

DEC 1 2014

**Woodruff, Morris**

**From:** Ben Stockton <warsaw17@gmail.com>  
**Sent:** Tuesday, November 25, 2014 8:33 AM  
**To:** Woodruff, Morris  
**Subject:** Fwd: DNR 2014 peojwct  
**Attachments:** DNR 2014 peojwct.pdf; smime.p7s

**Missouri Public  
Service Commission**Exhibit No. 2Date 11-21-14 Reporter \_\_\_\_\_File No. SA-2015-0065

Dear Mr. Woodruff.

This is in regards to the public meeting you held in Warsaw Mo.  
 Nov 24 2014 7pm.

Find attached the DNR document that uses 2% of annual median family income as a maximum for fair sewer bills. The figure is mentioned on pg 18 (extracted below) and probably other locations in the document and other DNR literature (102 pages, rather long).

The best estimates for our sewer district ,BCSD#1.is \$18,500 to \$23,500 annual family median income. (Using warsaw as the upper figure, 2000 Census data) That works out to a 2% rate of 31 to 39 dollars a month. American Water is using Jefferson City as its starting standard and Jefferson City's 2000 census annual family income was \$39,528, working out to a 2% sewer bill spread over 12 months of \$66.05 a month. They have our district planned to start at \$65.22. You can see the problem.

Our plant was originally overbuilt, and simply cannot be run for 350 customers for a fair rate for this income of this area. We are not Osage Beach. No cabins are allowed on Truman Lake shoreline and visitors have turned to RV parks. Thus, the population is not growing as project planners expected when they built the plant (nor are housing prices rising) and the district's population has not grown in 16 years (we started at 350 customers in the district, and we are still at 350 ;( but now, 131+ are refusing to pay or can't pay) and the surrounding areas DO NOT want on this sewer system. If Am.Water acquires the plant and tries to make a profit , monthly bills could easily top \$150 a month in a couple years, which would mean even more people would try to get out of the system (and the rate would spiral as it did in 2012.). You heard the testimony. All the people testifying were against the purchase except one speaker, and, you will note that speaker had no supporters present.

Best Regards,

Ben

PG 18

Water SRF loan." The department has offered an even higher percentage grant for the most disadvantaged communities. For any community with a population of 3,300 or less, whose user rates will be at or above 2 percent of the median household income (MHI) and the MHI is at or below 75 percent of the state average MHI, they may receive a grant for up to 75 percent of their project cost and a loan for the remaining 25 percent. It is the department's intent to give preference to disadvantaged communities as well as on-site decentralized wastewater treatment and green infrastructure demonstration projects. In fiscal year 2014, the department is reserving an additional \$11 million from the federal fiscal year 2010 capitalization grant.

Page 102

Water Protection Program – Financial Assistance Center P.O. Box 176, Jefferson City, MO 65102-0176800-361-4827www.dnr.mo.gov

----- Forwarded message -----

From: Gerald Duvall <[gatliffbeach@earthlink.net](mailto:gatliffbeach@earthlink.net)>

Date: Mon, 10 Mar 2014 14:44:05 -0500

Subject: DNR 2014 peojwct

To: ben stockton <[warsaw17@gmail.com](mailto:warsaw17@gmail.com)>, Leroy Harris <[joyceharris5@embarqmail.com](mailto:joyceharris5@embarqmail.com)>, Geranis <[geranis@outlook.com](mailto:geranis@outlook.com)>, Mike Doak <[doakmike@aol.com](mailto:doakmike@aol.com)>, Bob Vedder <[septic\\_man@aol.com](mailto:septic_man@aol.com)>

interesting pages 5 and 6 and 37

# CLEAN WATER STATE REVOLVING FUND

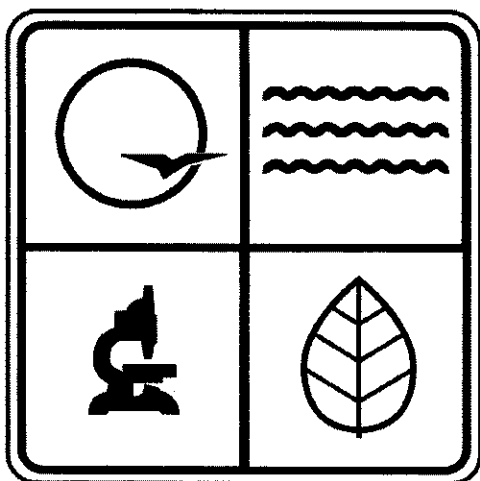
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## Intended Use Plan and Priority List Fiscal Year 2014

Approved by the Missouri Clean Water Commission - Sept. 11, 2013



**MISSOURI**  
Department of  
Natural Resources



# **MISSOURI DEPARTMENT OF NATURAL RESOURCES**

**Fiscal Year 2014**  
(Oct. 1, 2013 – Sept. 30, 2014)

**Clean Water State Revolving Fund  
Intended Use Plan And Priority List**

**Adopted Sept. 11, 2013**

**Fiscal Year 2014 Clean Water State Revolving Fund  
Intended Use Plan,  
State Grant And Loan Priority Lists  
And  
Program Application Forms And Instructions**

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The following application forms, instructions and guidance documents may be found on the Missouri Department of Natural Resources web page: [www.dnr.mo.gov/env/wpp/srf/wastewater-assistance.htm](http://www.dnr.mo.gov/env/wpp/srf/wastewater-assistance.htm). Potential applicants may also contact the department's Financial Assistance Center at 573-751-1192.

Missouri Clean Water State Revolving Fund Application

Water Quality Review Assistance/Antidegradation Review Request Form

Facility Plan Checklist

Clean Water SRF Fund Project Facility Plan Guidance

Environmental Protection Agency 2012 Green Infrastructure Guidance

**Fiscal Year 2014  
Clean Water State Revolving Fund  
Intended Use Plan**

**Introduction**

The Missouri Department of Natural Resources, Water Protection Program is the delegated authority for the administration of federal funds made available to the state under the provisions of the Clean Water Act by the U.S. Environmental Protection Agency. The funds are for financing a variety of eligible projects and are to be used in perpetuity for low interest loans made from the Clean Water State Revolving Fund (SRF).

The Department of Natural Resources is given authority by the state legislature to administer several related state-funded grant and loan programs.

This document contains the Intended Use Plan (IUP) and priority lists for the Clean Water SRF program and a listing of program applicants. At the current time, additional state grant and loan program funding is not available.

Operation and management of the Clean Water SRF program is directed by regulations 10 CSR 20-4.010 through 10 CSR 20-4.020 and 10 CSR 20-4.040 through 10 CSR 20-4.050.

**Intended Use Plan**

This Intended Use Plan contains information regarding the development and management of the Clean Water SRF priority lists and assurances mandated by federal rules. The plan details the proposed distribution of Missouri's anticipated Clean Water SRF capitalization grants, the repayments of previously awarded SRF loans, and the interest earnings from the repayment account deposits for the upcoming fiscal year.

The program is at a crossroads; the continued success of the program is dependent on how the department will allocate funding in the future to address the clean water infrastructure needs throughout the state. With the uncertainty of future federal funding, the allocation of available Clean Water SRF funding will come under greater scrutiny.

Historically, the Clean Water SRF Intended Use Plan has been prepared, and after public comment, been adopted by the commission with an effective date of July 1. This schedule allowed the program to run concurrently with the state fiscal year. However, due to the economic uncertainty of the last several years, it has become evident that the financial information necessary to prepare the Intended Use Plan would not be available in time to prepare the plan as in the past. Upon careful review of federal and state processes, it has been determined that preparing the Intended Use Plan on a schedule that coincides with the federal fiscal year would be beneficial to the Clean Water SRF program and applicants.

This Intended Use Plan describes the proposed use of funds reserved for financial assistance for clean water infrastructure improvements during fiscal year 2014 (Oct. 1, 2013 to Sept. 30, 2014). The effective dates of the fiscal year 2013 plan were extended to cover the transition period. This Intended Use Plan shall remain effective until Sept. 30, 2014 or until such time as the fiscal year 2015 Intended Use Plan becomes effective.

In addition to the schedule change, the department considered a variety of options to enhance the program and expand the number of projects receiving funding. Two options were selected for implementation.

The department will utilize the ability of the Environmental Improvement and Energy Resources Authority (EI ERA) to sell bonds, the proceeds of which would supplement projected annual funding levels. Size of the sales would be based on current Clean Water SRF loan repayment schedules and projected new loans. An anticipated bond sale of \$130 million is included in the Sources and Uses table on page 14.

The department will also allocate a certain percentage of available funding for certain size communities or for high priority project types, such as Combined Sewer Overflows. Funds set aside for this reserve are based on a percentage of the anticipated available funds, the number of applicants ready to proceed, as well as federal and departmental issues.

Projects carried over from the previous fiscal year would be allocated available funds first. Remaining funds would be allocated, to the extent we receive applications, as shown below. Any remaining funds from a specific group would be distributed as necessary to fund other projects that are ready to proceed.

- 40% allocated to outstate Missouri
- 30% allocated to large metropolitan areas and districts
- 15% allocated to address combined sewer overflow projects
- 15% allocated to Green Project Reserve incentives and department initiatives

Large metropolitan areas and districts have service area populations of 75,000 or more. Outstate Missouri areas have service area populations of less than 75,000. Additional information on this subject is provided on page 27.

#### **Clean Water SRF Applications and Project Priority**

The department solicits applications for the state's revolving fund program each year. Applications for assistance are prioritized in accordance with the Construction Grant and Loan Priority System, 10 CSR 20-4.010. State Regulation establishes Nov. 15<sup>th</sup> as the annual submittal deadline for applications to participate in the programs during any fiscal year. However, applications will be accepted and processed at any time. Potential applicants are strongly encouraged to contact the department prior to submitting an application.

Except for projects funded solely through the Clean Water SRF, all applicants anticipating the use of other state or federal funds must complete a Missouri Water and Wastewater Review Committee project proposal. The applicant should contact the committee for a complete project proposal package. The committee represents the following agencies:

Andy Papen  
Missouri Department of Economic Development  
Community Development Block Grant Program  
301 W. High Street, P.O. Box 118  
Jefferson City, MO 65102  
Telephone: 573-751-3600



David Potthast  
Missouri Department of Natural Resources  
State Revolving Fund  
1101 Riverside Dr., P.O. Box 176  
Jefferson City, MO 65102  
Telephone: 573-526-0828

Ted Forester  
U.S. Dept. of Agriculture, Rural Development  
601 Business Loop 70 West, Parkade Center, Suite 235  
Columbia, MO 65203  
Telephone: 573-876-0995

State regulation 10 CSR 20-4.040 establishes that applications are valid for two plan cycles. Those projects not meeting program criteria within the allotted two-year cycle will have their allocated funds released and reallocated to other projects. Re-application to the program is possible at the end of the two-year cycle, but a project's position on a fundable, contingency, or planning list may change with each subsequent application.

Project applications listed in this IUP are separated into two groups: carryover and new. Projects that were listed as "Fundable New Projects" in the previous Intended Use Plan are placed on the "Fundable Carryover Projects" list for fiscal year 2014. All remaining projects are evaluated and priority points are assigned in accordance with 10 CSR 20-4.010. Projects are placed on the fundable, fundable contingency, contingency or planning lists based upon their priority points, their progress towards meeting funding eligibility criteria, and availability of adequate monies. Staff will closely monitor each applicant's progress towards funding eligibility and may shift projects between the lists.

### **Bypassing Projects**

As funds become depleted, staff will present recommendations to the commission to fund or bypass an applicant's project. Projects failing to progress towards fundable status are subject to funding bypass. A project with fewer priority points may bypass a project with a higher priority point ranking that is failing to make sufficient advancement towards funding eligibility. Recommendations to the Clean Water Commission to fund or bypass a project may be made at any commission meeting throughout the fiscal year. Applicants whose projects are recommended for bypass or funding will be notified prior to the commission meeting when their projects appear on the agenda and will be allowed time to present their points of view regarding the proposed change in project status.

### **Readiness to Proceed**

A Clean Water SRF project's readiness to proceed is based upon two criteria; acceptable debt instrument and the submittal of a "complete" facility plan. A facility plan submittal checklist is included with the application form. Potential applicants are strongly encouraged to obtain a water quality review sheet or anti-degradation report from the department before initiating facility planning activities. Facility plans submitted to the department without the appropriate water quality review sheet or anti-degradation report and the Facility Plan Submittal Checklist will be deemed incomplete. Incomplete facility plans will delay proposed projects and, ultimately, project funding.

A summary of each program, beginning on page 21, is included with its fundable, contingency and planning lists.

## **Clean Water State Revolving Fund Fiscal Year 2014 Intended Use Plan**

### **I. Background**

Each year as required by Title VI of the federal Clean Water Act, Missouri prepares an Intended Use Plan to identify the projected uses and serve as a basis for distribution of the monies available in its Clean Water State Revolving Fund.

During fiscal year 2014, Missouri expects to be awarded the federal fiscal year 2013 capitalization grant for the Clean Water SRF program. The anticipated grant amount is \$37,009,000. The federal funds will be matched with 20 percent state funds from the proceeds of state Environmental Improvement and Energy Resources Authority (EIERA) bond sales.

Applications for assistance are considered based upon the priority ranking criteria contained in 10 CSR 20-4.010. When applications exceed the funds available, projects are listed in priority point order. In order to recognize the efforts of Clean Water SRF applicants to complete their proposed wastewater infrastructure projects, the funding lists consider an applicant's readiness to proceed, in addition to their priority point ranking.

#### **Project Lists**

- **Fundable Carryover Projects List** – The commission shall maintain a carryover list identifying unfunded projects approved for funding in the prior fiscal year. These projects shall maintain their funding eligibility in the current fiscal year.
- **Fundable Projects Lists** – The fundable lists identify those projects the commission intends to fund during a given fiscal year. The commission will not consider placing a proposed project on one of the fundable lists unless the Facility Plan Submittal Checklist is submitted with the facility plan and items one through four on the list are completed. Prior to completion and submittal of a facility plan, the applicant is strongly encouraged to obtain a water quality review from the department. An entity seeking to have a project placed on one of the fundable lists must have submitted a substantially complete facility plan and information indicating the public entity has an appropriate debt instrument in place. A debt instrument includes, but is not limited to, general obligation bonds and revenue bonds.

The Fundable Projects List is composed of three separate lists as follows:

- **Outstate Missouri Fundable Projects List**
  - **Large Metropolitan Areas and Districts Fundable Projects List**
  - **Combined Sewer Overflow Fundable Projects List**
- **Fundable Contingency Projects List** – Identifies projects meeting all programmatic criteria to receive funds. This list is created due to insufficient available funds. Projects will be listed in priority point order regardless of the date all programmatic criteria are met.
  - **Contingency Projects List** – The contingency project list identifies projects that may be considered for funding during a given fiscal year if unanticipated or uncommitted funds become available. Projects will not be considered for the contingency list unless a complete facility plan or engineering report has been submitted for review.
  - **Planning List** – The planning list identifies all potential loan projects not contained on a fundable priority list. Planning list projects may advance to the contingency or fundable lists,

with commission approval, and the successful completion of the listing criteria: voter passage of bond issues or approval of alternate debt instruments, and submission of a substantially complete facility plan.

- Priority Watershed Reserve – The priority watershed reserve list was established as a part of the department’s Our Missouri Waters Initiative. Additional information about the initiative begins on page 24.
- Public and Private Partnership Demonstration Projects and Public Entity and Satellite Community Partnerships – These new lists in fiscal year 2014 have been established as a part of the department’s decision to reserve an increased amount of additional subsidization funding from federal capitalization grants. Additional information on this subject begins on page 12.
- Nonpoint Source and Green Infrastructure Demonstration Grants – The nonpoint source and green infrastructure list identifies proposed demonstration projects directly related to addressing nonpoint sources of pollution or projects implementing green infrastructure.
- Disadvantaged Community Reserve – The disadvantaged community reserve list was established as a result of the federal fiscal year 2010 budget. Congressional intent is to provide additional subsidization to state-defined disadvantaged communities. Communities shown on this list must meet readiness to proceed criteria as well as meet the disadvantaged community criteria (see page 24).

Projects will be eligible to receive financial assistance subject to final program appropriations, project reviews, and project schedules.

## **II. Description of the Clean Water SRF Loan Program**

Department staff work with each applicant to develop a schedule that allows the project to be financed on a predetermined closing date.

Assistance will be in the form of loans with a target interest rate of 30 percent of market rate. In accordance with state regulation 10 CSR 20-4.040, the interest rate shall be based on the Twenty-Five Bond Revenue Index as published in *The Bond Buyer*. An annual fee of up to 1.0 percent of the outstanding loan balance will be charged by the department. The loan fee shall be used to administer the Clean Water SRF program and other water pollution control activities in accordance with federal regulations. Short-term loans will be for a one to three year period. Long-term loans will be for up to 20 years.

The Cash Flow Model diagram on page 7 is provided to assist in understanding the loan program. Construction loan repayments must begin within one year after the first operational contract is substantially completed, i.e., the facilities are placed into operation. The bond repayment schedules will generally consist of semi-annual interest payments, and semi-annual or annual principal payments. The trustee bank holds the periodic participant repayments in separate recipient accounts outside the Clean Water SRF. Interest earnings on these recipient accounts are credited to the communities’ debt service account which reduces the amount of interest to be paid by the communities.

Prior to state fiscal year 2010, the program leveraged through the use of a reserve fund model. General Obligation or Revenue bonds were used to secure a borrower’s proposed debt. The

bonds were purchased and resold nationally by the Environmental Improvement and Energy Resources Authority (EI ERA). The funds generated by the sale of the bonds were deposited with a trustee bank in the applicant's name and were used for construction.

As construction costs were incurred, federal or recycled funds were deposited into a reserve account in an amount equal to 70 percent of expenditures. Interest was earned on the reserve through guaranteed investment contracts, which was then credited to the interest portion of the debt service of the bonds thereby providing the interest subsidy to the recipient. Due to recent economic conditions, guaranteed investment contracts are no longer available. During fiscal year 2011, the Clean Water SRF program transitioned to a cash flow model loan program.

The department receives federal Capitalization Grants from the Environmental Protection Agency. There is a 20 percent state match required to receive the grants. The funds are deposited into the State Revolving Fund (A) and utilized in accordance with applicable federal and state program requirements. State match funds are disbursed prior to utilizing Capitalization Grant funds.

Under the cash flow model loan program, the department purchases the debt obligations of the participants directly. As construction progresses, funds are released from the Clean Water SRF (A) to the recipient (B) through the trustee bank (C) so the construction costs can be paid. Recipients of a grant receive the funds directly from the Clean Water SRF program. Upon completion of the project, the loans are adjusted to reflect the final loan amount.

