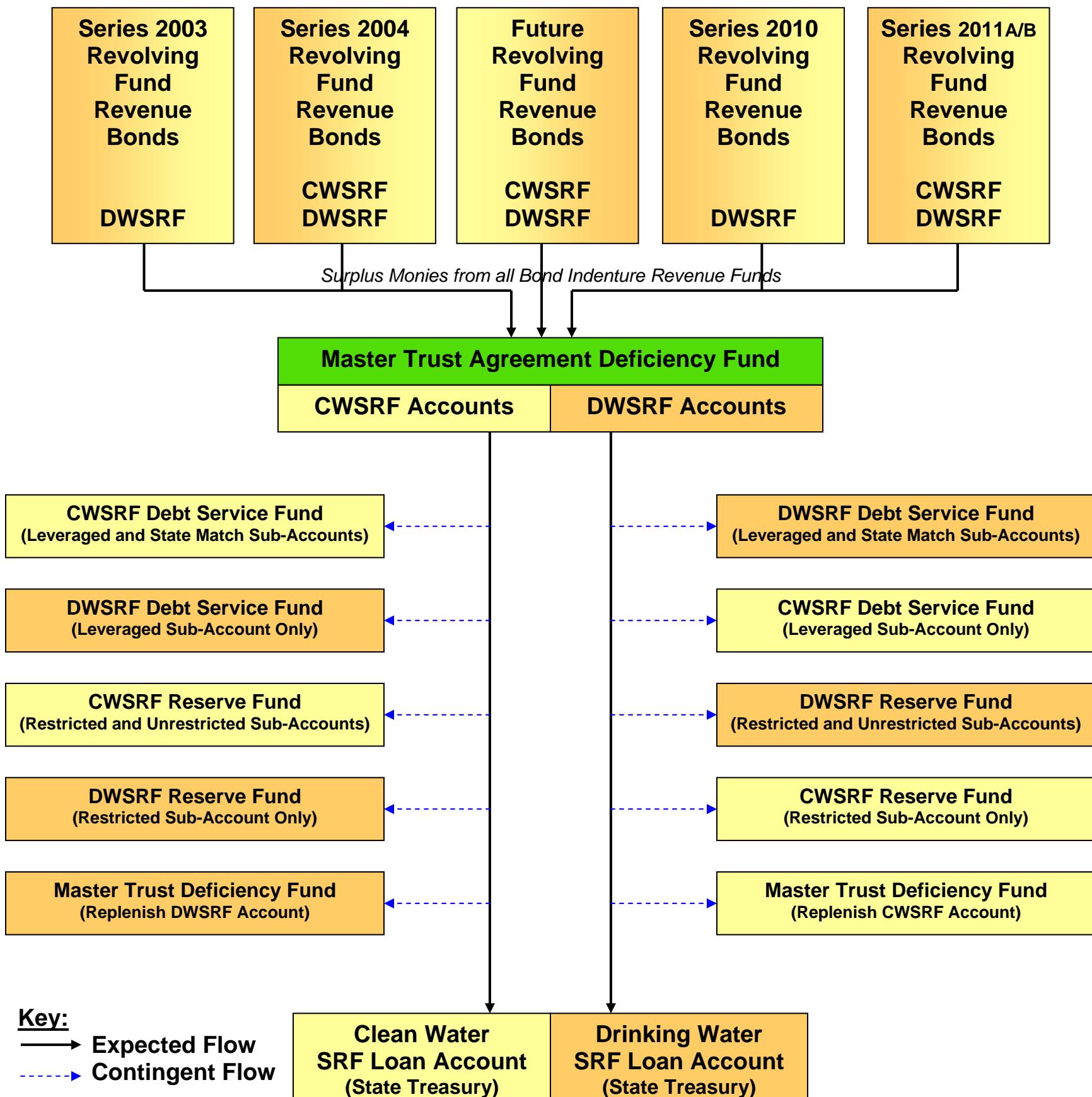
1 Estimated projecting loan closing 2 months following board approval date

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

Appendix C

Cross-Collateralization

under the
Master Trust Agreement
Oklahoma Water Resources Board
Clean Water and Drinking Water State Revolving Funds



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 septic treatment facility may be crucial to the proper maintenance and subsequent functioning of decentralized wastewater systems. Without the septic 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 INFRASTRUCTURE

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_portfoliomana

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=10_WCAP2&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.srbusinesscases.net/>.



