Oregon Department of Environmental Quality
Nov. 2-3, 2017
Oregon Environmental Quality Commission meeting
Agency Staff Report
Rulemaking, Action item F

Clean Water State Revolving Fund 2017

Table of Contents

Attachment A: EPA guidance

Attachment B: Oregon's Nonpoint Source Program Management Plan

DEQ recommendations to the EQC and Proposed Motion

Recommendation: The Department of Environmental Quality recommends that the Environmental Quality Commission adopt the proposed rules presented at pages 35 to 68 of this report, as part of Chapter 340 of the Oregon Administrative Rules.

Proposed Motion: I move that the Environmental Quality Commission, having considered the record for this rulemaking, approve the recommendations of the Department of Environment Quality, and adopt the proposed rules presented at pages 35 to 68 of this report as part of Chapter 340 of the Oregon Administrative Rules.

Overview

Short summary

DEQ proposes the following changes to OAR 340, division 54. The proposed amendments will:

- Amend Oregon's Clean Water State Revolving Fund (CWSRF) rules to align with amendments to federal law that:
  - Expand eligible land purchase costs for treatment works construction projects
  - Define eligible recipients for additional subsidization
  - Incorporate federal regulation requirements for procuring architectural and engineering contracts

- Amend CWSRF rules to ensure the fund's perpetuity through fiscal and programmatic effectiveness by:
  - Increasing the extension period for applicants to remain on the program's Intended Use Plan
  - Establishing criteria for refinancing and restructuring loans
  - Extending the timeframe for a borrower to request its first loan disbursement
  - Requiring a 30-day prepayment notification from borrowers that intend to prepay a loan
  - Offering eligible borrowers an alternate subsidy that is equivalent to principal forgiveness
  - Creating a principal forgiveness calculation for eligible green projects based on the cost of the green project components
  - Clarifying and simplifying rule language to comply with plain language requirements.

- Remove bond purchase language that expired Feb. 1, 2016.

Brief history

In 2015, DEQ adopted amendments to these rules required by the 2014 Water Resources Reform and Development Act. 2014 WRDA amended Titles I, II, V and VI of the federal Water Pollution Control Act, also known as the Clean Water Act. One of the amendments changed the eligibility definition for additional subsidization, resulting in excluding certain special districts, such as irrigation districts. In Oregon, the program offers additional subsidization in the form of principal forgiveness. The Environmental Quality Commission asked DEQ to consider options to resolve the principal forgiveness ineligibility issue that affected irrigation districts.

In response, DEQ initiated this proposed rulemaking to develop an alternate subsidy, in lieu of principal forgiveness, for special districts. On Dec. 16, 2016, President Obama signed the

Water Infrastructure Improvements for the Nation Act that amended the Clean Water Act again. This changed the eligibility for additional subsidization to include special districts.

DEQ proposes to adopt the new federal "eligible recipient" definition that includes special districts. DEQ also proposes 340-054-0065(12)(e), Alternate Subsidy, that is equivalent to principal forgiveness, to resolve potential eligibility issues in the future.

In addition, DEQ will incorporate the optional program policy changes from the Water Resources Reform and Development Act of 2014 to expand eligible land purchase costs for treatment works projects.

The focus of this rulemaking is to ensure the CWSRF loan program retains sufficient funds to continue operating indefinitely. Program staff evaluated the benefits of implementing rule changes that will allow:

- An alternate subsidy for borrowers
- The option to refinance and restructure loans under certain circumstances
- Policy changes that increase programmatic effectiveness to benefit borrowers and perpetuate the availability of the fund for years to come.

The proposed changes provide more regulatory certainty and consistency for borrowers by better aligning with current federal definitions and standards. It also provides DEQ with more certainty regarding the long-term financial stability of the loan program by requiring advance notification to the agency if a borrower intends to pre-pay its loan. The notification would allow DEQ to plan how to redistribute, or otherwise make best use of, the funds ahead of the payment schedule previously approved for the borrower.

Regulated parties

The proposed rules apply to entities seeking financing for water pollution control activities through the Clean Water State Revolving Fund.

Public and stakeholder involvement

DEQ convened the standing Clean Water State Revolving Fund advisory committee for three public meetings to discuss the rulemaking topics. The committee included representatives from organizations with an interest in public water quality financing and water quality improvement projects.