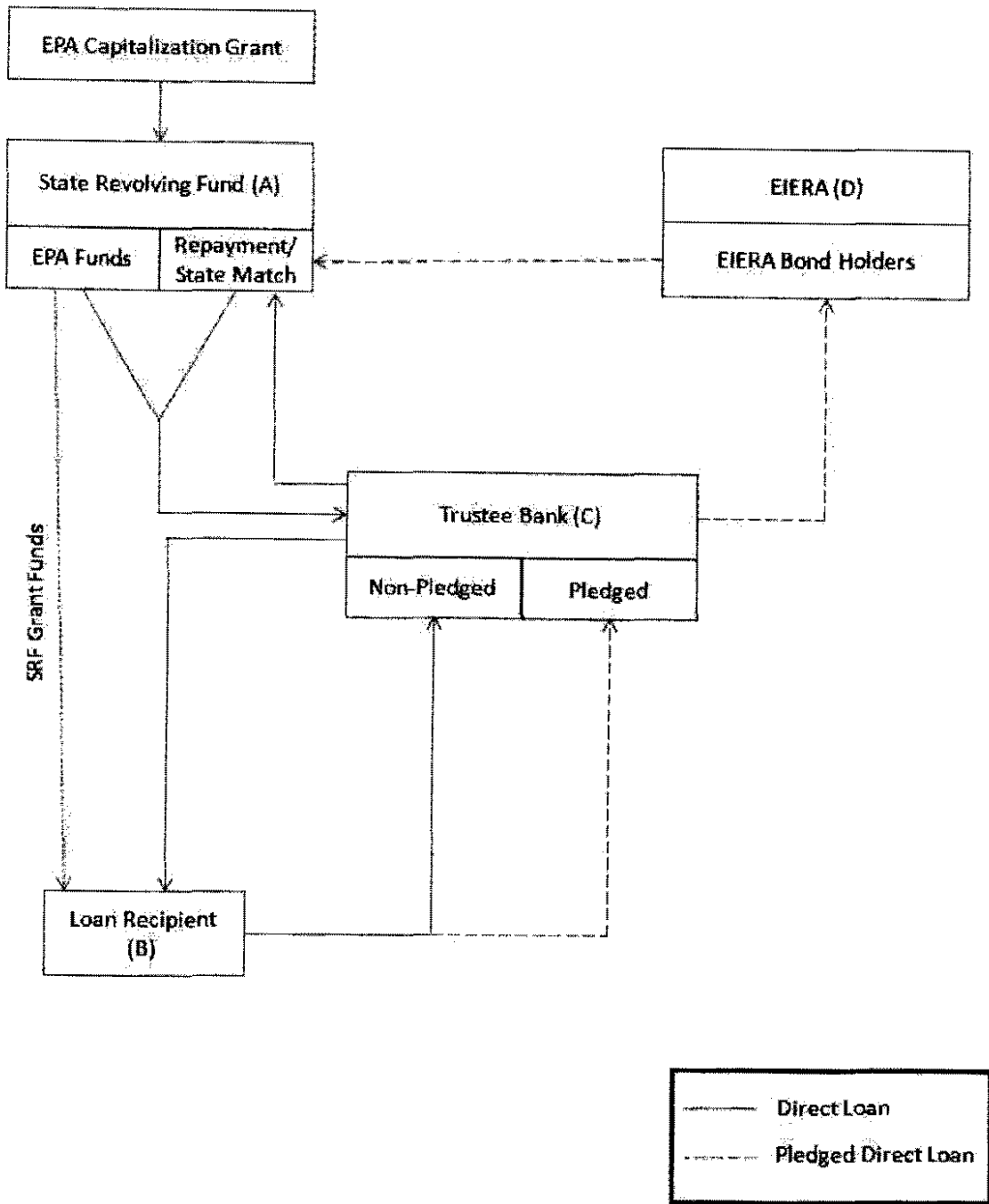
Loan recipients send their loan principal and interest payments to the trustee bank (C). At such time as the Clean Water SRF program needs to replenish the repayment fund, the EI ERA (D) exercises their authority to sell bonds and the direct loans are pledged to retire the EI ERA debt. The proceeds of this sale are deposited into the Clean Water SRF repayment account. The principal and interest payments on the EI ERA bonds are secured through the pledge of the direct loan principal and interest payments from previous Clean Water SRF program participants. Any surplus principal and interest that is not needed for the EI ERA debt service is deposited into the repayment account.

The department continues to work with the SRF finance team to refine the new program structure, and will continue to evaluate possible future program structures to ensure the program provides a stable source of funding for clean water infrastructure projects well into the future.

The department reserves the right to refinance, assign, pledge or leverage any loans originated through the Clean Water SRF program.

All loan funds must be expended within 24 months of the loan closing. Loan funds may only be used for the project initially approved by the department as evidenced by the issuance of the Finding of No Significant Impact and subsequent issuance of the construction permit.

# Cash Flow Model



### **Cross-Collateralization of Funds**

The U.S. Departments of Veterans Affairs and Housing and Urban Development, and the Independent Agencies Appropriations Act, 1998 (Public Law 105-65) authorized limited cross-collateralization between the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund. Cross-collateralization allows states to use Clean Water SRF funds as security for bonds issued to finance Drinking Water SRF projects and vice versa. The cross-collateralization of the two funds may enhance the lending capacity of one or both SRFs. State statute 644.122 RSMO provides the state's legal authority to implement cross-collateralization.

### **III. Goals and Objectives**

Each year the department evaluates the operations and the financial structures of the Clean Water SRF to gauge program effectiveness. Long and short-term goals are proposed to improve program services and investment returns. Assessment of the improvement effort is included in the annual report. The following sections present the current strategies for program improvement.

#### **Long-Term Goals (Three to Five Years)**

Goal: Promote coordination efforts both within and outside the agency for the purpose of expediting the funding of projects. The Clean Water SRF program staff commits to work with the U.S. Department of Agriculture-Rural Development and the Department of Economic Development Community Development Block Grant program to provide affordable financing for municipal pollution prevention and control projects.

Goal: Pursue more holistic regional and watershed-based solutions that address both point and nonpoint source pollution problems and opportunities to use distributed wastewater treatment options where they could be applied.

Goal: Initiate the Clean Water SRF state regulations review and revision process.

Goal: Pursue public and private sector partnership demonstration projects.

Goal: Provide financial assistance to public entities to provide service to distressed satellite communities.

#### **Short-Term Goals**

Goal: Explore with stakeholders ways the Clean Water SRF Program can be used to encourage integrated state water resource management through a watershed approach to better target resources and provide greater environmental benefits to the State of Missouri.

Goal: Target available loan funds to high priority needs in accordance with the Intended Use Plan priority list in order to encourage construction of the highest impact water quality improvement projects.

Goal: Look at ways the Clean Water SRF program can be used to encourage sustainable infrastructure and capacity development concepts with borrowers.

Goal: Continue to identify projects that qualify for green project reserve funding, in accordance with federal guidance.

#### **IV. Modifications**

After the commission adopts the Clean Water SRF priority lists, it may modify the lists or redistribute the available funds in accordance with paragraphs A through D below. The commission may only take this action after providing notice to those projects directly affected.

As stated previously, in accordance with 10 CSR 20-4.040, Clean Water SRF applications must be postmarked or received by Nov. 15 prior to the fiscal year for which Clean Water SRF assistance is being sought. However, to facilitate the timely and expeditious use of available Clean Water SRF funds, eligible applications that are not received in time to be placed on the project lists adopted by the commission, and received prior to Sept. 1, 2013 will be evaluated upon receipt. By amendment, the commission may place the new project on the appropriate project list.

##### **A. Inadequate Allocations**

If the actual federal Clean Water SRF allocations are less than the allocations anticipated by the commission in the development of the priority lists, or if previous allocations are reduced, the commission may find it necessary to reduce their commitments to projects on the priority lists or to the various purposes outlined in the appendices. The commission may take formal action to reduce the number of commitments in accordance with subparagraphs 1-3 of this paragraph.

1. The commission may reduce the funds allocated to each purpose as shown on the table found on page 14.
2. The commission may remove the lowest priority projects from the fundable priority lists, placing these projects on the appropriate contingency list in a position dictated by their priority relative to other projects on that contingency list.
3. The commission may bypass projects on the fundable priority lists in accordance with paragraph C of this document.

##### **B. Unanticipated and Uncommitted Funds**

If unanticipated or uncommitted funds become available, the commission may take formal action to distribute them in accordance with subparagraphs 1-3 of this paragraph.

1. The commission may use the unanticipated or uncommitted funds to move the highest priority project from contingency priority lists to the proper fundable list.
2. The commission may use the unanticipated or uncommitted funds to increase the amount of funds allocated to the various purposes as shown on the table found on page 14.
3. The commission may increase the amount of funds allocated to projects on the fundable lists or to provide increased assistance to projects that have already received assistance.

##### **C. Project Bypass**

The commission may bypass any project on a fundable priority list that is not, in the commission's opinion, making satisfactory progress in satisfying requirements for Clean Water SRF assistance. Such projects will be removed from the fundable priority lists and placed on the proper contingency or planning priority list in a position dictated by the

commission. In determining whether a project is making satisfactory progress in satisfying the requirements for Clean Water SRF assistance, the commission shall use the criteria contained in subparagraphs 1-2 of this paragraph. Funds released through project bypass will be considered uncommitted and available for distribution in accordance with paragraph B of this section.

1. All projects originally on the fundable lists when adopted may be by-passed if the applicant fails to submit the documents required for Clean Water SRF assistance at least 60 days prior to the beginning of the quarter for which the assistance is anticipated.
2. The commission may use individual schedules developed by the department to determine whether a Clean Water SRF project is making satisfactory progress during the fiscal year.
3. Carryover projects may be automatically bypassed if they do not have all documents submitted and approved on or before **June 1, 2014**. Recovered funds will be immediately available for contingency projects in accordance with paragraph B of this section.

**D. Project Removal**

Projects may be removed from the priority list at the request of the applicant, a finding by the department that the project is ineligible for Clean Water SRF assistance, or a finding by the EI ERA that the applicant is not eligible for participation in the program.

**V. Use of Funds**

The table on page 14 summarizes the state's allocation of federal funds, distribution of those resources, and the amount available for eligible construction for the fiscal year 2014 Clean Water SRF proposed projects.

Since 1989, the Clean Water SRF has made binding commitments for project costs in excess of \$2.1 billion. In 1996 the first Clean Water SRF nonpoint source loan program was instituted; approximately \$18.2 million has been obligated to nonpoint source projects in the subsequent years.

The fiscal year 2014 Intended Use Plan contains nonpoint source loan requests of \$5 million.

The Clean Water SRF project lists are found on pages 26 - 37 of this document.

**Transfer of Loan Funds Between the Drinking Water SRF and the Clean Water SRF**

Section 302 of the Safe Drinking Water Act Amendments of 1996 authorized the transfer of funds between the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund. The rules governing the transfer of funds limit the dollar amount a state can transfer to no more than 33 percent of a Drinking Water SRF capitalization grant.

As funding is available and as needs arise, the department can transfer loan funds with the approval of the Missouri Safe Drinking Water Commission, the Missouri Clean Water Commission and EPA.



A listing of previous transfers is contained in the table below:

Fiscal Year	Clean Water SRF	Drinking Water SRF
2001	(\$10,475,000)	\$10,475,000
2011	\$10,475,000	(\$10,475,000)
2013	\$10,000,000	(\$10,000,000)
2013 (Federal)	\$18,500,000	(\$18,500,000)

The department, with prior approval from the Missouri Safe Drinking Water Commission, the Missouri Clean Water Commission, and EPA, reserves the right to make additional transfers in the future.

#### **Repayment Fund Investment Interest Earnings To Retire State Debt**

The debt service for all Water Pollution Control Bonds has historically been paid through the state's general revenue, with the exception of the last series sold in 2002. The department obtained an agreement with the U.S. Environmental Protection Agency to repay the 2002 series using the investment interest earnings from the Clean Water SRF repayment fund.

The department renegotiated this agreement with EPA to apply Clean Water SRF investment interest earnings to bonds issued prior to 2002, not just the 2002 series. Specifically, the Clean Water SRF operating agreement, between the department and the U.S. Environmental Protection Agency, has been amended to allow for the use of repayment fund investment interest earnings to retire the SRF's share of the Water Pollution Control Bonds used for state match. On Jan. 10, 2007, the commission amended the 2007 Clean Water SRF Intended Use Plan to allow for the use of investment interest earnings to retire the SRF's share of the Water Pollution Control Bonds issued prior to 2002 and used for state match at that time.

The department has analyzed the impact on the Clean Water SRF should the investment interest earnings be used to pay interest on the SRF's share of the Water Pollution Control Bonds. The department intends to use approximately \$2.0 million during fiscal year 2014. Staff will continue to monitor the use of investment interest earnings in future years to ensure that the integrity of the Clean Water SRF fund will not be negatively impacted.

#### **Federal Capitalization Grant Requirements**

Beginning in federal fiscal year 2010, additional requirements were imposed on the state as a condition of receiving Capitalization Grants.

##### **A. Additional Subsidization.**

A portion of the capitalization grants since 2009 are to be used to provide additional subsidization. A summary of the amounts reserved from each capitalization grant appears below.

Federal Fiscal Year	Percentage	Amount
2010	Not less than 14.98%	\$19,459,361
2011	Not less than 9.27%	\$3,793,371
2012	Not more than 8.25%	\$3,266,140
2013	Not more than 7.07%	\$2,614,923

The federal fiscal year 2010 intent of Congress was "to target, as much as possible, the additional subsidized monies to communities that could not otherwise afford a Clean

Water SRF loan.” The department has offered an even higher percentage grant for the most disadvantaged communities. For any community with a population of 3,300 or less, whose user rates will be at or above 2 percent of the median household income (MHI) and the MHI is at or below 75 percent of the state average MHI, they may receive a grant for up to 75 percent of their project cost and a loan for the remaining 25 percent.

It is the department’s intent to give preference to disadvantaged communities as well as on-site decentralized wastewater treatment and green infrastructure demonstration projects.

In fiscal year 2014, the department is reserving an additional \$11 million from the federal fiscal year 2010 capitalization grant. The funding will be utilized as follows:

1. Three million dollars will be directed to the department’s Our Missouri Waters Initiative. Additional information about the initiative begins on page 24.
2. Three million dollars will be directed to public entity and satellite community partnerships. Prioritization of funding will include addressing non-compliance, regionalization, manmade or natural disasters that will likely cause harm to human health or the environment or is presently causing adverse impacts.

Applications are being accepted for funding projects starting in fiscal year 2014. Grant awards will be based on the readiness to proceed criteria. Grants in this category will be evaluated using existing prioritization. Grants may be evaluated as frequently as a quarterly basis and may be subject to redistribution based on need and to address severe health, environmental Regionalization opportunities with commission approval.

3. Five million dollars will be directed to demonstration projects that develop public and private sector partnerships to address Clean Water SRF needs.

The department has targeted one million dollars of the federal fiscal year 2011 funding to a green infrastructure demonstration project grant, and \$554,280 to disadvantaged community reserve funding. The remaining \$2,239,091 has been targeted to green components of projects. Grant funding may be provided for 50 percent of the green component.

The department has reserved \$3,266,140 of the federal fiscal year 2012 funding for additional subsidies in the form of grants. The full amount is being targeted to the department’s Our Missouri Waters Initiative. Additional information on the initiative begins on page 24.

The department is targeting \$2,319,412 of the federal fiscal year 2013 capitalization grant additional subsidization funding to disadvantaged communities. The remaining \$295,511 has been targeted to the department’s Our Missouri Waters Initiative, consistent with the previous grant.

Beginning in fiscal year 2015, any Clean Water State Revolving Fund federal appropriation that includes grant funds, those funds will be distributed in the following priority order unless otherwise mandated by the federal appropriation:

1. In keeping with congressional intent, grant funds will be made available to disadvantaged communities or those entities that would otherwise be unable to afford the proposed project with a loan only.

2. To those communities willing to accept the wastewater from neighboring disadvantaged systems.
3. For DNR initiatives.

**B. Green Project Reserve.**

A portion of the capitalization grants are to be used for projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. A summary of the amounts reserved from each capitalization grant appears below.

<b>Federal Fiscal Year</b>	<b>Percentage</b>	<b>Amount</b>
2010	Not less than 20%	\$3,917,900
2011	Not less than 20%	\$8,187,200
2012	Not less than 10%	\$3,917,900
2013	Not less than 10%	\$3,700,900

Department staff will work directly with applicants prior to funding, to identify projects or components of projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities. Additional information regarding green infrastructure may be found in the Program Application Forms and Instructions at the end of this document.

**VI. Clean Water SRF Sources of Funds**

The estimated sources and anticipated distribution of funds can be found in the table on page 14.

**Funds Available**

Since the program's authorization in 1989, the Missouri Clean Water SRF has received over \$953 million in federal capitalization grants and over \$96 million in state match. The funding has been used to make over \$2.2 billion in loans to 549 recipients. The loans have resulted in interest savings to the communities of over \$737 million.

The Clean Water SRF program expects to have approximately \$339 million available for financing during this fiscal year. The estimate includes carry-over monies from previous years, repayments, interest earnings on investments of Clean Water SRF resources and the federal capitalization grants. The amount of funds made available through this Intended Use Plan may be revised at any time due to current economic conditions.

The department will use the four percent program administration set aside from the federal capitalization grants and fees charged to Clean Water SRF recipients for program administration.

**Distribution of Capitalization Grant and Loan Repayment Funds**

Funds will be distributed to projects that are moved to the Fundable List by the Clean Water Commission. Sources and distribution of funds are as of Dec. 31, 2012.

**Fiscal Year 2014 Intended Use Plan  
Sources And Distribution Of Funds**

Description	Current	Anticipated	Balance
<b>Sources:</b>			
Capitalization Grants Funds (federal portion only)			
2009	\$ 750		
2010	\$ 1,055		
2011	\$ 5,631,414		
2012 <sup>1</sup>	\$ 56,094,042		
2013		\$ 37,009,000	
<b>Total Capitalization Grant Funds</b>	<b>\$ 61,727,261</b>	<b>\$ 37,009,000</b>	<b>\$ 98,736,261</b>
Bond Refinancing Proceeds		\$ 2,659,063	\$ 2,659,063
Repayment Fund (Fund 0602 & 0649) <sup>2</sup>	\$ 256,372,870	\$ 104,432,121	\$ 360,804,991
EIERA Bond Sale		\$ 130,000,000	\$ 130,000,000
<b>Total Sources</b>	<b>\$ 318,100,131</b>	<b>\$ 274,100,184</b>	<b>\$ 592,200,315</b>
<b>Uses:</b>			
Loan Commitments	\$ 4,658,928		\$ 4,658,928
Committed for ARRA projects	\$ 26,342,672		\$ 26,342,672
Committed for Direct Loans	\$ 136,151,319		\$ 136,151,319
Independent Audit		\$ 25,000	\$ 25,000
4% FFY 10 Administration Costs		\$ 1,055	\$ 1,055
4% FFY 11 Administration Costs		\$ 1,059,606	\$ 1,059,606
4% FFY 12 Administration Costs		\$ 1,567,160	\$ 1,567,160
4% FFY 13 Administration Costs		\$ 1,480,360	\$ 1,480,360
Match Bond Debt Service <sup>3</sup>			
Remaining Principal Due	\$ 9,067,500		
Interest Due through SFY 2014		\$ 398,048	\$ 9,465,548
Additional Match Bond Debt Service <sup>4</sup>			
Due through SFY 2014		\$ 437,350	
2010B Pledged Commitments		\$ 5,809,480	\$ 6,246,830
Anticipated Direct Loans (Jan. 1 – Sept. 30)		\$ 65,858,000	\$ 65,858,000
Disadvantaged Community Loans		\$ 354,689	
FFY 10 Additional Subsidization		\$ 17,459,361	
FFY 11 Additional Subsidization		\$ 3,793,371	
FFY 12 Additional Subsidization		\$ 3,266,140	
Our Mo Waters Initiative Loans		\$ 2,453,844	
FFY 13 Additional Subsidization		\$ 2,614,923	\$ 29,942,328
Loan Funds Allocated for FY 14 CW IUP Projects		\$ 309,401,509	\$ 309,401,509
<b>Total Uses</b>	<b>\$ 176,220,419</b>	<b>\$ 415,979,896</b>	<b>\$ 592,200,315</b>

1. The grant amount includes the \$18.5 million transfer from Drinking Water SRF.
2. Repayment Funds include the 2010B State Match Bond Proceeds.
3. Debt service for the A2002 and A2010 State Match Bond.
4. Debt service for the Match Bond Debt Service is currently being funded from the Clean Water SRF program rather than state funds.

**Distribution of Loan Administration Fees**

On Oct. 20, 2005 the U.S. Environmental Protection Agency issued guidance relative to the administration fees charged by the state to recipients of Clean Water SRF program assistance. Fees charged by the program are not included as principal in loans. Dependent upon the source of the loan, as well as the timing of the receipt of the administration fee, the administration fee may be considered as program income. As shown in the following table, the administration fees collected are considered as:

- program income earned during the capitalization grant period;
- program income earned after the capitalization grant period, or;
- non-program income.

During the grant period is defined as the time between the effective date of the grant award and the ending date of the award reflected in the final grant financial report.

Program income earned during the grant period may only be used for eligible Clean Water SRF activities, as defined in the Federal Clean Water Act, and program administration. Program income earned after the grant period, as well as non-program income, may be used for a broad range of water-quality related purposes. The state has obtained approval from the EPA to use program income earned after the grant period for water-quality related purposes.