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

- () () a. Site plan for facilities includes sustainable building components.
- () () b. The design includes an energy reduction plan with at least a 20% reduction goal
- () () c. The Treatment Facility participates in EPA energy star program¹
- () () d. Project utilizes high efficiency fixtures, energy star components in heating, ventilating, and air conditioning (HVAC) equipment, Power Smart technology
- () () 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)
- () () f. Use of renewable energy alternatives (e.g., geothermal, solar, off grid, Hydro Wind) (Categorical)
- () () g. Project proposes to use high efficiency pumps (achieve 20% reduction in energy consumption) (categorical-documentation required)
- () () 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)
- () () 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 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. (Categorical)
- () () b. 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. (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/>

(Attachment-2)

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			

(Attachment-2)

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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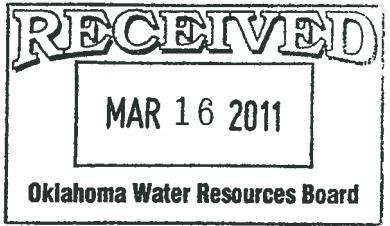
Appendix E

May 1, 2011

Oklahoma Water Resources Board to Hold Public Meeting on Clean Water State Revolving Fund FY 2012 Intended Use Plan

OKLAHOMA CITY - The Oklahoma Water Resources Board will hold a public meeting to receive comments on the Draft FY 2012 Clean Water State Revolving Fund (CWSRF) Intended Use Plan and Project Priority List on Thursday, June 2, 2011, at 10:30a.m. at 3800 North Classen Blvd, Oklahoma City, OK 73118. 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.



OFFICE OF ATTORNEY GENERAL
STATE OF OKLAHOMA

March 4, 2011

Dr. Al Armendariz
Regional Administrator, Region VI
United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: Certification of FY 2011 CWSRF Capitalization Grant

Dear Dr. Armendariz:

The Federal Water Pollution Control Act, 33 U.S.C §§1381, *et seq.*, as amended, provides authority to Congress to make capitalization grants available to the states for water pollution control revolving fund programs. In connection with the application of the state for the capitalization grant, 40 C.F.R. §35.3110 requires that the state's Attorney General provide certification of the state's authority to enter into capitalization grant agreements.

This letter certifies that the Oklahoma Water Resources Board ("OWRB") has the authority to participate on behalf of the State of Oklahoma in this federal grant program. The statutes that specify the OWRB's authority includes the following language:

"...the Oklahoma Water resources Board shall have the following jurisdictional area of responsibility:...Administration of the federal State Revolving Fund Program including, but not limited to, making application for and receiving capitalization grant awards, wastewater prioritization for funding, technical project reviews, environmental review process, and financial review and administration."

27 O.S. § 1-3-101 (C)(6). Additional authority for the OWRB to apply for, receive and administer federal capitalization grant awards is specified in Oklahoma Const. Art. X §39 and 82 O.S. §§1085.53 *et seq.*

If you have further questions or need additional information, please feel free to contact my office.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Scott Pruitt".
E. Scott Pruitt
Attorney General

Oklahoma SAAP Grants (ACTIVE)

as of June 27, 2011

Grantee	Amount	EPA Grant Number	NEPA Type & Target/Actual Date	Project Description	Status
FY 2001					
OWRB 3%	\$49,500	XP-976165-01	N/A		
Norman, OK	\$1,597,000	XP-986829-01	EA/FNSI	WWTP Improvements	Project Complete
FY 2002					
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
FY 2003					
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		Multiple Meetings But No Info Yet	WWTP Improvements	Planning Stage
Midwest City, OK	\$433,700		EPA CE issued July 2008	Water Infrastructure improvement	95 % Completion
Norman, OK	\$1,301,000	XP-976588-01	EPA CE issued	WWTP Improvements	Project Complete
FY 2004					
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	95 % Completion
Arcadia, OK	\$313,400		No info yet; EID Anticipated Soon	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

Oklahoma SAAP Grants (ACTIVE)