The committee reviewed and commented on the proposed topics. The group recommended parameters for restructuring and refinancing loans; prepayment notification; and the principal forgiveness calculation for green projects. The committee concluded that the proposed rules meet the needs of the fund's stakeholders.

DEQ held one public hearing at the DEQ offices in Portland on Tuesday, Aug. 15, 2017. Stewart Taylor, the finance director for the City of Albany, presented the only testimony. He testified detailing the city's support for DEQ's proposal to allow the restructure and refinance of existing CWSRF loans under certain circumstances.

Later sections of this document include a summary of the six comments received during the open public comment period, DEQ's responses and a list of the commenters.

Statement of Need

Including Eligible Land Costs for Building Treatment Works	
340-054-0015 Eligible projects and activities	
What need would the proposed rule address?	Current rules do not allow program funding to be used for purchasing land that is "integral to the treatment process" and all land that is "necessary for construction." The 2014 Water Resources Reform and Development Act amended the Clean Water Act section 212(2)(A) definition of "treatment works" to expand eligible land purchase costs for the Clean Water State Revolving Fund loan program.
How would the proposed rule address the need?	The proposed rule allows project costs to include the purchase of land needed to build a facility itself and land that is necessary to complete the construction process. Borrowers will be authorized to use Clean Water State Revolving Fund loans to purchase additional land integral to the treatment process when building a treatment works project that was not previously eligible for purchase with Clean Water State Revolving Fund loans. To clarify eligibility, the proposed rule change includes a reordering of the types of eligible projects listed under "public agency" and "municipality or intermunicipal, interstate, or state agency."
How will DEQ know the rule addressed the need?	DEQ will receive applications for funding that include projects with additional land costs. DEQ will receive loan disbursement requests for additional land costs. Borrowers will purchase additional eligible land for constructing treatment works projects.

A waiver option for approved plans and specifications for nonpoint source projects	
340-054-0022(4)(f) Loan application requirements, Local Community Loan.	
What need would the proposed rule address?	The requirement in 340-054-0022(4)(f) to approve plans and specifications is not necessary for the majority of the nonpoint source projects funded through a Local Community Loan. Few of these projects are at the level of complexity needing plans and specifications approved by DEQ engineers as OAR 340-052-0022 authorizes.
How would the proposed rule address the need?	The proposed rule would allow DEQ engineers to waive the requirement for approved plans and specifications for nonpoint source projects funded through a Local Community Loan when the project does not have a treatment works component and when the project does not have the level of complexity needing plans and specifications approved by DEQ engineers as OAR 340-052-0022 authorizes.
How will DEQ know the rule addressed the need?	The loan agreement process will be expedited and borrowers will save money.

Increasing Intended Use Plan Extension Period	
340-054-0025(6) Removing application from the project priority list.	
What need would the proposed rule address?	Applicants' projects can remain on the program's Intended Use Plan for three years. Applicants can request a six month extension if needed. Some applicants need a longer extension to complete loan agreement requirements before being removed from the Intended Use Plan.
How would the proposed rule address the need?	The proposed rule will increase the timeframe for the extension period from six months to twelve months.
How will DEQ know the rule addressed the need?	Applicants will complete loan agreement requirements during the increased extension period and sign a loan agreement instead of being removed from the Intended Use Plan and being required to reapply or forfeit Clean Water State Revolving Fund financing.

340-054-0060 Loan Agreement and Conditions	
340-054-0060(1) Timely use of loan funding.	
What need would the proposed rule address?	Currently, borrowers who do not begin using loan proceeds within two years after executing a loan agreement may be subject to automatic loan cancellation.
How would the proposed rule address the need?	The proposed rule will allow borrowers to request a one-time, one-year extension to begin using loan proceeds and pay holding costs or to cancel the loan and reapply for funding.
How will DEQ know the rule addressed the need?	Loans will not be automatically cancelled when a borrower has not begun to use loan proceeds within two years after signing a loan agreement.
Including federal regulation requirements for procurement 340-054-0060(15), Architectural and engineering services.	
What need would the proposed rule address?	The State of Oregon procurement process for contracting architectural and engineering services does not currently apply to federally recognized Indian Tribes, a subset of eligible borrowers.
How would the proposed rule address the need?	The proposed rule allows borrowers to choose between the State of Oregon's process for contracting architectural and engineering services and the federal process. This allows federally recognized Indian Tribes, a subset of eligible borrowers, to elect to follow the federal process instead of the State of Oregon process, which does not apply to tribes.
How will DEQ know the rule addressed the need?	Borrowers will choose the federal procurement process when it applies and is beneficial.