<b>Source And Distribution Of Funds*</b>			
<b>Loan Administration Fees</b>			
	<b>Program Income Earned During Grant Period</b>	<b>Program Income Earned After Grant Period</b>	<b>Non-Program Income</b>
<b>Balance as of 12/31/12</b>	<b>\$ 418,232</b>	<b>\$ 19,223,715</b>	<b>\$ 5,121,450</b>
<b>Income</b>			
Projected (01/01/13 thru 06/30/13)	\$ 368,007	\$ 1,206,515	\$ 1,614,776
Projected (07/01/13 thru 06/30/14)	\$ 1,459,574	\$ 2,307,991	\$ 2,818,965
<b>Total Projected Income</b>	<b>\$ 1,827,581</b>	<b>\$ 3,514,506</b>	<b>\$ 4,433,741</b>
<b>FY 13 Projected Expenditures (01/01/13 thru 06/30/13)</b>			
Program Administration	\$ (214,224)	\$ (55,907)	\$ (370,079)
DNR Transfers & Allocations	\$ (60,965)	\$ 18,157	\$ (153,304)
Program Specific Distribution (PSD)		\$ (1,583,769)	\$ (864,778)
<b>FY 14 Projected Expenditures</b>			
Program Administration	\$ (433,617)	\$ (1,227,923)	\$ (2,839,534)
ITSD Direct Costs			\$ (500,000)
Board Training & Operator Certification		\$ (250,000)	
Abatement of Water Quality Emergencies			\$ (250,000)
Water Quality & Watershed Initiatives		\$ (1,000,000)	
Rural Sewer Grants			
State Parks Wastewater Infrastructure		\$ (2,250,000)	
Fixed Station Ambient Network Contract		\$ (452,356)	\$ (356,772)
Water Quality Studies			\$ (100,000)
Small Community Technical Assistance Program			\$ (500,000)
<b>Total Projected Expenditures</b>	<b>\$ (708,806)</b>	<b>\$ (6,801,798)</b>	<b>\$ (5,934,467)</b>
<b>Projected Balances</b>	<b>\$ 1,537,007</b>	<b>\$ 15,936,423</b>	<b>\$ 3,620,724</b>

\* The distribution of loan administration fees to various department activities is subject to change throughout the fiscal year. Actual fund uses will be shown in detail in the fiscal year 2014 Clean Water State Revolving Fund Annual Report.

**VII. State Assurances and Proposals**

**A. Administrative Costs**

The department will use four percent of the federal fiscal year 2013 federal capitalization grant funds for program administration.

**B. Public Review and Comment**

The Intended Use Plan and priority list will be reviewed and adopted through a public review and comment process.

**C. Environmental Review**

The department has adopted regulation 10 CSR 20-4.050, which provides for a National Environmental Policy Act like review for all projects receiving Clean Water SRF loans.

**D. First Use for Enforceable Requirements**

EPA's Clean Water SRF guidance requires states to have the national municipal policy facilities either under construction or on enforceable schedules prior to using Clean Water SRF funds for non-national municipal policy projects. Missouri satisfied this requirement in December 1989.

**E. Compliance with Title II**

The Missouri Clean Water Commission assures that all Clean Water Act Clean Water SRF requirements were met by the designated equivalency projects in prior Intended Use Plans.

**F. Binding Commitments**

The department will enter into binding commitments (loans) for a minimum of 120 percent of each EPA grant payment into the Clean Water SRF within one year of the receipt of each payment.

**G. Expenditure of Funds**

The department will expend all funds in the Clean Water SRF in an expeditious and timely manner.

**H. Potential for Environmental Impact Statements**

All of the proposed fundable list projects have a low potential need for preparation of an environmental impact statement. A final decision regarding the need for an environmental impact statement will be made on each project during review of the facility plans.

**I. Description of Assistance**

For projects listed in this plan, the Clean Water SRF assistance will be in the form of loans with a target interest rate of 30 percent of market and an annual fee of up to 1.0 percent on the outstanding loan balance. Short-term loans will be for a one to three year period. Long-term loans will be for up to 20 years. Additional subsidization will be provided in accordance with federal appropriations.

**J. Carry-over Projects**

Unfunded projects that filed an original application by Nov. 15, 2011 were automatically carried into the fiscal year 2014 Intended Use Plan unless the Missouri Clean Water Commission removed the project under the provisions of sections IV.C. (Bypass) or IV.D. (Removal) of this document or the proposed loan recipient has requested to be removed.

**Carry-over projects in the fiscal year 2014 Intended Use Plan are not eligible to compete in the fiscal year 2015 Intended Use Plan unless reapplication is made by Nov. 15, 2013.**

**K. Anticipated Cash Draw Ratio (Proportionality)**

Missouri uses the cash flow model of the Clean Water SRF. The federal capitalization grant is not used as security on the state match bonds. One hundred percent of the required state matching funds are deposited into the Clean Water SRF before any capitalization grant funds are drawn. Then, a cash draw ratio of 100 percent federal funds is used.

**VIII. Additional Recipient Requirements**

**A. Single Audit Act Compliance**

Recipients of federal funds totaling greater than \$500,000 are subject to the provisions of the federal Single Audit Act of 1984 and the Single Audit Act Amendments of 1996. These requirements provide the federal government with assurances that the expenditures of federal funds are for their intended purposes and that the dispersal of those funds occurs in a timely manner. Final loan documents will include specific information.

**B. Missouri Labor Standards**

In accordance with Chapter 290 RSMo, projects receiving financial assistance for any construction project carried out in whole or in part with assistance made available by the Clean Water SRF, must comply with the requirements of the Missouri Department of Labor and Industrial Relations.

The department will not supply annual wage orders (wage determinations) for the projects. It will be the responsibility of each recipient to obtain the correct wage orders and to maintain compliance with them throughout the project. For additional information, applicants for funding should contact Department of Labor and Industrial Relations Division of Labor Standards Wage and Hour Section, 3315 W. Truman Boulevard, Room 205, P.O. Box 449, Jefferson City, MO 65102-0449, Phone: 573-751-3403, or by E-mail at: [laborstandards@labor.mo.gov](mailto:laborstandards@labor.mo.gov)

**C. Davis-Bacon Act**

All assistance provided after Dec. 23, 2011 for the construction of treatment works carried out in whole or in part with assistance made available through the Clean Water State Revolving Fund as authorized by Title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.), or with such assistance made available under section 205(m) of that Act (33 U.S.C. 1285(m)), or both, a term or condition requiring the compliance with the requirements of section 513 of that Act (33 U.S.C. 1372) in all procurement contracts. The purpose of this language is to apply the Davis-Bacon Act prevailing wage requirements to all assistance agreements.

All laborers and mechanics employed by contractors and sub-contractors on projects funded directly by or assisted in whole or in part by and through the federal government pursuant to the act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards specified in this section, the Secretary of Labor shall have



the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C.App.) and section 3145 of title 40, United States Code.

The U.S. Department of Labor provides all pertinent information related to compliance with the Davis-Bacon Act including labor standards, prevailing wage rates and instructions for reporting.

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## **Loan Programs**

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## **Loan Programs:**

The department presently offers a direct loan program, which includes loans for nonpoint source projects. Submittal deadline for these programs, established by state regulations, is Nov. 15<sup>th</sup>. However, Clean Water SRF staff will accept and process applications as received during the year. Financial information submitted by the applicants determines which loan program best meets the applicant's needs and financial capability.

The EPA has approved a class deviation from 40 CFR 35.3125 (b)(1). The class deviation allows for non-federal, non-state match Clean Water SRF funds (Clean Water SRF repayment funds) to provide loans that can be used to satisfy the local match requirement for most EPA grant-funded treatment works projects, including special Appropriations Act projects. This change can be applied to any EPA grant-funded treatment works project, other than a construction grant project, regardless of the date of the grant award, or the date that funds were appropriated for the project.

### **Clean Water SRF Loans**

Missouri's Clean Water SRF program offers low-interest loans for wastewater treatment improvements. The Missouri Clean Water Commission, the department and the EI ERA are cooperating to maximize the amount of construction that can be supported by the Clean Water SRF. The terms of the loan program are outlined below.

- Loan Term                      0 to 20 years
- Interest Rate                 30 percent of market rate
- Loan Fees                      Up to 1.0 percent on outstanding loan balance

Loans are available to communities that are financially able to support repayment of a loan. These loans are made possible by the federal capitalization grants awarded to the state. Capitalization grant funds are supplemented with matching funds equal to 20 percent of the annual grant amount. The matching funds are currently generated by the sale of EI ERA bonds.

Loans may be made to finance a variety of eligible nonpoint source projects.

Direct loans may be offered as interim loans on a case-by-case basis. Interim loans are offered as a means to provide funding for the development of plans and specifications and/or to initiate construction activities. For more information on the Clean Water SRF Loan Program, contact Doug Garrett at: 573-751-1192.

### **Nonpoint Source Loans**

Financial resources from the Clean Water SRF can be made available to address any nonpoint source pollution problem defined in the state's Nonpoint Source Management Plan. Nonpoint source water pollution occurs from agricultural sources, failed on-site wastewater treatment systems, local contamination of potable water table aquifers, abandoned water wells, and many other sources.

For information regarding the Clean Water SRF funding of nonpoint source projects, contact Doug Garrett or Traci Newberry at 573-751-1192.

### **MASBDA Animal Waste Treatment System Loan Program**

The Clean Water SRF currently funds a loan program through the Missouri Department of Agriculture for the construction of animal waste treatment facilities. Loans for animal waste treatment facilities are awarded to the Missouri Agriculture and Small Business Development Authority which in turn loans the funds to livestock and dairy producers for animal waste treatment facilities.

For information regarding the Animal Waste Treatment System Loan Program, contact MASBDA at 573-751-2129.

### **Disadvantaged Community Reserve**

As stated previously, federal capitalization grants require that a portion of the funding be used to provide additional subsidization therefore the department reserved funding for additional subsidies in the form of grants. These grants have been targeted to a variety of projects such as on-site or decentralized wastewater treatment and green infrastructure demonstration projects. Applicants may receive a 50 percent grant, based on the total eligible project costs, with a maximum grant amount of \$3 million per applicant. Applicants are responsible for securing the necessary matching funds. The department has been giving preference to disadvantaged communities as well as on-site or decentralized wastewater treatment and green infrastructure demonstration projects.

However, any community with a population of 3,300 or less, whose user rates will be at or above two percent of the median household income and the median household income is at or below 75 percent of the state average, may receive a grant for up to 75 percent of their project cost and be eligible to receive a loan for the remaining 25 percent. The availability of grant funds is contingent upon federal appropriations

### **The Department's Our Missouri Waters Initiative**

The department's Our Missouri Waters Initiative represents changes in our water management activities for both water supply and water quality. This process is designed to address challenges at an individual watershed level.

The department evaluated watersheds in the state using three priorities:

- Preservation - High-quality watersheds we want to protect
- Restoration - Opportunities for targeted improvement
- Watershed Partnerships - Success will depend on active involvement at the local level, and current activities can leverage resources

The department selected three pilot watersheds after evaluating the following criteria:

- Drought Susceptibility
- Cropland Erosion Potential
- Groundwater Contamination Potential
- Urbanization
- Population Growth
- Livestock Manure
- Commercial Fertilizer
- Water Supply
- Water Supply Reliability
- High-Quality Resources
- Wetlands
- Water Quality Impairment

- Biological Conditions
- Watershed Partnerships

Once water quality and quantity issues in our watersheds have been identified and prioritized, the department will take action to:

- Increase public involvement
- Coordinate activities within the department and among other agencies
- Determine methods to measure success

The three pilot watersheds selected by the department are:

- Big River Watershed
- Lower Grand Watershed
- Spring River Watershed

The project lists contain seven projects in the pilot watersheds as follows:

- Carl Junction – Spring River Watershed
- Duquesne – Spring River Watershed
- Pierce City – Spring River Watershed
- Joplin – Spring River Watershed
- Alba – Spring River Watershed
- Aurora – Spring River Watershed
- Monett – Spring River Watershed

While this approach to water management is new, the initiative builds on the department's previous work in specific watersheds. The department has been working for many years in the three proposed pilot watersheds where this effort will begin. Many of the department's divisions and programs are actively engaged in various activities in these waterways. By focusing on the watershed, the Our Missouri Waters initiative aims to integrate these activities across division and program organizational lines.

The federal fiscal years 2011 and 2012 capitalization grants provide for additional subsidization to Clean Water SRF projects. The department reserved \$2,239,091 of 2011 and \$3,266,140 of 2012 funding to provide grants through the Our Missouri Waters Initiative.

In fiscal year 2014, an additional \$3,000,000 of the federal fiscal year 2010 capitalization grant funding, and \$295,511 of the federal fiscal year 2013 capitalization grant funding is being reserved. The funding is being used to provide assistance to systems in the pilot watersheds.

**Clean Water SRF Loan Program  
Fundable Carry-over Projects - Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve			
											Category	Business/Categorical	Amount	
<b>Available Funds</b>					<b>\$309,401,509</b>									
Kansas City WSD (Turkey Creek PS) *	C295588-19	Coll Rehab	140	225,000	15,812,700	MO-0024929	4, 5	14-4	IIIB	15-4				
St. Joseph (Eastside Wastewater Service Area Improvements) *	C295699-01	Coll Rehab	140	76,780	25,985,882	MO-0023043	4	14-1	IVA	14-4				
Kansas City WSD (Birmingham Disinfection & Clarifiers) *	C295588-23	TP	130	459,787	8,134,963	MO-0049531	5	14-4	II	15-4				
Odessa *	C295675-01	TP	130	5,100	12,540,000	MO-0026395	4, 5	14-1	I, II, IVB	14-4				
Kirkville (Phase 8) *	C295250-10	Coll Rehab	105	17,505	1,422,000	MO-0049506	4, 5	14-1	IIIA	14-4	EE	B	1,422,000	
<b>Total Fundable Carryover Projects</b>					<b>\$63,895,545</b>									<b>\$1,422,000</b>
<b>Balance Forward</b>					<b>\$245,505,964</b>									

*Note: An explanation of the abbreviations and codes appears on page 38.*



**Allocation of Available Loan Funding**

<b>Loan Balance Forward from Fundable Carry-over Projects List</b>		<b>\$245,505,964</b>
Outstate Missouri (1)	40%	\$98,202,385
Large Metropolitan Areas and Districts (2)	30%	\$73,651,789
Combined Sewer Overflow (CSO)	15%	\$36,825,895
Green Project Reserve (GPR) Incentives and Department Initiatives	15%	\$36,825,895

- (1) Service area population of less than 75,000.
- (2) Service area population of 75,000 or more.

**Financial Summary of the Fundable Project Lists (loan funding only)**

	<b>Outstate Missouri</b>	<b>Large Metropolitan Areas &amp; Districts</b>	<b>Combined Sewer Overflow</b>	<b>Green Projects &amp; Department Initiatives</b>	<b>Total</b>
<b>Loan Allocation</b>	\$98,202,385	\$73,651,789	\$36,825,895	\$36,825,895	\$245,505,964
<b>Total Projects (1)</b>	\$(59,920,292)	\$(108,205,000)	\$(53,830,000)	\$(14,885,330)	\$(236,840,622)
<b>Balance Before Transfers</b>	\$38,282,093	\$(34,553,211)	\$(17,004,105)	\$21,940,565	\$8,665,342
<b>Transfers</b>	\$(34,553,211)	\$34,553,211			\$0
	\$(3,728,882)		\$3,728,882		\$0
			\$13,275,223	\$(13,275,223)	\$0
<b>Total Transfers</b>	\$(38,282,093)	\$34,553,211	\$17,004,105	\$(13,275,223)	\$0
<b>Balance Available (2)</b>	\$0	\$0	\$0	\$8,665,342	\$8,665,342
<b>Amount Forward to Project Tables (3)</b>	\$59,920,292	\$108,205,000	\$53,830,000	\$23,550,672	\$245,505,964

- (1) From the Project Lists on the subsequent pages.
- (2) Balance may be shifted to other categories to fund projects that are ready to proceed.
- (3) Amount equals the Allocation + Total Transfers.

**Clean Water SRF Loan Program  
Outstate Missouri Fundable Projects – Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
<b>Amount Available</b>					<b>\$59,920,292</b>								
Pulaski Co. S.D. No. 1 (Weeks Hollow WWTF)	C295320-06	TP Exp, Impr	130	19,000	\$5,749,370	MO-0111716	5	14-2	I	15-2			
Lake Ozark	C295646-02	Coll Rehab	125	1,489	2,722,674	N/A	4, 5	14-1	IVB	14-3	EE	B	2,722,674
Kirksville	C295250-11	TP Exp, Impr	120	17,505	19,415,000	MO-0049506	5	14-1	I	16-3			
Boone County RSD (Westwood Meadows)	C295375-18	Coll	120	146	385,575	MO-0053171	4,5	14-1	IVA	14-4			
Boone County RSD (Clearview Acres Subdivision WWTF) *	C295375-20	Coll	110	2,283	1,146,250	MO-0085944	5	14-2	IV, IVB	15-2			
Ellington	C295689-01	TP Impr, I/I	110	987	3,091,630	MO-0022896	5	14-4	I, IIIA	16-1			
Boone County RSD (Trails West Subdivision)	C295375-22	PS, FM, Coll	110	650	1,006,450	MO-0092002	5	14-4	IVA, IVB	16-4			
Boone County RSD (Twin Lakes WWTF)	C295375-16	TP	110	200	1,091,640	MO-0101885	4,5	14-1	I, IVA	15-1			
Boone County RSD (El Rey Heights)	C295375-17	I, FM	110	139	203,490	MO-0091766	4,5	14-3	IVA	15-1			
Nevada *	C295698-01	Coll Rehab, I/I	105	8,386	3,000,000	MO-0089109	5	14-4	IIIA, IIIB	15-3			
Boone County RSD (Spring Park Int.)	C295375-11	I, I/I, Coll	105	470	417,273	Multiple	4,5	14-1	IIIA, IVA, IVB	14-4			
Belton	C295712-01	TP Impr	100	11,000	12,460,000	MO-0117412	5	14-4	I	16-2			
Boone County RSD (Sunrise Estates Int.)	C295375-10	I	95	544	648,725	MO-0090816 MO-0090824	4,5	14-1	IVB	14-3			

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
Holts Summit	C295192-03	TP, PS, I, Coll	90	3,350	3,250,000	MO-0106810 MO-0033910	4, 5	14-3	I, II, IIIB, IVA	15-4			
Franklin County PWSD #1 (Pottery Road) *	C295325-02	Coll, LS	75	1,204	2,494,356	Multiple	1, 4, 5	14-4	IVA, IVB	15-4			
Unionville	C295720-01	Coll Rehab	65	1,865	2,448,881	MO-0054569 MO-0026646	5	14-1	IIIA	15-1			
Boone County Commission (Manchester Heights)	C295685-01	Coll	55	76	388,978	MO-0081922 MO-0097837	5	14-3	IVA	15-2			
<b>Total Fundable Projects</b>					<b>\$59,920,292</b>								
<b>Balance</b>					<b>\$0</b>								

Note: An explanation of the abbreviations and codes appears on page 38.

### Clean Water SRF Loan Program Large Metropolitan Areas & Districts Fundable Projects – Fiscal Year 2014

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
<b>Amount Available</b>					<b>\$108,205,000</b>								
MSD - Mo River WWTP Secondary Treatment Expansion – Phase III *	C295564-03	TP	195	197,000	\$17,000,000	MO-0004391	4, 5	14-1	I, II	14-4			
MSD - MSD Public I/I Reduction Program – Phase I	C295023-33	I/I	145	1,300,000	35,000,000	Multiple	4, 5	14-2	IIIA	16-2			

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
St. Joseph (WWTP Improvements)	C295699-04	TP Impr	145	76,780	49,000,000	MO-0023043	5	14-1	I, II	15-4			
Columbia (Upper Hinkson Outfall Phase I)	C295361-10	I	95	12,672	\$7,205,000	MO-0097837	4	14-1	IVB	15-1			
<b>Total Fundable Projects</b>					<b>\$108,205,000</b>								
<b>Balance</b>					<b>\$0</b>								

Note: An explanation of the abbreviations and codes appears on page 38.

### Clean Water SRF Loan Program CSO Fundable Projects – Fiscal Year 2014

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
<b>Amount Available</b>					<b>\$53,830,000</b>								
St. Joseph (Blacksnake Creek Stormwater)	C295699-03	CSO	145	76,780	\$53,830,000	MO-0023043	5	14-4	V	16-4			
<b>Total Fundable Projects</b>					<b>\$53,830,000</b>								
<b>Balance</b>					<b>\$0</b>								

Note: An explanation of the abbreviations and codes appears on page 38.

**Green Project Reserve and Department Initiatives Allocation of Available Loan Funding**

<b>Loan Amount Available</b>	<b>\$23,550,672</b>
Priority Watershed Reserve	\$5,544,628
Public & Private Partnership Demonstration Projects *	\$1,972,853
Public Entity & Satellite Community Partnerships *	\$0
Nonpoint Source Direct Loan Program	\$5,000,000
Nonpoint Source and Green Infrastructure Demonstration Grants	\$0
Disadvantaged Community Reserve	\$2,367,849
Balance	\$8,665,342

\* Loan funding will be made available as partnerships are established.