as of June 27, 2011

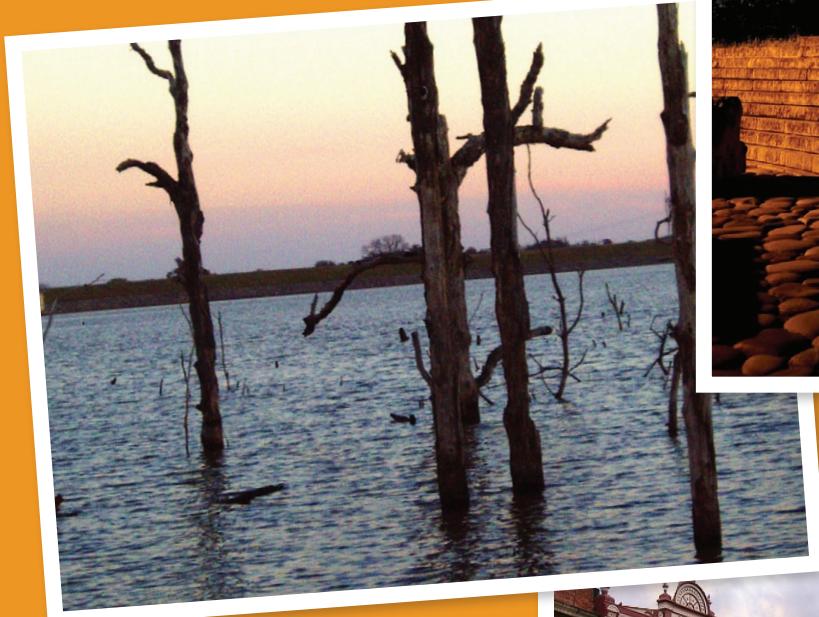
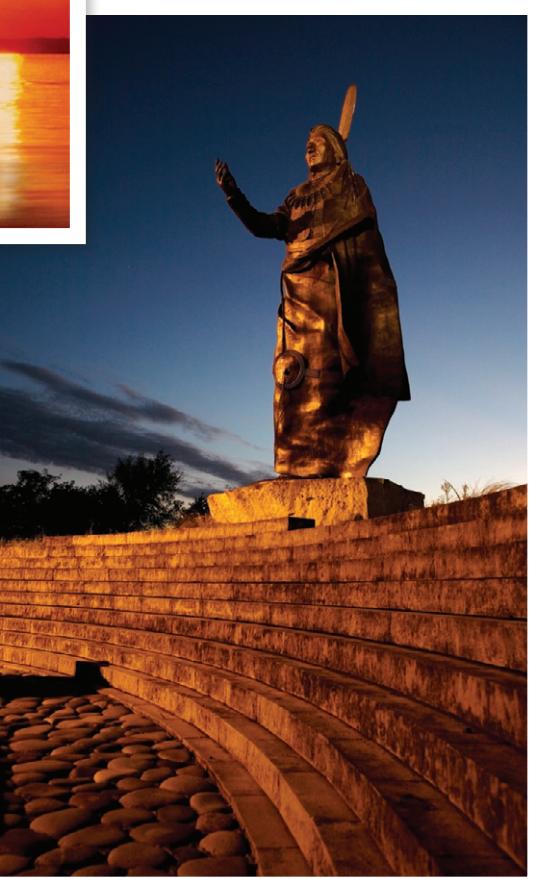
Grantee	Amount	EPA Grant Number	NEPA Type & Target/Actual Date	Project Description	Status
FY 2005					
Seminole, OK	\$962,200	XP-966279-01	EA/FNSI; 01/09/2007	Water Infrastructure improvement	Project Complete
Skiatook, OK	\$96,200	XP-966099-01	EPA issued CE Feb. 9, 2006	WWTP Improvements	Project Complete
Marlow, OK	\$96,200	XP-966173-01	CE; 06/09/2006	Water Infrastructure improvement	Project Complete
Meeker, OK	\$77,000	XP-966385-01	EPA issued CE	Water Infrastructure improvement	Project Complete; Processing Last Payment
Sulphur, OK	\$192,400	XP-966622-01	EA/FNSI	Wastewater Collection System Improvement	Project Complete
FY 2006					
Wewoka, OK	\$266,750		EPA issued CE 06/03/10	Water	Planning stage
Nicoma Park,OK	\$194,000		EA/FNSI issued by EPA	Wastewater collection system	Planning stage
FY 2008					
Ardmore,OK	\$300,000		No Project Info Yet	Water and Wastewater Project	Planning stage
FY 2009					
Ada	\$500,000		CE Draft sent to EPA	Water and Wastewater Project	Planning stage
McAlester	\$300,000		EPA issued CE 02/14/11	Water	Project Advertised & Bid
FY 2010					
Enid	\$300,000		Draft CE sent to EPA 06/20/11	Water (Wastewater?)	Planning Stage
Lawton	\$750,000			Water & Wastewater	Planning Stage

Acknowledgements

Special thanks to Owen Mills, Jon Phillips and the OWRB Public Information Staff for their vision with the formatting of this report. Thanks to the staff engineers and public information officer for the outstanding pictures capturing the varied projects that we fund. And finally, tremendous thanks to the OWRB's Financial Assistance Staff for their continuous dedication and hard work! Without the professional staff of the Financial Assistance Division, OWRB would not be able to provide the ongoing financial support to Oklahoma communities!



FUN FACT Oklahoma contains approximately 1,401 square miles of water area in its lakes and ponds (larger than the state of Rhode Island).



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Financial Assistance Division
3800 N. Classen Boulevard
Oklahoma City, Oklahoma 73118