340-054-0065 Loan Types, Terms and Interest Rates	
Prepayment Notification 340-054-0065(8)(b) Loan term.	
What need would the proposed rule address?	DEQ needs at least a 30 day notification from a borrower when they plan to prepay a loan.
How would the proposed rule address the need?	The proposed rule will require borrowers to provide a written notification 30 days before the

340-054-0065 Loan Types, Terms and Interest Rates	
	estimated pay off date. This will give DEQ enough time to plan for the prepayment or to decide whether to negotiate a refinance option for the loan to ensure the fund's perpetuity.
How will DEQ know the rule addressed the need?	DEQ will receive notice if a borrower plans to prepay. DEQ may refinance loans and retain the interest and fees that will ensure the fund's perpetuity. DEQ will maintain the fund's utilization rate more securely and avoid the risk of a reduced fund utilization rate.
340-054-0065(10) Restructure and refinance CWSRF loans.	
What need would the proposed rule address?	The program can restructure existing CWSRF loans only when there is a repayment issue, which is a rare occurrence. The program is not authorized to refinance an existing CWSRF loan. This limits the program's ability to negotiate terms and rates when a borrower plans to prepay a loan.
How would the proposed rule address the need?	The proposed rule will allow DEQ to restructure a loan under additional circumstances, such as when a borrower has more than one CWSRF loan and wants to combine the loans to simplify the repayment process. This will make repayment easier for borrowers and give the program the ability to negotiate terms and rates that will benefit the fund financially. DEQ could offer a refinance option that will allow the program to retain the loan and continue to earn interest and fees to ensure the fund's perpetuity.
How will DEQ know the rule addressed the need?	The program will have less prepayments and simplified repayment processes for borrowers with multiple Clean Water State Revolving Fund loans.
Adopting federal language 340-054-0010(12); 340-054-0065(12)(a)(A), (B), (C) Additional subsidization	

340-054-0065 Loan Types, Terms and Interest Rates	
What need would the proposed rule address?	Some public agencies are not eligible for additional subsidization. This limits their ability to participate in and benefit from the program.
How would the proposed rule address the need?	The proposed rule adopts the federal definition "eligible recipient" from the Water Infrastructure Improvements for the Nation Act that amended the Clean Water Act. This changed the eligibility for additional subsidization to include special districts. This allows more public agencies to be eligible for additional subsidization.
How will DEQ know the rule addressed the need?	The program will offer special districts additional subsidization for eligible projects when available.
Alternate Subsidy 340-054-0065(12)(e) Alternate subsidy.	
What need would the proposed rule address?	Additional subsidization is a requirement of the annual EPA capitalization grant. If the capitalization grant were to be terminated or if additional subsidization were no longer required by EPA, DEQ could not offer a subsidy to the borrower.
How would the proposed rule address the need?	DEQ will be able to provide a subsidy to reduce a borrower's repayment amount through a reduced interest rate or other calculation that reduces the loan repayment amount. This may not exceed the maximum amount of additional subsidization currently allowed, and may not have a negative impact on the fund's perpetuity.
How will DEQ know the rule addressed the need?	DEQ will be able to offer a subsidy for borrowers if the annual EPA capitalization grant were to be terminated or if EPA no longer required additional subsidization.
Principal Forgiveness for Green Project Components 340-054-0065(12)(f)(B), Additional subsidization, Award amount.	
What need would the proposed rule address?	Current practices may allow additional subsidization for portions of projects that are not considered green or sustainable.
How would the proposed rule address the need?	The proposed rule establishes a calculation that will limit the subsidization amount to 50 percent of the green and/or sustainable components of the project, not to exceed the total amount of

340-054-0065 Loan Types, Terms and Interest Rates	
	principal forgiveness allowable. This will help ensure the subsidization is used only for the green or sustainable portions of a project.
How will DEQ know the rule addressed the need?	Borrowers will not receive the maximum principal forgiveness amount allowable for parts of projects that do not qualify under the EPA's Green Project Reserve Crosswalk.

Housekeeping	
What need would the proposed rule address?	Some existing rules are unclear or redundant.
How would the proposed rule address the need?	The proposed rules include small adjustments to improve readability, to use active voice and to simplify language, consistent with plain language requirements.
How will DEQ know the rule addressed the need?	Applicants, borrowers and stakeholders will have a better understanding of program rules.