**Priority Watershed Reserve  
Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
													Category	Business/Categorical	Amount
<b>Amount Available from Prior Intended Use Plans</b>						<b>\$8,816,133</b>	<b>\$2,453,844</b>								
<b>Allocation from 15%</b>						<b>\$0</b>	<b>\$5,544,628</b>								
<b>Amount Available</b>						<b>\$8,816,133</b>	<b>\$7,998,472</b>								
Carl Junction (PW) *	C295650-01	TP Exp. I/I	165	7,445	\$4,100,000	\$2,050,000	\$2,050,000	MO-0025186	5	14-2	I, IIIA	15-2			
Joplin (PW) *	C295548-03	TP, I/I	155	50,150	\$6,000,000	3,000,000	3,000,000	MO-0023256	5	14-1	I, II, IIIA	14-4	EE	B	1,313,000
Aurora (PW)	C295711-01	TP Rehab	115	7,508	\$1,643,650	821,825	821,825	MO-0036757	5	14-4	I	15-4			

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve			
													Category	Business/Categorical	Amount	
Pierce City (PW) *	C295696-01	TP Impr, Coll	90	1,385	\$807,688	403,844	403,844	MO-0099155	1, 4, 5	14-1	I, II, IIIA, IIIB	14-4				
Alba (PW)	C295709-01	TP, Coll Rehab	80	594	\$2,494,546	1,247,273	1,247,273	MO-0089036	5	14-3	I, II, IIIA, IIIB	15-1				
Duquesne (PW)	C295447-04	Coll	70	1,790	\$951,059	475,529	475,530	N/A	4	14-2	IVA, IVB	14-4				
<b>Total Fundable Projects</b>						<b>\$7,998,471</b>	<b>\$7,998,472</b>								<b>\$1,313,000</b>	
<b>Balance</b>						<b>\$817,662</b>	<b>\$0</b>									

Note: An explanation of the abbreviations and codes appears on page 38.

### Public & Private Partnership Demonstration Projects Fiscal Year 2014

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve			
													Category	Business/Categorical	Amount	
<b>Amount Available</b>						<b>\$5,000,000</b>	<b>\$1,972,853</b>									
Windsor Place	C295721-01	TP Impr	65	332	1,215,515	607,758	607,757	MO-0115495	5	14-4	I	15-4	EI	C	1,215,515	
Russellville	C295718-01	TP Impr	20	813	2,730,192	1,365,096	1,365,096	MO-0106348	5	14-4	I	15-4	EI	C	2,730,192	
<b>Total Fundable Projects</b>						<b>\$1,972,854</b>	<b>\$1,972,853</b>								<b>\$3,945,707</b>	
<b>Balance</b>						<b>\$3,027,146</b>	<b>\$0</b>									

Note: An explanation of the abbreviations and codes appears on page 38.

**Public Entity & Satellite Community Partnerships  
Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount *	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve			
													Category	Business/Categorical	Amount	
<b>Amount Available</b>						\$3,000,000	\$0									
<b>Total Fundable Projects</b>						\$0	\$0									\$0
<b>Balance</b>						\$3,000,000	\$0									

*Note: An explanation of the abbreviations and codes appears on page 38.*

*\* Loan funding will be made available as partnerships are established.*

**Clean Water SRF  
Nonpoint Source Direct Loan Program  
Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve			
											Category	Business/Categorical	Amount	
<b>Amount Available from 15%</b>					\$5,000,000									
Missouri Agriculture & Small Business Development *	C295212-09	TP	N/A	N/A	\$5,000,000	N/A	3	14-1	VIIB	15-1				
<b>Total Fundable Projects</b>					\$5,000,000									
<b>Balance</b>					\$0									

*Note: An explanation of the abbreviations and codes appears on page 38.*

**Nonpoint Source and Green Infrastructure Demonstration Grants  
Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Grant Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations
<b>Amount Available from 15%</b>					<b>\$2,812,000</b>					
Taney County (Regional Class A Biosolids Facility)	C295538-01	TP Impr	145	51,675	\$2,812,000	Multiple	5	14-1	I	14-3
<b>Total Fundable Projects</b>					<b>\$2,812,000</b>					
<b>Balance</b>					<b>\$ 0</b>					

*Note: An explanation of the abbreviations and codes appears on page 38.*

**Disadvantaged Community Reserve  
Fiscal Year 2014**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve				
													Category	Business/Categorical	Amount		
<b>Amount Available from Prior Intended Use Plans</b>						<b>\$7,505,662</b>	<b>\$354,689</b>										
<b>Allocation from 15%</b>						<b>\$0</b>	<b>\$2,367,849</b>										
<b>Amount Available</b>						<b>\$7,505,662</b>	<b>\$2,722,538</b>										
Sunrise Beach	C295540-01	TP, Coll	125	1,796	\$2,427,300	\$1,820,475	\$606,825	Multiple	4	14-4	I, II, IVA, IVB	15-1					
Brashear	C295669-01	TP, Impr	105	280	\$1,275,595	956,696	\$318,899	MO-0046990	4, 5	14-1	I	14-4					
Chamois *	C295703-01	TP, Coll Rehab	100	546	\$1,418,755	1,064,066	354,689	MO-0039642	4, 5	14-1	II, IIIB	14-4	EE	B	705,684		
Rocky Mount SD	C295623-01	Coll, TP	95	962	\$4,220,650	3,000,000	1,220,650	New	4	14-1	IIIB	14-4					



Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	Grant Amount	Loan Amount	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
													Category	Business/Categorical	Amount
East Lynne *	C295695-01	TP, I	95	303	\$685,900	664,425	221,475	MO-0022896	5	14-3	I, IIIA	15-2			
<b>Total Fundable Projects</b>						<b>\$7,505,662</b>	<b>\$2,722,538</b>								<b>\$705,684</b>
<b>Balance</b>						<b>\$0</b>	<b>\$0</b>								

Note: An explanation of the abbreviations and codes appears on page 38.

**Clean Water SRF Loan Program  
Fundable Contingency Projects - Fiscal Year 2014  
(Complete Facility Plan Submitted and Approved Debt Instrument)**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
MSD - MSD Public I/I Reduction Program - Phase II	C295023-36	I/I	145	1,300,000	16,000,000	Multiple	4, 5	14-4	IIIA	16-2			
Liberty *	C295702-01	TP, Coll	130	29,780	61,615,648	N/A	5	14-4	II, IVA, V	16-2			
<b>Total Fundable Contingency Projects</b>					<b>\$77,615,648</b>								

Note: An explanation of the abbreviations and codes appears on page 38.

**Clean Water SRF Loan Program  
Contingency Projects – Fiscal Year 2014  
(Complete Facility Plan Submitted)**

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Financing Schedule FY-Qtr	Needs Category	Initiation of Operations	Green Project Reserve		
											Category	Business/Categorical	Amount
Fulton	C295714-01	TP Exp, Impr	95	12,790	\$12,980,000	MO-0103331	5	14-3	I, II, IIIA, IIIB	15-3			
Naylor *	C295606-01	TP	50	610	200,000	MO-0099279	4, 5	14-1	I	15-1			
Prairie Heights Reorganized Common Sewer District	C295717-01	Coll Exp	45	296	225,000	N/A	2	14-4	IVA, IVB	15-4			
<b>Total Contingency Projects</b>					<b>\$13,405,000</b>								

*Note: An explanation of the abbreviations and codes appears on page 38.*

## Clean Water SRF Loan Program Planning List – Fiscal Year 2014

*Note: An explanation of the abbreviations and codes appears on page 38.*

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Needs Category
Ashland	C295710-01	TP	45	6,500	\$5,635,000	MO-0106844	5	II
Auxvasse	C295547-01	PS Rehab	15	983	442,000	MO-0100986	5	IIIB
Barnard *	C295706-01	TP Impr	75	257	643,750	MO-0041190	5	I
<b>Benton County Sewer District #1</b>	<b>C295713-01</b>	<b>PS, TP Impr</b>	<b>80</b>	<b>425</b>	<b>450,000</b>	<b>MO-0121550</b>	<b>5</b>	<b>II, IIIB</b>
Boone County RSD (South Route K WWTP)	C295375-21	TP Impr	85	2,477	3,665,190	MO-0087173	5	II, IIIA, IVA
Calvey Creek S.D. (Catawissa Area) *	C295524-02	TP Impr, Coll, I	100	5,482	3,470,000	MO-0115410	4, 5	I, IVA, IVB
Calvey Creek S.D. (Phase II)	C295524-03	Coll	40	500	1,670,000	N/A	4	IVA
Gainesville *	C295697-01	TP Rehab	50	773	2,494,356	MO-0027570	5	I
Gravois Arm Sewer District - Phase 4	C295715-01	Coll Exp	65	400	2,197,100	MO-0134821	5	IVA
Hume	C295722-01	TP, Rehab	15	336	258,856	MO-0114715	4	I
Jackson *	C295247-03	TP, I	45	13,758	9,455,000	MO-0022853	5	IIIA, IVA
Jefferson City (Basins 5, 6 & 12)	C295401-07	Coll Rehab, I, I/I	135	25,000	10,000,000	MO-0094846	4, 5	IIB, IVB
Kansas City WSD (Blue River WWTP Storage) *	C295588-06	Stormwater	60	459,787	700,000	MO-0024911	5	I, VII
Kansas City WSD (Brookside Phase III) *	C295588-07	Stormwater, I/I	70	459,787	11,690,849	MO-0024911	4, 5	IIIA, VI
Kansas City WSD (East Bannister Road) *	C295588-11	I	90	459,787	1,274,138	MO-0024911	4	IVB
Kansas City WSD (Second Creek) *	C295588-15	I	55	459,787	30,305,158	MO-0024961	4	IVB
Lake Lotawana *	C295700-01	TP	75	2,137	2,606,000	MO-0055425	5	I, II
Lincoln Co. PWSD #1	C295567-01	Coll	55	3,020	15,759,900	Multiple	4, 5	IVA, IVB
Madison *	C295658-01	I/I	20	567	1,253,874	MO-0096920	4, 5	I
Matthews *	C295701-01	TP Impr	80	605	928,000	MO-0127175	5	I
Monett (PW)	C295452-02	TP, Coll Rehab	80	8,900	4,830,000	MO-0021440	5	I, II, IIIA
Peculiar *	C295612-04	TP, PS, FM, Coll	90	4,800	10,293,600	MO-0089443	4, 5	I, IVA, IVB
Peculiar *	C295613-02	Stormwater	60	4,800	5,300,000	N/A	4	VI
Peculiar *	C295613-01	Stormwater	10	800	500,000	N/A	4	VI
Pike Creek Reorganized Common Sewer District	C295716-01	Coll Exp, I/I	80	2,000	1,918,700	MO-0124427	5	IIIA, IIIB, IVA
Poplar Bluff	C295671-01	TP	80	17,023	17,298,234	MO-0043648	1, 4, 5	I
Shelbina *	C295655-01	I/I	75	1,704	6,196,067	MO-0041092	4, 5	IIIA
Sikeston Board of Municipal Utilities *	C295323-02	TP, PS, FM, I&I	105	16,992	18,900,000	MO-0035009 MO-0120863	4, 5	I, IIIA, IVB

Note: An explanation of the abbreviations and codes appears on page 38.

Applicant	Project #	Description	Priority Points	Service Area Pop.	Eligible Costs	NPDES#	Problem Code	Needs Category
St. James *	C295704-01	TP Impr, I/I	60	5,200	4,620,000	MO-0093564	5	I, IIIA
Stanberry *	C295708-01	TP	60	1,243	3,967,915	MO-0043231	1, 5	II
Stella	C295719-01	TP Exp	75	158	671,403	MO-0124281	5	I
Walnut Grove *	C295518-01	TP, Coll, I, I/I, Rehab	40	665	1,000,000	MO-0107174	5	I, IIIA, IIIB, IVB
Windsor *	C295512-01	TP, Coll, I, PS, FM, Rehab	85	2,901	5,000,000	MO-0047317 MO-0047325	5	I, IIIA, IIIB, IVB
<b>Total Planning List Projects</b>					<b>\$ 185,395,090</b>			

### Abbreviations and Codes

Problem Codes	Needs Codes	Description Reference List
1 - NPDES Permit Violation	I Secondary Treatment	Coll Collection
2 - Unpermitted Discharge	II Advanced Treatment	CSO Combined Sewer Overflow
3 - Water Quality Stds. Violation	IIIA I/I correction	Det Detention
4 - Public Health Problems	IIIB Sewer replacement or rehabilitation	Exp Expansion
5 - Future NPDES Violation Expected	IVA New Collection	FM Force Main
	IVB New Interceptors	Impr Improvements
<b>Green Project Reserve Codes</b>	V CSO	I Interceptor
B Business Case	VIIB NPS: Animal	I/I Inflow/Infiltration
C Categorical	VIID NPS: Urban	NPDES National Pollution Discharge Elimination System
EE Energy Efficiency		NPS Non Point Source
EI Environmentally Innovative		PS Pump Station
GI Green Infrastructure	<b>PW Project Is In an Our Missouri Waters Initiative Priority Watershed</b>	Rehab Rehabilitation
WE Water Efficiency		TP Treatment Plant

Notes:

Final eligible costs will be determined as documents are submitted and the project is closer to financing.

Financing schedule shown is for planning purposes only. Final scheduling will be determined as documents are submitted and approvals obtained.

An \* indicates the project is carried over from last year's IUP.

Carry over projects from the fiscal year 2013 list must reapply to be considered for the fiscal year 2015 list.

Disadvantaged communities are reflected in **bold italic print**.

## **State Funded Grant and Loan Programs**

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#### **40 Percent Construction Grant Program**

The Clean Water Commission developed the State 40 Percent Construction Grant Program to provide assistance to those communities that do not qualify for a leveraged loan for the total amount of eligible project costs.

There are no additional funds for the 40 Percent Construction Grant program in Fiscal Year 2014.

For more information on the State 40 Percent Grant Program, contact Ms. Traci Newberry at: 573-526-0940.

#### **Small Borrower Loan Program**

This program is limited to communities under 1,000 population and the loan amount is limited to \$100,000. Loans can be secured by a bond issue or can be annually appropriated debt.

This program was established with water pollution control bonds and continues with state direct loan repayments. This small revolving fund is state funded exclusively and is not a part of the State Revolving Fund. The funds can be used for either drinking water or clean water needs.

For fiscal year 2014 there is a balance of \$1,086,763 available. This balance includes all repayments from clean water and drinking water loans made with state water pollution control bond funds as well as projected interest and repayments through Dec. 31, 2012.

Applications are accepted throughout the year. Uncommitted funds can be accessed at any time. To apply, contact Ms. Traci Newberry at 573-526-0940.

Once an application is received and reviewed, it will be presented to the Missouri Clean Water Commission for its approval.

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## **List of Fiscal Year 2014 Applicants**

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## List of Fiscal Year 2014 Applicants

*Note: An explanation of the abbreviations and codes appears on page 46.*

APPLICANT	APPLICATION DATE	PRIORITY POINTS	SERVICE AREA POP.	FEDERAL PROGRAM
Alba (PW)	11/5/2012	80	594	PW
Ashland	11/15/2012	45	6,500	P
Aurora (PW)	9/24/2012	115	7,508	PW
Auxvasse	11/15/2012	15	983	P
Barnard *	11/14/2011	75	257	P
Belton	10/26/2012	100	11,000	OS-Fund
Benton County Sewer District #1	11/15/2012	80	425	P
Boone County Commission (Manchester Heights)	11/15/2012	55	76	OS-Fund
Boone County RSD (Clearview Acres Subdivision WWTF) *	11/15/2011	110	2,283	OS-Fund
Boone County RSD (El Rey Heights)	11/2/2012	110	139	OS-Fund
Boone County RSD (South Route K WWTP)	11/13/2012	85	2,477	P
Boone County RSD (Spring Park Int.)	11/13/2012	105	470	OS-Fund
Boone County RSD (Sunrise Estates Int.)	11/15/2012	95	544	OS-Fund
Boone County RSD (Trails West Subdivision)	10/30/2012	110	650	OS-Fund
Boone County RSD (Twin Lakes WWTF)	10/31/2012	110	200	OS-Fund
Boone County RSD (Westwood Meadows)	11/1/2012	120	146	OS-Fund
Brashear *	11/15/2012	105	280	D
Calvey Creek S.D. (Catawissa Area) *	11/17/2011	100	5,482	P
Calvey Creek S.D. (Phase II)	11/15/2012	40	500	P
Carl Junction (PW) *	10/20/2011	165	7,445	PW
Chamois *	10/20/2011	100	546	D
Columbia (Upper Hinkson Outfall Phase I)	11/9/2012	95	12,672	LM-Fund
Duquesne (PW)	11/15/2012	70	1,790	PW
East Lynne *	5/12/2011	95	303	D
Ellington	11/15/2012	110	987	OS-Fund
Franklin County PWSD #1 (Pottery Road) *	11/16/2011	75	1,204	OS-Fund
Fulton	11/14/2012	95	12,790	Cont
Gainesville *	11/15/2011	50	773	P
Gravois Arm Sewer District - Phase 4	11/14/2012	65	400	P
Holts Summit	10/4/2011	90	3,350	OS-Fund
Hume	11/15/2012	15	336	P
Jackson *	11/15/2011	45	13,758	P
Jefferson City (Basins 5, 6 & 12)	5/28/2013	135	25,000	P
Joplin (PW) *	4/10/2012	155	50,150	PW
Kansas City WSD (Birmingham Disinfection & Clarifiers) *	11/17/2011	130	459,787	C
Kansas City WSD (Blue River WWTP Storage) *	11/17/2011	60	459,787	P
Kansas City WSD (Brookside Phase III) *	11/17/2011	70	459,787	P
Kansas City WSD (East Bannister Road) *	11/17/2011	90	459,787	P
Kansas City WSD (Second Creek) *	11/17/2011	55	459,787	P
Kansas City WSD (Turkey Creek P.S.) *	11/17/2011	140	225,000	C
Kirksville	11/15/2012	120	17,505	OS-Fund
Kirksville (Phase 8) *	11/15/2011	105	17,505	C
Lake Lotawana *	11/17/2011	75	2,137	P
Lake Ozark	11/1/2012	125	1,489	OS-Fund
Liberty *	11/17/2011	130	29,780	Fund-Cont
Lincoln Co. PWSD #1 *	11/15/2011	55	3,020	P
Madison *	12/20/2011	20	567	P
Matthews *	11/17/2011	80	605	P
Missouri Agriculture & Small Business Development *	4/23/2010	N/A	N/A	NPS
Monett (PW)	5/10/2013	80	8,900	P
MSD - Mo River WWTP Secondary Treatment Expansion - Phase III *	11/15/2011	195	197,000	LM-Fund
MSD - MSD Public I/I Reduction Program - Phase I	11/15/2011	145	1,300,000	LM-Fund
MSD - MSD Public I/I Reduction Program - Phase II	11/15/2011	145	1,300,000	Fund-Cont
Naylor *	11/16/2011	50	610	Cont
Nevada *	10/31/2011	105	8,386	OS-Fund
Odessa *	11/14/2011	130	5,100	C
Peculiar *	11/18/2011	90	4,800	P

Note: An explanation of the abbreviations and codes appears on page 46.

APPLICANT	APPLICATION DATE	PRIORITY POINTS	SERVICE AREA POP.	FEDERAL PROGRAM
Peculiar *	11/18/2011	60	4,800	P
Peculiar *	11/18/2011	10	800	P
Pierce City (PW) *	11/15/2011	90	1,385	PW
Pike Creek Reorganized Common Sewer District	11/15/2012	80	2,000	P
Poplar Bluff	10/22/2012	80	17,023	P
Prairie Heights Reorganized Common Sewer District	11/14/2012	45	296	Cont
Pulaski Co. S.D. No. 1 (Weeks Hollow WWTF)	9/19/2012	130	19,000	OS-Fund
Rocky Mount S. D.	11/5/2012	95	962	D
Russellville	11/13/2012	20	813	P&PP-Fund
Shelbina *	11/16/2011	75	1,704	P
Sikeston Board of Municipal Utilities *	11/17/2011	105	16,992	P
St. James *	11/16/2011	60	5,200	P
St. Joseph (Blacksnake Creek Stormwater)	11/5/2012	145	76,780	CSO-Fund
St. Joseph (Eastside Wastewater Service Area Improvements) *	11/7/2011	140	76,780	C
St. Joseph (WWTP Improvements)	11/13/2012	145	76,780	LM-Fund
Stanberry *	4/17/2012	60	1,243	P
Stella	11/15/2012	75	158	P
Sunrise Beach	11/5/2012	125	1,796	D
Taney County (Regional Class A Biosolids Facility)	11/8/2012	145	51,675	NPS-GI
Unionville	11/14/2012	65	1,865	OS-Fund
Walnut Grove *	11/10/2011	40	665	P
Windsor *	10/12/2011	85	2,901	P
Windsor Place	11/13/2012	65	332	P&PP-Fund

#### Abbreviations And Codes

C – Carryover	OS - Outstate
Cont – Contingency	P – Planning List
CSO – Combined Sewer Overflow	P&PP – Public & Private Partnership
D – Disadvantaged Community	Demonstration Project
F – Forty Percent Grant	PE&S - Public Entity & Satellite Community
Fund – Fundable List	Partnership
GI – Green Infrastructure	PL – Planning Loan
L – Late Application	PW – Priority Watershed
LM – Large Metropolitan Areas & Districts	SB – Small Borrower
NPS – Nonpoint Source	

## **Sources and Distribution of Funds Detail**

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**Sources and Distribution of Funds Detail  
Capitalization Grants and Loan Repayments  
(As of Dec. 31, 2012)**

<b>Estimated Sources</b>		
FFY 2009 CW SRF Capitalization Grant (federal portion only)	\$ 750	
FFY 2010 CW SRF Capitalization Grant (federal portion only)	\$ 1,055	
FFY 2011 CW SRF Capitalization Grant (federal portion only)	\$ 5,631,414	
FFY 2012 CW SRF Capitalization Grant (federal portion only)	\$ 56,094,042	
FFY 2013 CW SRF Capitalization Grant (federal portion only)	\$ 37,009,000	
Loan Repayment Fund (Balance in Fund 0602 as of 12/31/12)	\$ 255,109,853	
Balance of Fund 0649 as of 12/31/12	\$ 1,263,017	
Projected Proceeds from Bond Refinancing	\$ 2,659,063	
Estimated CWSRF portion of Fund 0602 Investment Interest (01/01/13 - 06/30/14)	\$ 2,152,031	
Estimated CWSRF portion of Fund 0649 Investment Interest (01/01/13 - 06/30/14)	\$ 16,900	
Reserve Release (01/01/13 - 06/30/14)	\$ 74,765,214	
Direct Loans - Principal and Interest Repayments (01/01/13 - 6/30/14)	\$ 27,497,976	
EIERA Bond Sale	\$ 130,000,000	
<b>Total Estimated Sources</b>		<b>\$ 592,200,315</b>
<b>Estimated Uses</b>		
Binding Loan Commitments (Balance of Reserve Payable 12/31/12)	\$ 4,658,928	
Base Program Funds Committed for ARRA projects as of 12/31/2012	\$ 26,342,672	
Base Program Funds Committed for Direct Loans as of 12/31/2012	\$ 136,151,319	
4% Administrative Expenses from FFY 2010 Capitalization Grant	\$ 1,055	
4% Administrative Expenses from FFY 2011 Capitalization Grant	\$ 1,059,606	
4% Administrative Expenses from FFY 2012 Capitalization Grant	\$ 1,567,160	
4% Administrative Expenses from FFY 2013 Capitalization Grant	\$ 1,480,360	
Independent Audit	\$ 25,000	
Match Bond Debt Service (A2002 and A2010)		
Remaining Principal Due as of 12/31/12	\$ 9,067,500	
Interest Due Through 06/30/2014	\$ 398,048	
Additional Match Bond Debt Service		
Due through SFY 2013	\$ 437,350	
2010B Pledge Commitments	\$ 5,809,480	
Anticipated Direct Loans during SFY 2013		
Boone County RSD (Rocky Fork Creek) & (Highway HH Phase I)	\$ 12,198,000	
St. Joseph (Whitehead Creek Stormwater Separation Project)	\$ 14,660,000	
Cape Girardeau (Phase 2)	\$ 39,000,000	
Disadvantaged Community Loans	\$ 354,689	
FFY 2010 Capitalization Grant Additional Subsidization	\$ 17,459,361	
FFY 2011 Capitalization Grant Additional Subsidization	\$ 3,793,371	
FFY 2012 Capitalization Grant Additional Subsidization	\$ 3,266,140	
Our Mo Waters Initiative Loans	\$ 2,453,844	
FFY 2013 Capitalization Grant Additional Subsidization (Estimated)	\$ 2,614,923	
Loan Funds Allocated to FY 14 CW IUP Projects	\$ 309,401,509	
<b>Total Estimated Uses</b>		<b>\$ 592,200,315</b>

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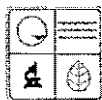
<b>Source And Distribution Of Funds</b>			
<b>Loan Administration Fees</b>			
<b>Fund 0568</b>			
<b>As of Dec. 31, 2012</b>			
<b>Income</b>	<b>Program Income Earned During Grant Period</b>	<b>Program Income Earned After Grant Period</b>	<b>Non-Program Income</b>
Beginning Balance as of 07/01/12	\$ 426,291	\$ 18,198,788	\$ 9,393,320
FY 13 Income (thru 12/31/12)	\$ 212,053	\$ 1,303,080	\$ 935,788
FY 13 Interest Earnings (thru 12/31/12)	\$ 1,438	\$ 56,789	\$ 23,945
Subtotal	\$ 639,782	\$ 19,558,657	\$ 10,353,053
<b>Expenditures Thru 12/31/12</b>			
FY 13 Personnel Services	\$ (94,117)	\$ -	\$ -
FY 13 Fringe	\$ (36,374)	\$ -	\$ -
FY 13 Expenses	\$ (6,517)	\$ (201,534)	\$ -
FY 13 PSD Expenditures	\$ -	\$ (5,412)	\$ (5,231,603)
FY 13 DNR Transfers	\$ (38,761)	\$ (57,652)	\$ -
FY 13 ITSD Transfers	\$ (30,795)	\$ (45,804)	\$ -
FY 13 HB 13 Transfers	\$ (13,499)	\$ (20,078)	\$ -
FY 13 OA Cost Allocation	\$ (1,481)	\$ (2,203)	\$ -
FY 13 State Owned Expenditures	\$ (6)	\$ (2,259)	\$ -
Subtotal	\$ (221,550)	\$ (334,942)	\$ (5,231,603)
Income Less Expenditures	\$ 418,232	\$ 19,223,715	\$ 5,121,450
<b>Projected Income</b>			
FY 13 Income (01/01/13 - 06/30/13)	\$ 366,018	\$ 1,137,199	\$ 1,602,864
FY 13 Interest Income (01/01/13 - 06/30/13)	\$ 1,989	\$ 69,316	\$ 11,912
FY 14 Income (07/01/13 - 06/30/14)	\$ 1,449,056	\$ 2,198,940	\$ 2,794,189
FY 14 Interest Income (07/01/13 - 06/30/14)	\$ 10,518	\$ 109,051	\$ 24,776
Subtotal	\$ 1,827,581	\$ 3,514,506	\$ 4,433,741
<b>Projected Expenditures</b>			
FY 13 Personnel Services	\$ (122,765)	\$ -	\$ (246,637)
FY 13 Fringe	\$ (72,175)	\$ -	\$ (123,442)
FY 13 Expenses	\$ (19,284)	\$ (55,907)	\$ -
FY 13 DNR Transfers	\$ (29,149)	\$ 7,441	\$ (71,552)
FY 13 ITSD Transfers	\$ (24,101)	\$ 5,215	\$ (57,840)
FY 13 HB 13 Transfers	\$ (9,196)	\$ 3,298	\$ (23,912)
FY 13 OA Cost Allocation	\$ 1,481	\$ 2,203	\$ -
FY 13 PSD Expenditures	\$ -	\$ (1,583,769)	\$ (864,778)
FY 14 Personal Service, Fringe, Expenses & Indirect	\$ (433,617)	\$ (1,227,923)	\$ (2,839,534)
FY 14 ITSD Direct Costs	\$ -	\$ -	\$ (500,000)
FY 14 Board Training & Operator Certification	\$ -	\$ (250,000)	\$ -
FY 14 Abatement of Water Quality Emergencies	\$ -	\$ -	\$ (250,000)
FY 14 Water Quality & Watershed Initiatives	\$ -	\$ (1,000,000)	\$ -
FY 14 Rural Sewer Grants	\$ -	\$ -	\$ -
FY 14 State Parks Wastewater Infrastructure	\$ -	\$ (2,250,000)	\$ -
FY 14 Fixed Station Ambient Network Contract	\$ -	\$ (452,356)	\$ (356,772)
FY 14 Water Quality Studies	\$ -	\$ -	\$ (100,000)
FY 14 Small Community Technical Assistance Program	\$ -	\$ -	\$ (500,000)
Subtotal	\$ (708,806)	\$ (6,801,798)	\$ (5,934,467)
Total Actual and Projected	\$ 1,537,007	\$ 15,936,423	\$ 3,620,724

NOTE: The distribution of loan administration fees to various Department activities is subject to change throughout the Fiscal Year. Actual fund uses will be shown in detail in the state fiscal year 2014 Clean Water State Revolving Fund Annual Report.

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## **Program Application Forms and Instructions**

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# Clean Water State Revolving Fund Loan Application Instructions for Form 780-1951

Note: Any funding assistance is subject to all State Revolving Fund requirements. Potential applicants should contact the Financial Assistance Center prior to completing and submitting an application. Contact the Financial Assistance Center at 573-751-1192 or toll free at 800-361-4827.

1. Print or type the applicant information. Include a street address if available. The applicant is the entity that will receive the loan funds if awarded. Prior to receiving a loan, the entity must have a DUNS (Data Universal Numbering System) number. The DUNS number is a nine digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>). The authorized representative is the person designated by the applicant to sign official documents and to speak for the applicant on project related matters.
2. This contact noted on the application should be knowledgeable about the application and able to be contacted during business hours.
3. Include the engineering firm name and the professional engineer working on this project.
4. Show the population of the entire service area. The "population to be served" will be different from the census population if the project is to sewer, or construct improvements in, a portion of the municipality or district.
5. Provide the state senate and state representative district number(s) for the project area.
6. Point source projects include those projects that directly or indirectly impact a National Pollutant Discharge Elimination System, or NPDES, permitted facility. In addition, a proposed project that will ultimately result in the issuance of an NPDES permit is to be considered a point source project. A non-point source project is one that does not fit the point source project description, e.g., a project to rehabilitate or replace on-site wastewater systems, the construction of a decentralized (cluster) wastewater system, or riparian corridor restoration. Provide a brief project description. Green Project Components may include the following:
  - Management of stormwater runoff at the local level through the use of natural systems, or engineered systems that mimic natural systems, to treat polluted runoff.
  - Water or energy efficiency improvements.
  - Environmentally innovative activities.
7. List the wastewater discharge permit numbers of all facilities affected by the proposed project.

8. List the non-permitted facilities to be eliminated by the proposed project.
9. Supply the cost estimates for the project. Land acquisition and easements are not eligible unless they are integral to the wastewater treatment process (land application). Call for additional guidance if land acquisition is related to a project to address non-point source pollution.
10. Provide a cost breakdown by category of need.
11. 11A and 11B. Provide information on existing or proposed ballot issues. If a bond or tax issue has already been voted, provide a copy of the ballot language and certified election results.  
  
11C. List other types of debt instruments and funding sources such as Neighborhood Improvement District, or NID, U.S. Department of Agriculture-Rural Development, Community Development Block Grants, etc. Supporting documentation should be attached to the application.
12. The financial information will be used to determine the applicant's financial capability to carry out the proposed project.  
  
12A. The median household income is based on the most recent census.  
  
12B. Fill in the current rate for 5,000 gallons. Use the proposed rate if the project area is currently unsewered.  
  
12C. Show the total revenues for the most recent year. Show when the accounting year ended if the fiscal year used is not the calendar year. If this is a new system, write in "new system".  
  
12D. Show the total expenditures for the sewer system for the same time period shown in 12C.
13. List any board trainings related to wastewater management that your board members have attended in the last three years.
14. Provide as much information as possible related to the watershed the project is located in, and the problems to be addressed by the project. This information will be used in determining the project priority in relation to other applications for funding.
15. Check the boxes that apply to the proposed project.
16. Provide the anticipated dates for the milestones listed. Put N/A in the space if the milestone isn't applicable to the project.
17. Information required by 10 CSR 20-4.040(8) must be submitted before the application will be prioritized.

This additional information, if provided, may allow for additional priority points. The applicant may submit other project related information that applicant feels should be submitted with the application.

### **Incomplete Applications will be Returned**

Sign the application; attach any additional information that will enable the department to prioritize your wastewater needs.

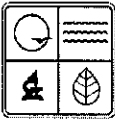
- If you are using funds from U.S. Department of Agriculture-Rural Development or Department of Economic Development, Community Development Block Grant Program, be certain that you have included this information.
- Make a copy of the completed application for you records.
- Electronically transmitted applications will not be accepted.
- Mail the Completed Application to:  
Missouri Department of Natural Resources, Water Protection Program,  
Financial Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

### **For More Information**

Missouri Department of Natural Resources  
Water Protection Program, Financial Assistance Center  
P.O. Box 176  
Jefferson City, MO 65102-0176  
800-361-4827 or 573-751-1192  
FAX: 573-751-9396  
[www.dnr.mo.gov/env/wpp/srf/index.html](http://www.dnr.mo.gov/env/wpp/srf/index.html)







MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, FINANCIAL ASSISTANCE CENTER  
**CLEAN WATER STATE REVOLVING FUND LOAN APPLICATION**

Submit to: P.O. Box 176, Jefferson City, MO 65102-0176  
 ATTN: Financial Assistance Center

FOR OFFICE USE ONLY	
DATE RECEIVED	
PROJECT NUMBER	
PRIORITY POINTS	

This application is for a Clean Water State Revolving Fund Loan described in 10 CSR 20-4.040

**APPLICANT INFORMATION**

1. NAME OF APPLICANT		DUNS NUMBER	
<input type="checkbox"/> Incorporated Municipality <input type="checkbox"/> Public Water/Sewer District <input type="checkbox"/> Other:			
APPLICANT TELEPHONE NUMBER WITH AREA CODE Ext.		APPLICANT FAX NUMBER WITH AREA CODE	
APPLICANT MAILING ADDRESS			
CITY	STATE	ZIP CODE + FOUR	COUNTY
AUTHORIZED REPRESENTATIVE NAME		AUTHORIZED REPRESENTATIVE TITLE	
2. NAME OF PERSON TO CONTACT ABOUT THIS APPLICATION		TELEPHONE NUMBER WITH AREA CODE Ext.	
3. CONSULTING ENGINEER			
CONSULTANT MAILING ADDRESS			
CITY	STATE	ZIP CODE + FOUR	
CONSULTANT TELEPHONE NUMBER WITH AREA CODE Ext.		CONSULTANT FAX NUMBER WITH AREA CODE	
4. POPULATION (CURRENT CENSUS)		POPULATION OF AREA TO BE SERVED	
5. STATE SENATE DISTRICT NUMBER(S)		STATE REPRESENTATIVE DISTRICT NUMBER(S)	

**6. PROPOSED PROJECT INFORMATION**

<input type="checkbox"/> Point Source Project	<input type="checkbox"/> Non-Point Source Project	
<input type="checkbox"/> Green Project Components (See Instructions)	Decentralized/Cluster Wastewater System	<input type="checkbox"/>
	On-Site System Rehabilitation/Replacement	<input type="checkbox"/>
	Other Non-Point Source Project	<input type="checkbox"/>

**Project Description. Include Green Project Components, if applicable (Attach Engineering Report):**

**PERMIT INFORMATION Factor A at 10 CSR 20-4.010 (1)(A)1**

7. List National Pollutant Discharge Elimination System, or NPDES, Permit Number(s) of Water or Wastewater facilities affected by this project:


8. List Non-Permitted facilities to be eliminated by this project (attach list if necessary):

Name	Population Served	Type and Condition of Facility

**PROJECT COST INFORMATION**

9. Cost Estimate Dated:		10. Cost Breakdown for Designated Categories	
Engineering Planning and Design	\$	I. Secondary Treatment	\$
Engineering (Construction Phase)	\$	II. Advanced Treatment	\$
Engineering Inspection	\$	IIIA. Inflow/Infiltration Correction	\$
Land and Easements*	\$	IIIB. Sewer Rehabilitation	\$
Construction	\$	IVA. Collection Sewers	\$
Equipment	\$	IVB. Interceptor Sewers	\$
SRF Closing Costs (estimate 3 percent)	\$	V. Combined Sewer Overflow Correction	\$
Other Costs (specify)	\$	VI. Storm Water	\$
Contingencies	\$	VII. Non-Point Source	\$
<b>Total Project Costs</b>	\$ 0.00	<b>Total Project Costs</b>	\$ 0.00
Funding From Other Sources	\$		
<b>Funding Request (this application only)</b>	\$		

\* These costs are generally not eligible for CWSRF funding.

**11. DEBT INSTRUMENT**

A. Bonds	B. Capital Improvements Sales Tax
Date of Bond Election	Date of Election
Type of Bond	Dedicated? <input type="checkbox"/> Yes <input type="checkbox"/> No
Amount of Bond \$	Sunset Provision? <input type="checkbox"/> Yes <input type="checkbox"/> No

C. Other (specify):

**12. APPLICANT FINANCIAL INFORMATION Factor C at 10 CSR 20-4.010(1)(A)3**

A. Median Household Income (from census)	
B Current monthly sewer use rate (for 5,000 gallons)	Proposed sewer rate (for 5,000 gallons)
C Sewer revenues for most recent year ended	Most recent year's date of data used
D. Sewer operating expenditures for most recent year	

**13. BOARD TRAINING Factor C at 10 CSR 20-4.010(1)(A)3**

List any board training(s) related to wastewater utility management that current board members have attended in the last three years:

**14. WATERSHED INFORMATION** Factors A at 10 CSR 20-4.010 (1)(A)1 and Factor E at 10 CSR 20-4.010 (1)(A)5

WATER BODY AFFECTED BY PROPOSED PROJECT

- Check if this is the receiving water body
- Check if the body is classified
- If affected water body is not classified, provide the nearest downstream water body

Is proposed project identified in a multi-jurisdictional area watershed plan?  Yes  No If yes, provide a copy of the plan.

Does the proposed project serve more than one community?  Yes  No If yes, identify communities:

Does the proposed project eliminate the need for multiple wastewater treatment facilities?  Yes  No

Does the proposed project address groundwater pollution?  Yes  No

GROUNDWATER IS USED FOR:

OTHER PROBLEMS ADDRESSED:

**15. PROJECT TYPE (CHECK ALL THAT APPLY)** Factor B at 10 CSR 20-4.010 (1)(A)2

- Combined sewer overflow/sanitary sewer overflow      Number of overflows per year: \_\_\_\_\_
- Wastewater Treatment Facility (specify)      Has antidegradation report been submitted?  Yes  No  N/A
  - New facility
  - Increase capacity/increase level of treatment
  - Rehabilitation/process improvement
- Failing or failed on-site wastewater disposal system      Percentage of systems failing: \_\_\_\_\_ %
  - On-site system replacement/rehabilitation
  - Construction of a decentralized wastewater system
  - New collection system
- Collection system rehabilitation primarily to address inflow/infiltration
- New collection system
- Upgrade or expansion of existing collection system
- Storm water detention
- Agricultural Best Management Practice
- Landfill capping, leachate collection, side slope seepage prevention and control system, and monitoring wells

The project addresses groundwater pollution by: Factors E at 10 CSR 20-4.010 (1)(A)5

- Addressing problems caused by petroleum storage tanks
- Addressing problems caused by a hazardous waste site participating in the department's Voluntary Cleanup Program
- Addressing water quality problems caused by inadequate landfill leachate collection systems

The project considers aquatic/riparian habitat by: Factor F at 10 CSR 20-4.010(1)(A)6

- Including measures to restore aquatic/riparian habitat and/or to prevent aquatic/riparian degradation

**16. PROJECT SCHEDULE (READINESS TO PROCEED) Factor C at 10 CSR 20-4.030(A)3**

Milestone	Anticipated Date
A. Antidegradation report submitted (for any new, expanded or upgraded wastewater treatment plant)	
B. Engineering Report and Facility Plan complete	
C. All other funding is secured (if necessary, bonds are voted)	
D. Engineering Plans and Specifications complete	
E. Construction start date	
F. Mandatory completion date (attach copy of compliance schedule)	

**17. THE FOLLOWING INFORMATION IS REQUIRED BY 10 CSR 20-4.040(8) AND MUST BE INCLUDED WITH THIS APPLICATION FORM:**

- A project summary that includes the need for the project :
  - The project components including maps or drawings showing the project location
  - A cost estimate including a cost breakdown
- The most recent financial statement
- Proposed project schedule including:
  - Construction start date defined as the date of notice to proceed
  - Construction completion
  - Initiation of operation
  - Project completion

**18. SUPPLEMENTAL INFORMATION - DOCUMENTATION MUST BE ATTACHED Factor C at 10 CSR 20-4.010(1)(A)3**

- User charge system budgets showing revenues and expenses for the past five years.
- Documentation showing that an inflow/infiltration reduction program has been in place for the fast five years.
- Water or Energy Conservation Plan
- Proposed project is specifically identified in the applicant's master wastewater or capital improvement plan. (Master wastewater or capital improvement plan should be for a period of five or more years).
- Documentation indicating the percentage of failed on-site wastewater disposal systems to be replaced or rehabilitated.