Rules affected, authorities, supporting documents

Lead division
Operation Division

Program or activity
Community Programs and Assistance, the Clean Water State Revolving Fund

Chapter 340 action

Adopt

None.

Amend - OAR

340-054-0005	340-054-0010	340-054-0011	340-054-0015	340-054-0026
340-054-0022	340-054-0025	340-054-0026	340-054-0036	340-054-0056
340-054-0060	340-054-0065	340-054-0071	340-054-0072	

Repeal - OAR

None.

Renumber - OAR

None.

Statutory authority - ORS
468.020 468.440

Statute implemented - ORS
468.423 - 468.440

Legislation

None.

Documents relied on for rulemaking

Document title	Document location
EPA's Green Project Reserve Crosswalk	EPA green project reserve crosswalk
EPA guidance and policy memos for the Clean Water State Revolving Fund loan program	EPA CWSRF guidance
Summary of Clean Water State Revolving Fund Advisory Committee Recommendations	Clean Water State Revolving Fund Rulemaking Website

Fee Analysis

This rulemaking does not introduce any new fees or raise any existing fees.

Statement of fiscal and economic impact

Fiscal and Economic Impact

There are numerous positive fiscal impacts from the proposed rule changes. Fiscal benefits for local governments, the primary applicants and borrowers of program funds, include better financing options such as restructuring or refinancing loans, more subsidy, additional eligible project costs and extending the period for remaining listed in the Intended Use Plan.

The program itself may experience negative fiscal impacts that increase administration costs and increase the fund's utilization rate. No other DEQ program will be impacted.

There are also indirect economic benefits to the general public and business owners located in the service area near a project funded by the loan program. Loan funds allow a borrower to avoid rate increases through new financing options or principal forgiveness.

Statement of Cost of Compliance

State agencies

DEQ

The revolving nature of the fund makes the Clean Water State Revolving Fund program self-sustaining in terms of administration and program costs. The proposed rules would have limited direct fiscal impacts to the program and no impacts to other DEQ programs.

Direct Impacts

- Including eligible land costs for building treatment works: Fund utilization could increase which could increase the cost to the program but also increase the amount of interest and fees the program generates.
- Increasing Intended Use Plan extension period: Fund utilization could increase which could increase the cost to the program but also increase the amount of interest and fees the program generates.
- Timely use of loan funding: Collecting holding costs for loans not disbursed within the original two year timeline would reduce program costs by filling the gap between what funds earn in the treasury pool and what a loan would earn in repayment.
- Prepayment notification: Prepayments in fiscal years 2014 through 2016 totaled $83 million, costing the program about $10.6 million in lost interest and $2.7 million in lost fees over the next 20 years. Notification of intent to prepay a loan allows DEQ to prepare for recommitting the additional funds, reducing the loss of interest and fees, and reducing negative impacts to the program's perpetuity.
- Restructuring and refinancing CWSRF loans: DEQ could incur additional administrative time and costs to restructure a borrower's loans. Refinancing loans

would allow the program to collect the interest and fees needed for the fund to revolve and generate future loan dollars. The ability to refinance loans could also reduce the impact of loan prepayments as described above.

- Alternate subsidy: May increase the number of projects awarded additional subsidization which would ensure DEQ meets its allocation requirement.
- Principal forgiveness for green projects: May increase the number of projects awarded additional subsidization which would ensure DEQ meets its allocation requirement. This could require more administrative costs in assessing and tracking fiscal information for more projects because the calculation may incentivize more borrowers to choose green project components. In turn, DEQ could forgive more principal and avoid carrying the additional subsidization balance into the next fiscal year.
- Housekeeping items: No known fiscal impact.

Other State and Federal Agencies

Proposed rule changes to the Clean Water State Revolving Fund program, including restructuring or refinancing loans and an alternate subsidy, could make the program a more economical financing option than other funding programs and increase the number of applicants. This could increase administrative time and costs for agencies that evaluate a project's compliance with federal cross-cutting authorities.

Local governments

Local governments are the primary Clean Water State Revolving Fund applicants and borrowers. This includes cities, counties, sanitary districts, special districts, soil and water conservation districts and certain intergovernmental entities.