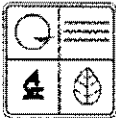
**CERTIFICATION:**

The undersigned representative certifies that the information submitted in this application is true and correct to the best of his/her knowledge and that he/she is authorized to sign and submit this application. The applicant agrees, if a loan is awarded on the basis of this application, to comply with all applicable terms, conditions and procedures of the Department of Natural Resources, the applicable rules and regulations of the Missouri Clean Water Commission and the terms and conditions of the loan agreement. **Incomplete applications will be returned.**

SIGNATURE OF AUTHORIZED REPRESENTATIVE	DATE
NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE Ext.

**PREPARER'S NAME AND SIGNATURE (IF APPLICABLE)**

SIGNATURE OF PREPARER	DATE
NAME AND TITLE (PRINT OR TYPE)	TELEPHONE NUMBER WITH AREA CODE Ext.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM  
**FACILITIES PLAN SUBMITTAL CHECKLIST**  
 Clean Water State Revolving Fund  
 Submit to: P.O. Box 176, Jefferson City, MO 65102-0176  
 Attn: Financial Assistance Center

<b>FOR OFFICE USE ONLY</b>
DATE RECEIVED

This form must be submitted with the Facility Plan

**1.0 APPLICANT INFORMATION**

1. NAME OF APPLICANT			
APPLICANT MAILING ADDRESS			
CITY	STATE	ZIP CODE + FOUR	COUNTY
APPLICANT TELEPHONE NUMBER WITH AREA CODE Ext.		APPLICANT FAX NUMBER WITH AREA CODE	
NAME OF PERSON TO CONTACT ABOUT THIS APPLICATION			
CONTACT PERSON'S TITLE		CONTACT PERSON'S TELEPHONE NUMBER WITH AREA CODE Ext.	
CONSULTING ENGINEER			
CONSULTANT MAILING ADDRESS			
CITY	STATE	ZIP CODE + FOUR	
CONSULTANT TELEPHONE NUMBER WITH AREA CODE Ext.		CONSULTANT FAX NUMBER WITH AREA CODE	

**2.0 CONTINUING AUTHORITY**

AUTHORIZED REPRESENTATIVE NAME	
AUTHORIZED REPRESENTATIVE TITLE	AUTHORIZED REPRESENTATIVE TELEPHONE NUMBER WITH AREA CODE Ext.

**3.0 PROJECT INFORMATION**

PROJECT NAME	
<input type="checkbox"/> SRF Project No.	<input type="checkbox"/> DED/CDBG No.
<input type="checkbox"/> SG Project No.	<input type="checkbox"/> Other Funding Sources:
<input type="checkbox"/> EPA Grant No.	<input type="checkbox"/> Applicant funded:
<input type="checkbox"/> USDA/RD	

**4.0 FACILITIES PLAN INFORMATION (CHECK THE BOXES OF THE ENCLOSED ITEMS)**

<input type="checkbox"/> Copy of antidegradation review report and preliminary determination, if applicable
<input type="checkbox"/> Copy of Draft Effluent Limits review letter provided by the Missouri Department of Natural Resources Water Protection Program, Permits Section
<input type="checkbox"/> Evaluation of existing Waste Water Treatment Facility
<input type="checkbox"/> Appropriate design period used
<input type="checkbox"/> Hydraulic and organic projected loadings
<input type="checkbox"/> Inflow/Infiltration analysis and evaluation
<input type="checkbox"/> Alternative evaluation with economic analysis
<input type="checkbox"/> General project design criteria
<input type="checkbox"/> Location of treatment facility on a map with legal description
<input type="checkbox"/> Current and estimated future user charge
<input type="checkbox"/> Signed, sealed and dated by a registered Professional Engineer of Missouri

**CLEARANCE LETTERS**

- Army Corps of Engineers
- Department of Natural Resources, Historic Preservation
- Department of Conservation
- United States Fish and Wildlife
- Department of Natural Resources, Division of Geology and Land Survey (lagoon collapse potential and receiving stream determination)
- Federal Assistance Clearinghouse
- Division of State Parks (If infringes on federally funded parks)

**PUBLIC PARTICIPATION in accordance with 10 CSR 20-4.040 (14) and 10 CSR 20-4.050 (2)(B)2**

- Facility Plan
- User Charge
- Environmental Effects

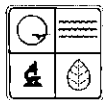
**Note:** Review will not be initiated until items 1.0 through 4.0 are submitted. Issuance of an environmental review and final approval of the Facility Plan can not be given until all items have been submitted. Attach a schedule for submittal of any remaining information or documents.

**SIGNATURE**

SIGNATURE OF AUTHORIZED REPRESENTATIVE	DATE
NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE Ext.

**PREPARER'S NAME AND SIGNATURE (IF APPLICABLE)**

SIGNATURE OF PREPARER	DATE
NAME AND TITLE (TYPE OR PRINT)	TELEPHONE NUMBER WITH AREA CODE Ext.



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# Clean Water State Revolving Fund Project Facility Plan Guidance

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This document provides engineering consultants a comprehensive guide of the Missouri Department of Natural Resources' recommendations and requirements for an approvable facility plan for Clean Water State Revolving Fund, or SRF, projects. Requirements are followed by the appropriate regulatory citation.

The facility plan must include sufficient detail to demonstrate the proposed project meets applicable criteria. The data presented in the facility plan is the basis for the detailed design of the construction plans and specifications.

Facility plans must be approved by the department prior to the submittal of plans and specifications, a construction permit application and associated fee(s). See 10 CSR 20-8.110(3)(C).

The following is a sample format for the required facility plan content:

## **Title Page**

Include the following:

- Name of the project.
- Owner of the system.
- Contact information.
- Date of the submittal.
- Missouri registered professional engineer seal, signature and date.  
See 10 CSR 20-8.110(3)(D).

## **Table of Contents**

Identify the headers, figures, tables and appendices locations.

## **Introduction**

State the purpose for the project. Describe the existing system, including an evaluation of the existing conditions and problems needing correction. Provide a summary of existing and previous local and regional wastewater facility planning documents, if applicable. Include any schedules of compliance, enforcement administrative orders or agreements. See 10 CSR 20-8.110(4)(C)1.

## **Planning and Service Area**

Identify the planning area, the existing and potential future service area, the site of the project, anticipated location and alignment of proposed facilities on a map or sketch. See 10 CSR 20-8.110(4)(C)2.

### **Population Projection and Planning Period**

Base the present and predicted population on a 20 year planning period. Phased construction of wastewater facilities shall be considered in rapid-growth areas. Sewers and other facilities with a design life in excess of 20 years shall be designed for the extended period. See 10 CSR 20-8.110(4)(C)3 and 10 CSR 20-8.020(3)(A)2.

### **Existing Facilities Evaluation**

Existing Collection System:

Include a brief inventory of the collection system (e.g., the approximate miles of gravity sewers and force mains, the number of pumping stations and related pumping station capacity). An analysis of the existing collection system is not required if the project is for a wastewater treatment facility only. Communities that have large collection systems need only report on the collection system in the drainage basin in which the project is located.

If an inflow/infiltration, or I/I, analysis has been conducted, present the findings of the study along with the recommendations for the most cost-effective I/I reductions.

Communities that experience sanitary sewer overflows, or SSOs, must propose a plan for the reduction and eventual elimination of these overflows. The proposed project will not have to achieve SSO elimination; however, any permit or enforcement schedules must be addressed.

Existing Wastewater Treatment Facility:

Provide a detailed description of the existing wastewater treatment facility. Include an estimate of the hydraulic and organic loading capacity for the whole facility and each process unit. The age and condition of each process unit should be evaluated and presented. Problems with the current wastewater treatment facility should be identified and recommendations made for corrections. A sketch or process diagram of the wastewater treatment facility is desired.

A copy of the current Missouri State Operating Permit, or MSOP, should be provided.

See 10 CSR 20-8.020(3)(A)4.

### **Hydraulic Capacity Determination**

For consistency, use the following flow definitions as a basis for the design of sewers, pumping stations, wastewater treatment facilities, treatment units and other wastewater handling facilities. See 10 CSR 20-8.110(4)(C)4.A.

- **Design average flow** – The design average flow is the average of the daily volumes to be received for a continuous 12 month period expressed as a volume per unit time. However, the design average flow for facilities having critical seasonal high hydraulic loading periods (e.g., recreational areas, campuses and industrial facilities) shall be based on the daily average flow during the seasonal period.
- **Design maximum daily flow** – The design maximum daily flow is the largest volume of flow to be received during a continuous 24 hour period expressed as a volume per unit time.
- **Design peak hourly flow** – The design peak hourly flow is the largest volume of flow to be received during a one hour period expressed as a volume per unit time.
- **Design peak instantaneous flow** – The design peak instantaneous flow is the instantaneous maximum flow rate to be received.

Existing Systems

Flow projections for the design life of the system shall be made using actual flow data to the extent possible. Evaluate the probable degree of accuracy of data and flow projections. This reliability estimation shall include an evaluation of the accuracy of existing data, based on no less than one year of data. Also, provide an evaluation of the reliability of estimates of flow



decreases anticipated due to I/I reduction or flow increases due to elimination of SSOs and basement backups. Include critical data and methodology. Graphical displays of critical peak wet weather flow data shall be included for a sustained wet weather flow period of significance to the project. See 10 CSR 20-8.110(4)(C)4.B.

If the existing wastewater treatment facility is a lagoon, install a flow measurement device at the influent. One year of flow measurement data from this location will provide a more accurate flow representation.

#### New Systems

New sewer systems and wastewater treatment facilities shall be based on an average daily flow of 100 gallons per day, or gpd, per capita. Also, consider flow from industrial facilities and major institutional and commercial facilities. However, an alternate flow based on water use data or other justification, which better estimates flow, may be provided.

See 10 CSR 20-8.110(4)(C)4.C.(I). Wastewater sewer systems with a design flow less than 22,500 gpd should be determined in accordance with 10 CSR 20-8.020(9)(B). Wastewater treatment facilities with a design flow less than 22,500 gpd should be determined in accordance with 10 CSR 20-8.020(11)(B)3.

The peaking factor, determined by Figure 1 in 10 CSR 20-8.110(4)(C)4.C.(II), shall be multiplied by the projected design average flow to determine the peak hourly flow. The peaking factor accounts for normal infiltration for collection systems built with modern construction techniques. See 10 CSR 20-8.110(4)(C)4.C.(II). A peaking factor of four shall be used for sewer systems with a design flow less than 22,500 gpd. See 10 CSR 20-8.020(9)(B).

If the new collection system is to serve an existing development, the likelihood of I/I contributions from existing service lines and non-wastewater connections to those service lines shall be evaluated. Wastewater treatment facilities shall be designed accordingly to account for these additional flows. See 10 CSR 20-8.110(4)(C)4.C.(III).

#### Combined Sewer Interceptors

Interceptors for combined sewers shall have the capacity to receive sufficient quantity of combined wastewater for transport to wastewater treatment facilities to ensure attainment of the appropriate water quality standards. See 10 CSR 20-8.110(4)(C)4.D.

#### Organic Capacity Determination

For consistency, use the following organic load definitions as a basis for the design of wastewater treatment facilities. See 10 CSR 20-8.110(4)(C)5.A.

- **Biochemical Oxygen Demand** – The five day Biochemical Oxygen Demand, or  $BOD_5$ , is defined as the amount of oxygen required to stabilize biodegradable organic matter under aerobic conditions within a five day period.
- **Total five day Biochemical Oxygen Demand, or  $TBOD_5$**  –  $TBOD_5$  is equivalent to  $BOD_5$  and is sometimes used in order to differentiate carbonaceous plus nitrogenous oxygen demand from strictly carbonaceous oxygen demand.
- **Carbonaceous five day Biochemical Oxygen Demand, or  $CBOD_5$**  –  $CBOD_5$  is defined as  $BOD_5$  less the nitrogenous oxygen demand of the wastewater.
- **Design average  $BOD_5$**  – The design average  $BOD_5$  is generally the average of the organic load received for a continuous 12 month period for the design year expressed as weight per day. However, the design average  $BOD_5$  for facilities having critical seasonal high loading periods (e.g., recreational areas, campuses and industrial facilities) shall be based on the daily average  $BOD_5$  during the seasonal period.

- **Design maximum day BOD<sub>5</sub>** – The design maximum BOD<sub>5</sub> is the largest amount of organic load to be received during a continuous 24 hour period expressed as weight per day.
- **Design peak hourly BOD<sub>5</sub>** – The design peak hourly BOD<sub>5</sub> is the largest amount of organic load to be received during a one hour period expressed as weight per day.

#### Existing Systems

Projections shall be made from actual wasteload data to the extent possible. Evaluate the probable degree of accuracy of data and wasteload projections. Impacts of industrial sources shall be documented. See 10 CSR 20-8.110(4)(C)5.B.

#### New Systems

Domestic wastewater treatment design shall be based on at least 0.17 pounds of BOD<sub>5</sub> per capita per day and 0.20 pounds of suspended solids per capita per day, unless information is submitted to justify alternate designs. Impacts of industrial sources shall be documented. Data from similar wastewater treatment facilities may be used in the case of new systems. However, a thorough and documented investigation to establish the reliability and applicability of data from a similar wastewater treatment facility shall be provided. See 10 CSR 20-8.110(4)(C)5.C. Wastewater treatment facilities with a design flow less than 22,500 gpd should be determined in accordance with 10 CSR 20-8.020(11)(B)3.

#### Project Alternative Analysis

The most reasonable environmentally sound and implementable waste management alternatives must be evaluated. The requirement for cost-effectiveness may be waived by the department for projects upon showing that the project provides environmentally preferable benefits (e.g., sludge utilization, water reuse or reduction). See 10 CSR 20-4.040(9)(A)1. Identify two or more alternatives, each of which is feasible and practical. See 10 CSR 20-8.020(3)(C)1.

#### Collection System Extensions/Rehabilitations

Discuss proposed revisions to the existing or proposed collection system including the adequacy of portions not being changed by the project. See 10 CSR 20-8.110(4)(C)8.A and 10 CSR 20-8.020(3)(C)2.

#### Wet Weather

Proposed wastewater treatment facilities and collection systems shall provide for transportation and treatment of all flows including wet weather flows. If bypasses have been authorized by the department, provide the appropriate documentation. See 10 CSR 20-8.110(4)(C)8.B.

#### Site Evaluation

Provide the appropriate site evaluation information.

Compatibility of the treatment process with the present and planned future land use, including noise, potential odors, air quality and anticipated sludge processing and disposal techniques, shall be considered. Non-aerated lagoons should not be used if excessive sulfate is present in the wastewater. Wastewater treatment facilities should be separate from habitation or any area likely to be built up within a reasonable future period and shall be separated in accordance with state and local requirements. See 10 CSR 20-8.110(4)(C)8.C.(I) and 10 CSR 20-8.020(11)(A).

Identify zoning and other land use restrictions. See 10 CSR 20-8.110(4)(C)8.C.(II).

Include an evaluation of the accessibility and topography of the site. See 10 CSR 20-8.110(4)(C)8.C.(III).

Identify areas for future wastewater treatment facility expansions. See 10 CSR 20-8.110(4)(C)8.C.(IV).

Identify the direction of prevailing wind(s). See 10 CSR 20-8.110(4)(C)8.C.(V).

Wastewater treatment facility design must take into consideration flood protection. The facility should remain operational and accessible during a 25 year flood. Facility structures, electrical and mechanical equipment shall be protected from damage during a 100 year flood.

See 10 CSR 20-8.020(11)(A)1, 10 CSR 20-8.110(4)(C)8.C.(VI) and 10 CSR 20-8.140(3)(A).

Geologic information, depth to bedrock, karst features or other geologic considerations of significance to the project shall be included. A copy of a geological site evaluation from the department's Division of Geology and Land Survey, or DGLS, providing stream determinations (gaining or losing) must be included for all new wastewater treatment facilities. A copy of a geological site evaluation providing site collapse and overall potentials from DGLS must be included for all earthen basin structures. Earthen basin structures shall not be located in areas receiving a severe overall geological collapse potential rating. See 10 CSR 20-8.020(3)(A)7 and 10 CSR 20-8.110(4)(C)8.C.(VII). The *Request for Geohydrologic Evaluation of Liquid-Waste Treatment Facility/Site*, Form - MO 780-1688 is available online at [www.dnr.mo.gov/forms/index.html#Geology](http://www.dnr.mo.gov/forms/index.html#Geology).

Protection of groundwater including public and private wells is of utmost importance. Demonstrate adequate protection. If the proposed wastewater facilities will be near a drinking water source or other water facility, as determined by DGLS or by the department's Public Drinking Water Branch, address the allowable distance between the wastewater facilities and drinking water sources and facilities. See 10 CSR 20-8.110(4)(C)8.C.(VIII), 10 CSR 20-8.020(3)(A)6 and 10 CSR 20-8.020(11)(A)3.

Determine soil type and suitability for construction and depth to normal and seasonal high groundwater. See 10 CSR 20-8.110(4)(C)8.C.(IX).

The location, depth and discharge point of any field tile in the immediate area of the site shall be identified. See 10 CSR 20-8.110(4)(C)8.C.(X).

Access to the receiving stream for the wastewater treatment facility outfall shall be discussed and displayed. See 10 CSR 20-8.110(4)(C)8.C.(XII).

Include a preliminary assessment of site availability. See 10 CSR 20-8.110(4)(C)8.C.(XIII).

#### Unit Sizing

Unit operation and preliminary unit process sizing and basis shall be discussed.

See 10 CSR 20-8.110(4)(C)8.D.

#### Flow Diagram

Provide a preliminary flow diagram of treatment facilities including all recycle flows.

See 10 CSR 20-8.110(4)(C)8.E.

#### Emergency Operations

Discuss emergency operation requirements in accordance with 10 CSR 20-8.130 and 10 CSR 20-8.140. See 10 CSR 20-8.110(4)(C)8.F, 10 CSR 20-8.020(10)(B) and 10 CSR 20-8.020(11)(C)2.

#### No-discharge Option

Consideration shall be given to the feasibility of constructing and operating a no-discharge wastewater treatment facility. See 10 CSR 20-6.010(4)(D)1 and 10 CSR 20-8.110(4)(C)8.G.

#### Regionalization:

Consideration should be given to the transport of wastewater to a regional wastewater treatment facility, when feasible. See 10 CSR 20-6.010(3)(C).

#### Decentralized Options

Consideration should be given to centralized management of on-site wastewater systems for unsewered communities.

#### Technology not included in 10 CSR 20-8

Identify any innovative or new technology, for which the review process will be as stated in 10 CSR 20-8.140(5)(B). See 10 CSR 20-8.110(4)(C)8.H and 10 CSR 20-8.020(11)(B)2.

#### Deviations from 10 CSR 20-8

If this project contains known deviations from 10 CSR 20-8, submit the documentation and justification for the deviation. Note that many deviations are common while others are reviewed on a case-by-case basis. See 10 CSR 20-8.110(4)(C)10.

#### Biosolids

Discuss of solids handling, disposal options and method selected. Compliance with the requirements of 10 CSR 20-8.170 and any conditions in the applicants' MSOP must be assured. See 10 CSR 20-8.110(4)(C)8.I.

#### Treatment during Construction

Include the plan for the method and level of treatment to be achieved during construction. The treatment during construction plan must be approved by the department and implemented by inclusion in the plans and specifications. See 10 CSR 20-8.110(4)(C)8.J.

#### Operation and Maintenance

Portions of the project that involve complex operation or maintenance requirements shall be identified including laboratory requirements for operation, industrial sampling and self monitoring. See 10 CSR 20-8.110(4)(C)8.K.

Communities that do not propose to employ a full-time operator, 40 hours per week, must evaluate passive or easy-to-operate treatment alternatives before considering a mechanical activated sludge package plant. Examples of passive or easy-to-operate treatment systems include, but are not limited to, enhanced natural systems, submerged fixed film systems, sand filters and recirculating pea gravel filters. See 10 CSR 20-4.040(9)(B).

#### Cost Estimates

Cost estimates for capital and operation and maintenance must be included for each alternative. See 10 CSR 20-8.110(4)(C)8.L. Include the total project cost (construction, engineering, land acquisition, legal and administrative costs) analysis and a 20 year present worth cost estimate for each alternative.

#### Water Quality Reports

The department's determination of probable effluent limits must be included. Proposed wastewater treatment facilities shall provide for meeting the effluent limitations as determined by the department with the use of 10 CSR 20-7.015 and 10 CSR 20-7.031. See 10 CSR 20-4.040(9)(A)1. Supply the Antidegradation Review Report in accordance with 10 CSR 20-7.031(2), the Water Quality Antidegradation Review determination by the department and any special water quality studies completed by or on behalf of the applicant. See 10 CSR 20-8.110(4)(C)8.N. More information concerning the antidegradation review process is available online at [www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm](http://www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm).

#### 208b Plans

The project shall be consistent with the approved elements of any applicable water quality management plan under Section 208b of the Federal Clean Water Act. See 10 CSR 20-6.010(9)(F). Contact the department for a list of cities that have 208b management plans.

Projects are encouraged to use energy and water conservation technologies.  
See 10 CSR 20-4.040(9)(D).

### **Recommended Project Alternative Summary and Justification**

Identify the recommended alternative and provide justification.

Provide the following costs and an estimation of how long these costs are applicable for the recommended project:

- Construction.
- Engineering.
- Land.
- Legal.
- Administrative costs.
- Operation and maintenance.
- Average user charge, including documentation of the basis of the estimate.  
See 10 CSR 20-4.040(9)(A)2 and 10 CSR 20-4.040(17).

For the recommended alternative, include the following:

- Wastewater treatment facility design average and peak flows.
- Wastewater treatment facility design organic loading.
- For wastewater treatment facility improvement projects, indicate what treatment units are to be upgraded or added.
- For collection system projects, indicate the average and peak hourly flow requirements for sewers and pumping stations.
- Engineering criteria used for preliminary sizing of facilities.

### **Appendices**

The following information shall be included in the appendices upon request of the department depending on the complexity of the proposed project. All design data shall be considered preliminary for review purposes by the department. See 10 CSR 20-8.110(4)(D).

#### **Process Facilities**

Provide the criteria and basis of selection, hydraulic and organic loadings (e.g., minimum, average and maximum) and the effect on wastewater and sludge processes, unit dimensions, rates and velocities, detention concentrations, recycle, chemical additive control, physical control and flow metering, removal efficiencies, effluent concentrations, energy requirements and flexibility. See 10 CSR 20-8.110(4)(D)1.

#### **Process Diagrams**

Provide diagrams depicting process configuration, interconnecting piping, processing, flexibility, hydraulic profile, organic loading profile, solids profile, solids control system and flow diagram with capacities. See 10 CSR 20-8.110(4)(D)2.

#### **Laboratory**

Discuss physical and chemical tests and the frequency to control processes, time for testing, space and equipment requirements, description of the laboratory facility, and personnel requirements (e.g., number, type, qualifications, training, salaries and benefits).  
See 10 CSR 20-8.110(4)(D)3.

#### Operation and Maintenance

Discuss routine and special maintenance duties, time requirements per duty, tools necessary, spare parts list, equipment, vehicles, safety, maintenance workspace and storage and personnel requirements (e.g., number, type, qualifications, training, salaries and benefits).

See 10 CSR 20-8.110(4)(D)4.

#### Chemical Control

Identify processes needing chemical addition, type of chemicals, feed equipment and associated costs. See 10 CSR 20-8.110(4)(D)5.

#### Collection Systems Control

Discuss cleaning and maintenance, regulator and overflow inspection and repair, flow gauging, industrial sampling and surveillance, ordinance enforcement, equipment requirements, trouble-call investigations and personnel requirements (e.g., number, type, qualifications, training, salaries and benefits). See 10 CSR 20-8.110(4)(D)6.

#### Control Summary

Identify personnel, equipment, chemicals, utilities and power requirements of major units. See 10 CSR 20-8.110(4)(D)7.

#### **Additional Submittals for Facility Plan Approval**

The information in the remainder of the document is typically submitted after the facility plan. Provide the following information for facility plan approval by the department.

#### **Environmental Review**

The department will make the environmental determination. The proposed project could demonstrate a need for a categorical exclusion, or CATEX, or a finding of no significant impact/ environmental assessment, or FONSI. Supply the department with the appropriate environmental information so that the appropriate determination may be made.

Provide documentation of compliance with planning requirements of local government agencies. See 10 CSR 20-8.110(4)(C)8.M.

#### CATEX

Supply sufficient documentation of the following to the department:

- A statement indicating the project is cost-effective and the applicant is financially capable of constructing, operating and maintaining the facilities. See 10 CSR 20-4.050(2)(A)2.
- Provide plan map(s) of the proposed project showing the location of all construction areas, the planning area boundaries and any known environmentally sensitive areas. See 10 CSR 20-4.050(2)(A)3.

#### FONSI

An environmental information document, or EID, must be submitted for applicants whose proposed project has a FONSI environmental determination. See 10 CSR 20-4.050(2)(B). At a minimum, the EID shall contain the following:

- The environmental setting of the project and the future of the environment without the project.
- The potential environmental impacts of the project as proposed including those which cannot be avoided.
- The relationship between the short term uses of the environment and the maintenance and enhancement of long term productivity.
- Any irreversible and irretrievable commitments of resources to the proposed project.
- Documentation of coordination with appropriate governmental agencies.

The clearance letters from the following agencies are required for a FONSI. If any of these clearance letters are deemed unnecessary, provide justification.

**Historic Preservation:**

Missouri Department of Natural Resources  
 State Historic Preservation Program  
 P.O. Box 176  
 Jefferson City, MO 65102  
 800-361-4827  
[www.dnr.mo.gov/shpo/index.html](http://www.dnr.mo.gov/shpo/index.html)

**Missouri Federal Assistance Clearinghouse:**

Office of Administration  
 Missouri State Capital Building, Room 125  
 P.O. Box 809  
 Jefferson City, MO 65101  
 573-751-0337  
[www.oa.mo.gov/co/mofedasst/](http://www.oa.mo.gov/co/mofedasst/)

**Division of State Parks:**

Missouri Department of Natural Resources  
 Division of State Parks  
 P.O. Box 176  
 Jefferson City, MO 65102  
 800-334-6946  
[www.mostateparks.com](http://www.mostateparks.com)

**Division of Geology and Land Survey:**

Missouri Department of Natural Resources  
 Division of Geology and Land Survey  
 Geological Survey Program  
 P.O. Box 250  
 Rolla, MO 65401  
 800-361-4827  
[www.dnr.mo.gov/geology/index.html](http://www.dnr.mo.gov/geology/index.html)

**Missouri Department of Conservation:**

P.O. Box 180  
 Jefferson City, MO 65102  
 573-522-4115  
[mdc.mo.gov](http://mdc.mo.gov)

**U.S. Fish and Wildlife Service:**  
Missouri Ecological Services Office  
101 Park DeVillie Drive  
Suite A  
Columbia, MO 65203  
573-234-2132  
www.fws.gov

**Corps of Engineers District Office:**

The State of Missouri is divided between three different Corps of Engineers Districts: the Omaha District, the Kansas City District and the Little Rock District. The district boundaries and addresses for the appropriate district office can be found online at [www.swt.usace.army.mil/address/addressPAO.cfm](http://www.swt.usace.army.mil/address/addressPAO.cfm).

**Public Participation**

Public participation must be held to allow the public an opportunity to provide input during the project development. A public meeting to discuss alternative engineering solutions and a public hearing to discuss the estimated user charge rate are required. An environmental impact public hearing is required for applicants that the department has determined necessitate a FONSI.

Most applicants elect to hold all three public meeting/hearings on the same date, for ease of coordination. Note that the public meeting and hearings are separate events and must be opened and closed in an official manner. If an applicant elects to advertise for these public meeting/hearings together, each must be addressed separately with a specific beginning time.

**Alternative Engineering Solutions Public Meeting**

Conduct a public meeting to discuss the alternative engineering solutions presented for the project. See 10 CSR 20-4.040(14)(A). Provide documentation of the advertisement (e.g., publisher's affidavit) and verification of the public meeting (e.g., attendance record and meeting minutes).

At a minimum, the following information should be presented during the public meeting:

- Discuss the problems that have created the need to design and construct the proposed project.
- Discuss the alternatives that were evaluated.
- Discuss the recommended alternative and how this project will meet the required needs.

**Estimated User Charge Rate Public Hearing**

Conduct a public hearing to discuss the proposed user charge rates and how they were derived. This public hearing shall be public noticed 30 days prior to the hearing date. Provide documentation of the public notice. The applicant shall prepare a transcript, recording or other complete record of the public hearing for department review. See 10 CSR 20-4.040(14)(B).

At a minimum, the following information should be presented during the public hearing:

- Outline how the applicant will finance the costs of the recommended project.
- Discuss what additional costs will result from the project.
- Discuss the estimated user charge rates that will be necessary to fund the project.
- Discuss when any increases will go into effect.



### Environmental Impact Public Hearing

Conduct a public hearing to discuss the environmental impacts of the proposed project. This public hearing shall be advertised in a local newspaper of general circulation 30 days prior to the hearing date. Provide the publisher's affidavit as documentation of the public notice. A verbatim transcript of the public hearing shall be provided for department review. Any written or verbal testimony and the applicant's responses to the issues raised shall be recorded in the transcript. Include with the transcript, a list of all attendees with addresses. See 10 CSR 20-4.050(2)(B)2.

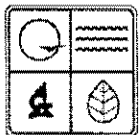
At a minimum, the following information should be presented during the public hearing:

- Discuss how the project will impact wetlands, floodplains, threatened or endangered species, cultural resources, prime farmland, public lands and parks.
- Discuss how the proposed project may impact the development pattern of the area.
- Discuss the environmental clearances requested from coordinating agencies.
- Discuss the impact on personal property such as driveways, trees and easements.
- Discuss the impact on water quality and air quality.

### **For More Information**

Missouri Department of Natural Resources  
Water Protection Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
800-361-4827 or 573-751-1300  
[www.dnr.mo.gov/env/wpp](http://www.dnr.mo.gov/env/wpp)





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH  
**WATER QUALITY REVIEW ASSISTANCE/ANTIDegradation REVIEW REQUEST**  
 PRE-CONSTRUCTION REVIEW FOR PROTECTION OF BENEFICIAL USES AND DEVELOPING EFFLUENT LIMITS

TYPE OF PROJECT  
 Grant     SRF Loan     All Other Projects

REQUESTER \_\_\_\_\_ TELEPHONE NUMBER WITH AREA CODE \_\_\_\_\_

PERMITTEE \_\_\_\_\_ TELEPHONE NUMBER WITH AREA CODE \_\_\_\_\_

**REASON FOR REQUEST**

New Discharge (See Instruction #9)     Upgrade (No expansion) (See AJP)     Expansion

DESCRIPTION OF PROPOSED ACTIVITY:  
 \_\_\_\_\_  
 \_\_\_\_\_

**FACILITY INFORMATION**

FACILITY NAME \_\_\_\_\_ MSOP NUMBER (IF APPLICABLE) \_\_\_\_\_

COUNTY \_\_\_\_\_ SIC / NAICS CODE \_\_\_\_\_

METHOD OF BACTERIA COMPLIANCE  
 Chlorine Disinfection     Ultraviolet Disinfection     Ozone     Not Applicable

WATER QUALITY ISSUES  
 \_\_\_\_\_  
 \_\_\_\_\_

Water quality issues include: effluent limit compliance issues, notice (s) of violation, water body beneficial uses not attained or supported, etc.

OUTFALL	LOCATION (LAT/LONG OR LEGAL DESCRIPTION)	MAPPED <sup>1</sup> (CHECK)	RECEIVING WATER BODY <sup>2</sup>
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

<sup>1</sup> Attach topographic map (See [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/)) with outfall location(s) clearly marked. For additional outfalls, attach a separate form.

<sup>2</sup> See general instructions for discharges to streams.

OUTFALL	NEW DESIGN FLOW ** (MGD)	TREATMENT TYPE	EFFLUENT TYPES*

\* Describe predominating character of effluent. Example: domestic wastewater, municipal wastewater, industrial wastewater, storm water, mining leachate, etc.

\*\* If expansion, indicate new design flow.

Checked for rare or endangered species and provided determination with this request. See Instruction #8.

**ANTIDegradation REVIEW SUBMISSION:**

See attached Antidegradation instructions. Applicant supplied a summary within:

Tier Determination and Effluent Limit Summary  
 Attachment A – Significant Degradation  
 Attachment B – Minimal Degradation  
 Attachment C – Temporary degradation  
 Attachment D – Tier 1 Review  
 No Degradation Evaluation – Conclusion of Antidegradation Review

See general instructions. Additional information may be needed to complete your request. Your request may be returned if items are missing. Revised submittal will be considered a new submittal.

SIGNATURE

DATE

PRINT NAME

E-MAIL ADDRESS

Submit request to: Missouri Department of Natural Resources  
Water Protection Program  
Attn: Permits and Engineering Section  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Phone: 573-751-1300  
Fax: 573-522-9920

The water quality review assistance is a process to determine effluent limits for new facilities or existing facilities seeking to increase loading into the receiving stream. Limits can be calculated by the permittee and submitted for review the department.

### GENERAL INSTRUCTIONS

1. Please attach:
  - A. A list of pollutants expected to be discharged.
  - B. The location of each outfall clearly shown on map(s). A U.S. Geological Survey topographic map is available at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/).
2. Discharge(s) to all gaining streams: Applicant must submit dissolved oxygen analysis (i.e., using Missouri Department of Natural Resources approved models such as Streeter Phelps ([www.ecy.wa.gov/programs/eap/pwspread/pwspread.html](http://www.ecy.wa.gov/programs/eap/pwspread/pwspread.html)) or Qual2K/Qual2E (Q2K/Q2E) stream water quality study ([www.epa.gov/athens/wwqts/index.html](http://www.epa.gov/athens/wwqts/index.html))) indicating that the preferred alternative's BOD<sub>5</sub> effluent limitations from the alternative analysis or the technology-based/regulatory BOD<sub>5</sub> effluent limits are protective of Missouri's water quality standard for dissolved oxygen. **Note:** If Q2K/Q2E is used, wasteload allocation for ammonia must be assumed. All Q2K/Q2E studies must have department approved Quality Assurance Project Plans. Recommended modeling procedures from the department (may differ with discharge) for this analysis are available upon request.
3. Discharge(s) to unclassified gaining stream: Applicant may provide the time of travel to the confluence with the classified stream segment for modeling pollutant decay (See *Total Ammonia Nitrogen Criteria Implementation Guidance Policy* at [www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm](http://www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm)). Otherwise, the applicant may determine limits based on no decay of discharge pollutants, which typically results in lower permit limits. Please use the TR-55 method (*Natural Resource Conservation Service, Urban Hydrology for Small Watersheds, Technical Release No. 55, June 1986*) for time of travel determination (<http://directives.sc.egov.usda.gov/22162.wba>). Please include a map, schematic or description of flow segments with your calculations. A worksheet with instructions is available upon request.
4. For all discharges, the chronic water quality criteria point of compliance is the classified stream or the confluence with the classified stream. No mixing is allowed for streams with seven-day Q10 low flow less than 0.1 cfs (10 CSR 20-7.031(4)(A)B(I)), while mixing is allowed for streams with seven-day Q10 low flow greater than 0.1 cfs (10 CSR 20-7.031(4) (A)B(II)).
5. For industrial facilities, a list of all chemicals, compounds, elements, etc. found in the discharge must be submitted with the request. Proprietary names of chemicals are not sufficient, as these chemicals may contain several pollutants for which the department must evaluate separate effluent limits. A pre-construction review meeting is highly recommended.
6. Do not submit water quality review assistance requests for renewals. All water quality-based effluent limits will be determined during the renewal process.
7. 10 CSR 20-7.015(8)(B)3. allows alternative limitations (i.e., lagoon or trickling filters) if a water quality impact study is conducted. This impact study should indicate that equivalent to secondary treatment for lagoons or trickling filters are protective of Missouri Water Quality standards for dissolved oxygen and ammonia.
8. Applicant must check for rare and endangered aquatic species that may be affected by the discharge at <http://mdcgis.mdc.mo.gov/heritage/newheritage/heritage.htm>.
9. Additional requirements for new facilities:
  - A. Division of Geology and Land Survey Geohydrologic Evaluations must be submitted with the request.
  - B. Coordinates of outfall (s) in lat/long or in the public land survey system must be provided.
  - C. Please submit a letter with project timeframe.

**Note: Lack of response for additional informational within a reasonable timeframe will result in return of request.**

## ANTIDEGRADATION INSTRUCTIONS

For more detailed instructions, the applicant should refer to *Missouri's Antidegradation Rule and Implementation Procedure*, which is available at [www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm](http://www.dnr.mo.gov/env/wpp/permits/antideg-implementation.htm). All **waters of the state** (except groundwater) are subject to the Antidegradation Implementation Procedure. All applicants must submit determination of assigned tier(s) of protection to water quality for all waters of the state on a pollutant-by-pollutant basis. The applicant should consult Antidegradation Implementation Procedure, Section 1.B. for the process of assigning Tier Protection Levels. Both Tier 1 and 2 reviews are conducted on a pollutant-by-pollutant basis. Outstanding national and state water resources listed on Table D and E in the Water Quality Standards at 10 CSR 20-7.031 automatically are assigned Tier 3 reviews that are conducted on a water body-by-water body basis.

As an overview, Antidegradation Implementation Procedure requires the new or expanded discharge either:

1. Demonstrate that the loading is below allowed facility assimilative capacity and segment assimilative capacity.
2. Demonstrate that loading will be maintained or decreased.
3. Demonstrate degradation or assume degradation with alternative analysis and SEI evaluation.

For minimally degrading activities as defined in Antidegradation Implementation Procedure, no alternative analysis or socio-economic importance demonstration is required. If the activity is degrading or assumed to be degrading, then in order to complete the Administrative Record of Decision the applicant must submit both:

1. An alternative analysis that demonstrates the non-degrading and minimally degrading discharging options are either impracticable, non-cost efficient, or unaffordable.
2. An evaluation of socio-economic importance of the proposed degrading discharging activity for social and economic development of the community. Applicants must summarize the review using the attached summary sheets (See below).

**Tier 1 Reviews:** Pollutants of concern that qualify for Tier 1 Reviews may be discharged in accordance with Water Quality Standards without performing the alternative analysis or socio-economic importance demonstration. However, for a Pollutant of Concern with Tier 1 designation, the applicant must provide existing receiving water quality data<sup>1</sup>, or an appropriate water quality model<sup>1</sup>, or department Section 303(d) listings (facilities with water bodies having 305(b) listed Pollutants of Concern should contact the department). Appendix 2 of the Antidegradation Implementation Procedure demonstrates the statistical process (90 percentile value is significantly more than 95 percent of the Water Quality Standards for the Pollutant of Concern) that applicants must use to designate Pollutant of Concern as Tier 1 (below, at or near Water Quality Standard), if Pollutant of Concern is not department Section 303(d) listed for that water body. Finally, for Tier 1 Pollutants of Concern the total maximum daily load process must be followed to maintain or improve water quality. The applicant must demonstrate that discharge will not violate the water quality criterion for that pollutant (see Attachment D). For a list of activities that are considered not to result in significant degradation, see Antidegradation Implementation Procedure, Section II.A.

**Tier 2 Reviews:** By default, and in the absence of existing water quality data, all **waters of the state** must have a Tier 2 review before an application for a permit to discharge is filed. If an applicant is assuming all POCs cause degradation, alternative analysis and socio – economic demonstration is required. Worksheets for evaluating alternative to discharge (see Antidegradation Implementation Procedure, Section II.B) and socio-economic importance to the community (See Antidegradation Implementation Procedure, Section II.E), as provided in 10 CSR 20-7.031, must be provided for review (see Attachment A). For Pollutant of Concern with Tier 2 designation, applicant must provide basis for determination by providing existing water quality<sup>3</sup> or an appropriate water quality model<sup>1</sup>. The applicant must consider the current existing water quality value in the administrative record from previous sampling events (see Antidegradation Implementation Procedure, Water Quality Assessment Procedures). If degradation is minimal or temporary, no alternative analysis and socio-economic demonstration (Tier 2 Review is not required) is required but applicant must provide basis for minimal determination. Degradation is considered minimal if the proposed new or expanded loading is less than 10 percent of the facility assimilative capacity and the cumulative degradation is less than 20 percent of the segment assimilative capacity as a result of all discharges combined. Minimal degradation as defined by Antidegradation Implementation Procedure must be supported by summary worksheet in Attachment B for facility assimilative capacity or segment assimilative capacity demonstrating assimilative capacity of Pollutant of Concern.