Direct Impacts

- Including eligible land costs for building treatment works: Eligible project costs now include purchasing land that is necessary to complete constructing treatment works, which benefits borrowers. Applicants will be able to request additional funds and increase the size and cost of projects.
- Increasing Intended Use Plan extension period: Extending the length of time an applicant can remain listed in the Intended Use Plan could result in an applicant obtaining a loan without reapplying to the program, reducing administrative time and costs.
- Timely use of loan funding: Borrowers could be invoiced for holding costs if a borrower does not request loan disbursements during the two year period and chooses not to have the loan canceled. Holding costs will make up the difference between the amount the program could earn in the State Treasury Pool and the amount of interest the program could earn during loan repayment.
- Prepayment notification: No known fiscal impact.
- Restructuring or refinancing loans: Restructuring or combining loans could lower administrative costs for the borrower by reducing the number of multiple monthly transactions. Refinancing with DEQ could reduce a borrower's costs to refinance an existing DEQ loan with another funding source. Conversely, by utilizing more

loan funds to refinance debt, there would be potentially less funds available for other projects.

- Alternate subsidy: Offering additional subsidization in lieu of principal forgiveness would reduce the debt service.
- Principal forgiveness for green projects: DEQ will provide an incentive of up to 50 percent of the calculated dollar value for green project components, not to exceed 50 percent of the loan amount or $500,000, whichever is less. The current rule provides the incentive based upon the dollar amount of the entire loan. Changing the rule could potentially reduce the amount of principal forgiveness awarded. Conversely, applicants would be incentivized to increase the dollar amount allocated towards green projects and therefore increase the utilization of green project components for a project.
- Housekeeping items: The proposed rules could impose more costs on applicants and borrowers by requiring additional upfront planning and consulting for considerations such as: construction costs, replacement, maintenance and operations, as well as the amount of water and energy conservation resulting from the project. However, the long-term fiscal impact of these new requirements should be beneficial because they promote more effective and sustainable projects.

Public

The general public is not eligible to borrow program funds.

Direct Impacts: No known direct impacts.

Indirect Impacts: Individual ratepayers may indirectly benefit if the new financing or principal forgiveness options allow the borrower to avoid service rate increases.

Large businesses - businesses with more than 50 employees

The proposed rules would have no direct economic impact on large businesses because they are not eligible to borrow program funds.

Direct Impacts: No known direct impacts

Indirect Impacts: There may be indirect beneficial economic impacts to businesses located in the service area near a project funded by the loan program, if the proposed changes allow the borrower to avoid rate increases.

Construction-related businesses may benefit from an increase in contracts if borrowers hire them to work on a project funded by the loan program.

Small businesses – businesses with 50 or fewer employees

The effect of the proposed rules on small businesses would be identical to the effect on large businesses, as described above.

a. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.
None. Small businesses are not eligible to borrow the program's funds.

b. Projected reporting, recordkeeping and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.
No additional activities are required to comply with the proposed rules.

c. Projected equipment, supplies, labor and increased administration required for small businesses to comply with the proposed rule.
No additional resources are required for compliance with the proposed rules.

d. Describe how DEQ involved small businesses in developing this proposed rule.
No small businesses participated in developing the proposed rules because the rules do not directly affect them.

Documents relied on for fiscal and economic impact

Document title	Document location
EPA's Green Project Reserve Crosswalk	EPA green project reserve crosswalk
EPA guidance and policy memos for the Clean Water State Revolving Fund loan program	EPA CWSRF guidance
Summary of Clean Water State Revolving Fund Advisory Committee Recommendations	Clean Water State Revolving Fund Rulemaking Website

Advisory committee

DEQ appointed an advisory committee to provide input on the proposed rules and make recommendations on this fiscal and economic impact statement.

As ORS 183.33 requires, DEQ asked for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses and, if so, how DEQ could reduce that impact as ORS 183.540 requires.

The committee reviewed the draft fiscal and economic impact statement. The committee's recommendations are documented in the advisory committee meeting summary dated April 12, 2017. The committee noted that the proposed rules will likely increase the fund utilization rate.

The committee determined the proposed rules would not have a significant adverse impact on small businesses in Oregon.

Housing cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel. DEQ determined the proposed rules only affect the cost of developing publically-owned water quality control and protection projects and therefore do not affect housing costs under this statute.

Federal relationship

ORS 183.332, 468A.327 and OAR 340-011-0029 require DEQ to attempt to adopt rules that correspond with existing equivalent federal laws and rules unless there are reasons not to do so.

Relationship to federal requirements

The Clean Water State Revolving Fund is a federal program established in the Clean Water Act Section VI – State Water Pollution Control Revolving Funds (33 U.S. Code §1383 (2016)) and 40 CRF § 35.31.

Adoption of federal requirements

DEQ proposes to adopt optional federal requirements to expand program options for CWSRF borrowers.

Including Eligible Land Costs for Building Treatment Works

340-054-0015 Eligible Projects and Activities

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will allow the program to finance additional eligible land purchase costs for the construction of treatment works projects.	The 2014 Water Resources Reform and Development Act amended the Clean Water Act, section 212(2)(A), definition of "treatment works," to include additional eligible land purchase costs for the Clean Water State Revolving Fund loan program. The revised definition allows purchasing land that is "integral to the treatment process" as well as those lands "necessary for construction." The proposed rule allows the program to finance these costs.

Adopting federal language for additional subsidization eligibility

340-054-0010(13) Definitions

340-054-0065(12)(a)(A), (B), (C) Additional subsidization

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will allow all public agencies, including special districts, to be eligible for additional subsidization.	The proposed rule adopts the federal definition "eligible recipient" from the Water Infrastructure Improvements for the Nation Act that amended Section 603(i)(1) of the Clean Water Act and changed the eligibility for additional

Adopting federal language for additional subsidization eligibility

340-054-0010(13) Definitions

340-054-0065(12)(a)(A), (B), (C) Additional subsidization

Proposed Rule and Topic	Relationship to Federal Law
	Subsidization to include special districts.

Including federal regulation requirements for procurement

340-054-0060(15) Architectural and engineering services.

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will allow borrowers to choose between the state of Oregon's and the federal process for contracting architectural and engineering services.	The Water Resources Reform and Development Act of 2014 incorporated section 602(b)(14) into the Clean Water Act, requiring borrowers to comply with specific procedures when contracting architectural and engineering services. The federal regulation requires that the process of procuring these contracts comply with either 40 United States Code, Chapter 11, or an equivalent state qualification-based process.

The following proposed rules are not different from or in addition to federal requirements.

Restructure and refinance CWSRF loans

340-054-0065(10) Restructure and refinance CWSRF loans (new section).

Proposed Rule and Topic	**Relationship to Federal Law**
Oregon Administrative Rules do not allow refinancing or restructuring debt. The proposed rule will allow refinancing and restructuring and Establish the criteria for refinancing and restructuring CWSRF debt.	Section 602(d)(2) of the Clean Water Act authorizes using the CWSRF to refinance debt. The Clean Water Act does not establish criteria for restructuring debt.

The following proposed rules add requirements additional to those in federal requirements.

The proposed rules add requirements in addition to federal requirements to expand on how Oregon will implement the federal requirements to ensure the fund's perpetuity. It is the state's role to determine how to operate the program procedurally in order to meet the federal requirements. The proposed rules will define the state's requirements to implement the program effectively.

Increasing Intended Use Plan Extension Period

340-054-0025(6) Removal of application from the project priority list.

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will increase the extension period for applicants to remain on the program's Intended Use Plan from six months to twelve months to allow applicants to complete loan requirements. This prevents the applicant from having to reapply when they are close to signing a loan agreement.	Section 602(c) of the Clean Water Act does not specify the timeframe an applicant remains on the Intended Use Plan.

Timely Use of Loan Funding

340-054-0060(1) Timely use of loan funding

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will extend the timeframe for a borrower to request its first loan disbursement.	The Clean Water Act does not establish a timeframe for borrowers to request its first loan disbursement.

Prepayment Notification

340-054-0065(8)(b) Loan Term

Proposed Rule and Topic	Relationship to Federal Law
The proposed rule will require a 30-day prepayment notification from borrowers that intend to prepay a loan.	The Clean Water Act does not establish a prepayment notification from borrowers that intend to prepay a loan.

Alternate Subsidy 340-054-0065(12)(e) Alternate subsidy.	
Proposed Rule and Topic	**Relationship to Federal Law**
The proposed rule will establish an alternate subsidy for eligible borrowers that is equivalent to principal forgiveness that would be available if EPA no longer required additional subsidization.	Section 603(i) of the Clean Water Act establishes additional subsidization in the form of principal forgiveness or as a negative interest loan.

Principal Forgiveness for Green Project Components 340-054-0065(12)(f)(B) Additional subsidization, Award amount.	
Proposed Rule and Topic	**Relationship to Federal Law**
The proposed rule will create a principal forgiveness calculation for eligible green projects based on the cost of the green project components.	Section 603(i) of the Clean Water Act establishes additional subsidization in the form of principal forgiveness or as a negative interest loan based. Eligibility is based on affordability criteria and green/sustainability criteria.