**Tier 3 Reviews:** Tier 3 water bodies shall receive no degradation of water quality. If hydrologic connection to Tier 3 water bodies has been or is demonstrated, then the applicant must demonstrate that water quality in the Tier 3 segment will not be lowered. Applicants in watersheds with significant losing segments should contact the department's Division of Geology and Land Survey for a Geohydrological Evaluation and available dye tracings information. Temporary degradation of water receiving with Tier 3 protection may be allowed by the department on a case-by-case basis as explain in Section II.A of Antidegradation Implementation Procedure document. Applicant must provide information stated below for evaluation of temporary degradation (see Attachment C).

<sup>3</sup> A Quality Assurance Project Plan, or QAPP, must be provided to the department's Water Protection Program for review well in advance (i.e., at least six months) of the proposed data collection activity and well before submittal of the Antidegradation Review. A pre-applicant conference is highly recommended. **Important:** Applicant must follow the U.S. Environmental Protection Agency's Quality Assurance Project planning document, which is available at [www.epa.gov/QUALITY/qs-docs/r5-final.pdf](http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf).

## ANTIDegradation INSTRUCTIONS (CONTINUED)

Temporary degradation is defined in the Antidegradation Implementation Procedure on pages 8 and 23. If degradation is temporary, describe the nature of the temporary impact by providing:

1. Length of time during which water quality will be lowered.
2. Percent change in ambient conditions.
3. Parameters affected.
4. Likelihood for long-term water quality benefits to the segment.
5. Degree to which achieving the applicable water quality standards during the proposed activity maybe at risk.
6. Potential for any residual long-term influences on existing uses.

**Summary Documentation:** Please attach the entire antidegradation review report. In addition, the department requests antidegradation review summaries of the major findings for each analysis. Attached to this request form are outlines of the requested information:

**Tier Determination and Effluent Limit Summary** (*required for all submittals*) – Summary of the tier determination, list of pollutants of concern, existing water quality, and summary of effluent limitation.

**Attachment A** – Significant degradation requires an alternative analysis, preferred alternative outline, social and economic importance of discharge, and if necessary, facility and segment assimilative capacity.

**Attachment B** – Minimal degradation requires a summary of facility and segment assimilative capacity. Tier determination analysis must be submitted with this review.

**Attachment C** – Temporary degradation requires description of nature of the impact.

**Attachment D** – Tier I Review requires determination of Tier I and may require facility assimilative capacity and segment assimilative capacity for discharge water body or downstream water body segment.

**No Degradation Evaluation – Conclusion of Antidegradation Review** – Do not submit water quality review assistance request. **Note:** During consultation with Water Protection Staff under the "Other" option of no degradation, a Water Quality Review Assistance Request may be required.

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

I. Introduction: The Fiscal Year (FY) 2012 Appropriation Act (P.L. 112-74) included additional requirements affecting the Clean Water State Revolving Fund (SRF) program. This attachment is included in the *Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2012 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs*. This attachment includes the details for determining green project reserve (GPR) eligibility for the Clean Water SRF program.

Public Law 112-74 states: “*Provided*, That for fiscal year 2012, to the extent there are sufficient eligible project applications, not less than 10 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.” These four categories of projects are the components of the Green Project Reserve (GPR).

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

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

The FY 2012 SRF GPR Guidance provides States with information needed to determine which projects count toward the GPR requirement. The intent of the GPR Guidance is to describe projects and activities that fit within the four specific categories listed in the FY 2012

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.



## CWSRF Eligibility Principles

**State SRF programs are responsible for identifying projects that count toward GPR. The following overarching principles, or decision criteria, apply to all projects that count toward GPR and will help states identify projects.**

- 0.1 All GPR projects must otherwise be eligible for CWSRF funding. The GPR requirement does not create new funding authority beyond that described in Title VI of the CWA. Consequently, a subset of 212, 319 and 320 projects will count towards the GPR. The principles guiding CWSRF funding eligibility include:
- 0.2 All Sec 212 projects must be consistent with the definition of “treatment works” as set forth in section 212 of the Clean Water Act (CWA).
- 0.2-1 All section 212 projects must be publicly owned, as required by CWA section 603(c)(1).
- 0.2-2 All section 212 projects must serve a public purpose.
- 0.2-3 POTWs as a whole are utilized to protect or restore water quality. Not all portions of the POTW have a direct water quality impact in and of themselves (i.e. security fencing). Consequently, POTW projects are not required to have a direct water quality benefit, though most of them will.
- 0.3 Eligible nonpoint source projects implement a nonpoint source management program under an approved section 319 plan or the nine element watershed plans required by the 319 program.
- 0.3-1 Projects prevent or remediate nonpoint source pollution.
- 0.3-2 Projects can be either publicly or privately owned and can serve either public or private purposes. For instance, it is acceptable to fund land conservation activities that preserve the water quality of a drinking water source, which represents a public purpose project. It is also acceptable to fund agricultural BMPs that reduce nonpoint source pollution, but also improve the profitability of the agricultural operation. Profitability is an example of a private purpose.
- 0.3-3 Eligible costs are limited to planning, design and building of capital water quality projects. The CWSRF considers planting trees and shrubs, purchasing equipment, environmental cleanups and the development and initial delivery of education programs as capital water quality projects. Daily maintenance and operations, such as expenses and salaries are not considered capital costs.
- 0.3-4 Projects must have a direct water quality benefit. Implementation of a water quality project should, in itself, protect or improve water quality. States should be able to estimate the quantitative and/or qualitative water quality benefit of a nonpoint source project.
- 0.3-5 Only the portions of a project that remediate, mitigate the impacts of, or prevent water pollution or aquatic or riparian habitat degradation should be funded. Where water quantity projects improve water quality (e.g. reduction of flows from impervious surfaces that adversely affect stream health, or the modification of irrigation systems to reduce runoff and leachate from irrigated lands), they would

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

- 0.3-6 Point source solutions to nonpoint source problems are eligible as CWSRF nonpoint source projects. Section 319 Nonpoint Source Management Plans identify sources of nonpoint source pollution. In some cases, the most environmentally and financially desirable solution has point source characteristics and requires an NPDES discharge permit. For instance, a septage treatment facility may be crucial to the proper maintenance and subsequent functioning of decentralized wastewater systems. Without the septage treatment facility, decentralized systems are less likely to be pumped, resulting in malfunctioning septic tanks.
  
- 0.4 Eligible projects under section 320 implement an approved section 320 Comprehensive Conservation Management Plan (CCMP).
  - 0.4-1 Section 320 projects can be either publicly or privately owned.
  - 0.4-2 Eligible costs are limited to capital costs.
  - 0.4-3 Projects must have a direct benefit to the water quality of an estuary. This includes protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on water, and requires the control of point and nonpoint sources of pollution to supplement existing controls of pollution.
  - 0.4-4 Only the portions of a project that remediate, mitigate the impacts of, or prevent water pollution in the estuary watershed should be funded.
  
- 0.5 GPR projects must meet the definition of one of the four GPR categories. The Individual GPR categories do not create new eligibility for the CWSRF. The projects that count toward GPR must otherwise be eligible for CWSRF funding.
  
- 0.6 GPR projects must further the goals of the Clean Water Act.<sup>1</sup>

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<sup>1</sup> 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 pavement<sup>2</sup>, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vector trucks and other capital equipment necessary to maintain green infrastructure projects.
  - 1.2-2 Wet weather management systems for parking areas including: permeable pavement<sup>2</sup>, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vector trucks and other capital equipment necessary to maintain green infrastructure projects.
  - 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

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

pavements and bioretention cells, and turf removal and replacement with native vegetation or trees that improve permeability.

- 1.2-7 Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks. This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds this may not be the original hydrology.
  - 1.2-8 Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).<sup>3</sup>
    - 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 vector trucks unless they support green infrastructure projects.

#### 1.4 Decision Criteria for Business Cases

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<sup>3</sup> 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.

- 1.4-1 Green infrastructure projects are designed to mimic the natural hydrologic conditions of the site or watershed.
  - 1.4-2 Projects that capture, treat, infiltrate, or evapotranspire water on the parcels where it falls and does not result in interbasin transfers of water.
  - 1.4-3 GPR project is in lieu of or to supplement municipal hard/gray infrastructure.
  - 1.4-4 Projects considering both landscape and site scale will be most successful at protecting water quality.
  - 1.4-5 Design criteria are available at:  
<http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm> and  
<http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm>
- 1.5 Examples of Projects Requiring A Business Case
- 1.5-1 Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients and other pollutants.

## 2.0 WATER EFFICIENCY

- 2.1 Definition: EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.
- 2.2 Categorical Projects
- 2.2-1 Installing or retrofitting water efficient devices, such as plumbing fixtures and appliances
    - 2.2-1a For example -- shower heads, toilets, urinals and other plumbing devices
    - 2.2-1b Where specifications exist, WaterSense labeled products should be the preferred choice (<http://www.epa.gov/watersense/index.html>).
    - 2.2-1c Implementation of incentive programs to conserve water such as rebates.
  - 2.2-2 Installing any type of water meter in previously unmetered areas
    - 2.2-2a If rate structures are based on metered use
    - 2.2-2b Can include backflow prevention devices if installed in conjunction with water meter
  - 2.2-3 Replacing existing broken/malfunctioning water meters, or upgrading existing meters, with:
    - 2.2-3a Automatic meter reading systems (AMR), for example:
      - 2.2-3a(i) Advanced metering infrastructure (AMI)
      - 2.2-3a(ii) Smart meters
    - 2.2-3b Meters with built in leak detection
    - 2.2-3c Can include backflow prevention devices if installed in conjunction with water meter replacement
  - 2.2-4 Retrofitting/adding AMR capabilities or leak detection equipment to existing meters (not replacing the meter itself).

- 2.2-5 Water audit and water conservation plans, which are reasonably expected to result in a capital project.
  - 2.2-6 Recycling and water reuse projects that replace potable sources with non-potable sources,
    - 2.2-6a Gray water, condensate and wastewater effluent reuse systems (where local codes allow the practice)
    - 2.2-6b Extra treatment costs and distribution pipes associated with water reuse.
  - 2.2-7 Retrofit or replacement of existing landscape irrigation systems with more efficient landscape irrigation systems, including moisture and rain sensing equipment.
  - 2.2-8 Retrofit or replacement of existing agricultural irrigation systems with more efficient agricultural irrigation systems.
- 2.3 Projects That Do Not Meet the Definition of Water Efficiency
- 2.3-1 Agricultural flood irrigation.
  - 2.3-2 Lining of canals to reduce water loss.
  - 2.3-3 Replacing drinking water distribution lines. This activity extends beyond CWSRF eligibility and is more appropriately funded by the DWSRF.
  - 2.3-4 Leak detection equipment for drinking water distribution systems, unless used for reuse distribution pipes.
- 2.4 Decision Criteria for Business Cases
- 2.4-1 Water efficiency can be accomplished through water saving elements or reducing water consumption. This will reduce the amount of water taken out of rivers, lakes, streams, groundwater, or from other sources.
  - 2.4-2 Water efficiency projects should deliver equal or better services with less net water use as compared to traditional or standard technologies and practices
  - 2.4-3 Efficient water use often has the added benefit of reducing the amount of energy required by a POTW, since less water would need to be collected and treated; therefore, there are also energy and financial savings.
- 2.5 Examples of Projects Requiring a Business Case.
- 2.5-1 Water meter replacement with traditional water meters (see AWWA M6 *Water Meters – Selection Installation, Testing, and Maintenance*).
  - 2.5-2 Projects that result from a water audit or water conservation plan
  - 2.5-3 Storage tank replacement/rehabilitation to reduce loss of reclaimed water.
  - 2.5-4 New water efficient landscape irrigation system (where there currently is not one).
  - 2.5-5 New water efficient agricultural irrigation system (where there currently is not one).

### **3.0 ENERGY EFFICIENCY**

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

## 3.2 Categorical Projects

- 3.2-1 Renewable energy projects such as wind, solar, geothermal, micro-hydroelectric, and biogas combined heat and power systems (CHP) that provide power to a POTW. (<http://www.epa.gov/cleanenergy>). Micro-hydroelectric projects involve capturing the energy from pipe flow.
  - 3.2-1a POTW owned renewable energy projects can be located onsite or offsite.
  - 3.2-1b Includes the portion of a publicly owned renewable energy project that serves POTW's energy needs.
  - 3.2-1c Must feed into the grid that the utility draws from and/or there is a direct connection.
- 3.2-2 Projects that achieve a 20% reduction in energy consumption are categorically eligible for GPR<sup>4</sup>. Retrofit projects should compare energy used by the existing system or unit process<sup>5</sup> 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](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.

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

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

- 3.3-4 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](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\\_portfoliomanager](http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager)) or Check Up Program for Small Systems (CUPSS) (<http://www.epa/cupss>) to document current energy usage and track anticipated savings.
- 3.5 Examples of Projects Requiring a Business Case
  - 3.5-1 POTW projects or unit process projects that achieve less than a 20% energy efficiency improvement.
  - 3.5-2 Projects implementing recommendations from an energy audit that are not otherwise designated as categorical.
  - 3.5-3 Projects that cost effectively eliminate pumps or pumping stations.
  - 3.5-4 Infiltration/Inflow (I/I) correction projects that save energy from pumping and reduced treatment costs and are cost effective.
    - 3.5-4a Projects that count toward GPR cannot build new structural capacity. These projects may, however, recover existing capacity by reducing flow from I/I.
  - 3.5-5 I/I correction projects where excessive groundwater infiltration is contaminating the influent requiring otherwise unnecessary treatment processes (i.e. arsenic laden groundwater) and I/I correction is cost effective.
  - 3.5-6 Replacing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors.
    - 3.5-6a NEMA is a standards setting association for the electrical manufacturing industry (<http://www.nema.org/gov/energy/efficiency/premium/>).
  - 3.5-7 Upgrade of POTW lighting to energy efficient sources such as metal halide pulse start technologies, compact fluorescent, light emitting diode (LED).
  - 3.5-8 SCADA systems can be justified based upon substantial energy savings.
  - 3.5-9 Variable Frequency Drive can be justified based upon substantial energy savings.

#### 4.0 ENVIRONMENTALLY INNOVATIVE

- 4.1 Definition: Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way.



## 4.2 Categorical Projects

- 4.2-1 Total/integrated water resources management planning likely to result in a capital project.
- 4.2-2 Utility Sustainability Plan consistent with EPA SRF's sustainability policy.
- 4.2-3 Greenhouse gas (GHG) inventory or mitigation plan and submission of a GHG inventory to a registry (such as Climate Leaders or Climate Registry)
  - 4.3-3a Note: GHG Inventory and mitigation plan is eligible for CWSRF funding.
  - 4.2-3b EPA Climate Leaders:
    - <http://www.epa.gov/climateleaders/basic/index.html>
    - Climate Registry: <http://www.theclimateregistry.org/>
- 4.2-4 Planning activities by a POTW to prepare for adaptation to the long-term effects of climate change and/or extreme weather.
  - 4.2-4a Office of Water – Climate Change and Water website:
    - <http://www.epa.gov/water/climatechange/>
- 4.2.5 Construction of US Building Council LEED certified buildings or renovation of an existing building on POTW facilities.
  - 4.2-5a Any level of certification (Platinum, Gold, Silver, Certified).
  - 4.2-5b All building costs are eligible, not just stormwater, water efficiency and energy efficiency related costs. Costs are not limited to the incremental additional costs associated with LEED certified buildings.
  - 4.2-5c U.S. Green Building Council website:
    - <http://www.usgbc.org/displaypage.aspx?CategoryID=19>
- 4.2-6 Decentralized wastewater treatment solutions to existing deficient or failing onsite wastewater systems.
  - 4.2-6a Decentralized wastewater systems include individual onsite and/or cluster wastewater systems used to collect, treat and disperse relatively small volumes of wastewater. An individual onsite wastewater treatment system is a system relying on natural processes and/or mechanical components, that is used to collect, treat and disperse or reclaim wastewater from a single dwelling or building. A cluster system is a wastewater collection and treatment system under some form of common ownership that collects wastewater from two or more dwellings or buildings and conveys it to a treatment and dispersal system located on a suitable site near the dwellings or buildings. Decentralized projects may include a combination of these systems. EPA recommends that decentralized systems be managed under a central management entity with enforceable program requirements, as stated in the *EPA Voluntary Management Guidelines*.
    - [http://www.epa.gov/owm/septic/pubs/septic\\_guidelines.pdf](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](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](http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=283)

4.2-6c For the purposes of the CWSRF, decentralized systems are considered to be section 319 projects and Davis-Bacon does not apply.

#### 4.3 Projects That Do Not Meet the Definition of Environmentally Innovative

- 4.3-1 Air scrubbers to prevent nonpoint source deposition.
- 4.3-2 Facultative lagoons, even if integral to an innovative treatment processes.
- 4.3-3 Surface discharging decentralized wastewater systems where there are cost effective soil-based alternatives.
- 4.3-4 Higher sea walls to protect POTW from sea level rise.
- 4.3-5 Reflective roofs at POTW to combat heat island effect.

#### 4.4 Decision Criteria for Business Cases

- 4.4-1 State programs are allowed flexibility in determining what projects qualify as innovative in their state based on unique geographical or climatological conditions.
  - 4.4-1a Technology or approach whose performance is expected to address water quality but the actual performance has not been demonstrated in the state;
  - 4.4-1b Technology or approach that is not widely used in the State, but does perform as well or better than conventional technology/approaches at lower cost; or
  - 4.4-1c Conventional technology or approaches that are used in a new application in the State.

#### 4.5 Examples of Projects Requiring a Business Case

- 4.5-1 Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.
  - 4.5-1a Natural wetlands, as well as the restoration/enhancement of degraded wetlands, may not be used for wastewater treatment purposes and must comply with all regulatory/permitting requirements.
  - 4.5-1b Projects may not (further) degrade natural wetlands.
- 4.5-2 Projects or components of projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.
- 4.5-3 Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.
- 4.5-4 POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.
- 4.5-5 Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects such as:
  - 4.5-5a Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment;
  - 4.5-5b Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals. (National Biosolids Partnership, 2010; *Advances in Solids Reduction Processes at Wastewater Treatment Facilities Webinar*; [http://www.e-wef.org/timssnet/meetings/tnt\\_meetings.cfm?primary\\_id=10CAP2&Action=LONG&subsystem=ORD%3cbr](http://www.e-wef.org/timssnet/meetings/tnt_meetings.cfm?primary_id=10CAP2&Action=LONG&subsystem=ORD%3cbr)).
  - 4.5-5b(i) Includes composting, class A and other sustainable biosolids management approaches.
- 4.5-6 Educational activities and demonstration projects for water or energy efficiency.
- 4.5-7 Projects that achieve the goals/objectives of utility asset management plans ([http://www.epa.gov/safewater/smallsystems/pdfs/guide\\_smallsystems\\_assetmanagement\\_bestpractices.pdf](http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf); <http://www.epa.gov/own/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 IV.A.a. in the *Procedures for Implementing Certain Provisions of EPA’s Fiscal Year 2012 Appropriations Affecting the Clean Water and Drinking Water State Revolving Fund Programs*). An**

**approved business case must be included in the State’s project files and contain clear documentation that the project achieves identifiable and substantial benefits. The following sections provide guidelines for business case development.**

5.0 Length of a Business Case

5.0-1 Business cases must address the decision criteria for the category of project

5.0-2 Business cases should be adequate, but not exhaustive.

5.0-2a There are many formats and approaches. EPA does not require any specific one.

5.0-2b Some projects will require detailed analysis and calculations, while others many not require more than one page.

5.0-2c Limit the information contained in the business case to only the pertinent ‘green’ information needed to justify the project.

5.0-3 A business case can simply summarize results from, and then cite, existing documentation – such as engineering reports, water or energy audits, results of water system tests, etc.

5.1 Content of a Business Case

5.1-1 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.

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

5.2 Items Which Strengthen Business Case, but Are Not Required

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

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

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

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





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