Housekeeping	
Proposed Rule and Topic	**Relationship to Federal Law**
The proposed rule will clarify and simplify rule language and punctuation.	This is in addition to federal requirements in order to address administrative issues.

What alternatives did DEQ consider, if any?

DEQ chose to align the Clean State Revolving Fund program with federal law as much as possible in the proposed rules. Program staff evaluated alternatives for addressing changes to the federal Clean Water Act in the rules. Staff chose to optimize complying with federal law and to incorporate additional policies that are unique to Oregon in an effort to help communities meet water quality infrastructure needs in an affordable way and to protect the perpetuity of the revolving loan fund.

Land Use

Land-use considerations

In adopting new or amended rules, ORS 197.180 and OAR 340-018-0070 require DEQ to determine whether the proposed rules significantly affect land use. If so, DEQ must explain how the proposed rules comply with statewide land-use planning goals and local acknowledged comprehensive plans.

Under OAR 660-030-0005 and OAR 340 Division 18, DEQ considers that rules affect land use if:

- The statewide land use planning goals specifically refer to the rule or program, or
- The rule or program is reasonably expected to have significant effects on:
    - Resources, objectives or areas identified in the statewide planning goals, or
    - Present or future land uses identified in acknowledged comprehensive plans

To determine whether the proposed rules involve programs or actions that affect land use, DEQ reviewed its Statewide Agency Coordination plan, which describes the DEQ programs that have been determined to significantly affect land use. DEQ considers that its programs specifically relate to the following statewide goals:

Goal	Title
5	Open Spaces, Scenic and Historic Areas, and Natural Resources
6	Air, Water and Land Resources Quality
9	Ocean Resources
11	Public Facilities and Services
16	Estuarial Resources

Statewide goals also specifically reference the following DEQ programs:

- Nonpoint source discharge water quality program – Goal 16
- Water quality and sewage disposal systems – Goal 16
- Water quality permits and oil spill regulations – Goal 19

Determination

DEQ determined that all the proposed rules affect programs or activities that the DEQ State Agency Coordination Program considers a land-use program. There are implications for land use throughout the state if the proposed rules result in the program funding more water quality improvement projects. DEQ's land-use planning goals compliance and local plan compatibility procedures adequately cover the proposed rules. Any new projects funded under these proposed rules would have to comply with OAR 340-054-0022(5)(e), which requires demonstrating that the projects comply with land-use requirements in OAR 340-018-0050 before they receive CWSRF funding.

Stakeholder and public involvement

Advisory committee

Background

DEQ convened the standing Clean Water State Revolving Fund advisory committee for three public meetings, in early 2017, to discuss the rulemaking topics. The committee included representatives from organizations with an interest in public water quality financing and water quality improvement projects.

The committee's web page is located at: CWSRF advisory committee.

Clean Water State Revolving Fund Rulemaking Advisory Committee	
Name	**Representing**
April Snell	Oregon Water Resources Congress
Carl Tappert	Rogue Valley Sewer Services, representing Special Districts Association of Oregon
Chris Marko	Rural Community Assistance Corp.
Chris Thomas	The Freshwater Trust
Doug Waugh	Clackamas Water Environment Services, representing Oregon Association of Clean Water Agencies
Emily Ackland	Association of Oregon Counties
Jan Lee	Oregon Association of Conservation Districts
Jason Green	Oregon Association of Water Utilities
Jeremy McVeety	Infrastructure Finance Authority
Lori Grant	Oregon Environmental Council
Sam Goldstein	USDA, Rural Development-Oregon
Todd Miller	City of Springfield, representing League of Oregon Cities
Tom Elliott	Oregon Department of Energy

Meeting notifications

To notify people about the advisory committee's activities, DEQ:

On Jan. 26, 2017, March 6, 2017 and April 4, 2017:

- Sent email bulletins, using a free e-mail subscription service standard for agency notifications, to the following lists:
    - Rulemaking
    - Clean Water State Revolving Fund

    - DEQ Public Notices
- Added advisory committee announcements to DEQ's calendar of public meetings at DEQ Calendar.
- Provided notice of meetings and links to committee information through postings on Facebook and Twitter.
- Published a press release

Committee discussions

In addition to the recommendations described under the Statement of Fiscal and Economic Impact section above, the committee reviewed and commented on each of the proposed rule topics. DEQ incorporated the committee's recommendations regarding restructuring and refinancing loans, the prepayment notification, and the principal forgiveness calculation for green projects. The committee concluded that the proposed rules met the needs of the fund's stakeholders.

Meeting minutes and recordings are available by request from DEQ or from the advisory committee webpage at: CWSRF 2017 rulemaking

EQC prior involvement

The commission was not involved in this rulemaking process.

Public Notice

DEQ provided notice of the proposed rulemaking and hearing by:

- Filing notice with the Oregon Secretary of State for publication in the August 2017 Oregon Bulletin;
- Posting the Notice, including the draft rules, on the web page for this rulemaking, located at: CWSRF 2017 rulemaking;
- On July 14, 2017, sending email notices to the following subscriber lists:
    - Rulemaking
    - Clean Water State Revolving Fund
    - DEQ public notices
    - Nonpoint source water quality
    - Onsite sewage systems
    - Stormwater
- Issuing a press release
- Emailing the following key legislators required under ORS 183.335:
    - Senator Michael Dembrow, Chair, Senate Environment and Natural Resources Committee
    - Representative Ken Helm, Chair, House Energy and Environment Committee
- Emailing advisory committee members directly
- Postings on Twitter and Facebook,

- Posting on the DEQ event calendar: DEQ Calendar

Request for other options

During the public comment period, DEQ requested public comment on whether to consider other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business. One commenter presented another option for restructuring and refinancing CWSRF loans that prompted DEQ to revise two rules. This document includes a summary of comments and DEQ responses.

Public hearings

DEQ held one public hearing at the DEQ offices in Portland on Tuesday, Aug. 15. At the hearing, Stewart Taylor, the finance director for the City of Albany, gave the only testimony. He detailed the city's support for DEQ's proposal to allow the restructure and refinance of existing CWSRF loans under certain circumstances.

Later sections of this document include a summary of the five comments received during the open public comment period, DEQ's responses, and a list of the commenters. Original comments are on file with DEQ.

Presiding officer's record

Hearing

Date: Tuesday, Aug. 15, 2017
Location: DEQ Headquarters, 6th floor
700 NE Multnomah St.
Portland, OR 97232

Presiding Officer: Lee Ann Lawrence

The presiding officer convened the hearing, summarized procedures for the hearing, and explained that DEQ was recording the hearing. The presiding officer asked people who wanted to present verbal comments to sign the registration list, or if attending by phone, to indicate their intent to present comments. The presiding officer advised all attending parties interested in receiving future information about the rulemaking to sign up for email notices. As Oregon Administrative Rule 137-001-0030 requires, the presiding officer summarized the content of the rulemaking notice. Three people attended in-person, and one by phone. One person presented verbal comment at the hearing.

Public comment period

DEQ accepted public comment on the proposed rulemaking from July 19, 2017, until 4 p.m. on Aug. 25, 2017.

Summary of comments and DEQ responses

The following table organizes public comments received and lists the comment topic, commenter and the commenters' affiliation. DEQ's response follows the summary. Original comments are on file with DEQ.

Four written comments were submitted electronically either through DEQ's online comment page or by email. One commenter submitted a written comment and oral testimony at the public hearing. One commenter submitted a partial sentence through DEQ's online comment page. DEQ notified the commenter that this was incomplete and where they could submit another comment. The commenter did not reply or submit another comment.

One commenter, City of Albany, expressed support for the new section 340-054-0065(10) Restructure and refinance CWSRF loans. Another commenter, United States Department of Agriculture, Rural Development – Oregon, expressed concern on the criteria for restructure and refinance, and provided specific suggestions to incorporate in the criteria. Two commenters expressed support for the changes in eligibility for additional subsidization. One commenter requested better definitions for eligible land costs, green infrastructure projects, water quality trading projects and green project reserve incentives.

DEQ revised the proposed rule 340-054-0065(10), Restructure and Refinance CWSRF loans and 340-054-0005(2)(d), Purpose in response to USDA, Rural Development – Oregon's comments as described in the response section below.

List of Comments

Comment #	Comment Topic	Commenter	Affiliation
1	Restructure and refinance CWSRF loans	Sam Goldstein	USDA, Rural Development-Oregon
2	Restructure and refinance CWSRF loans	Stewart Taylor	City of Albany
3	Additional subsidization	April Snell	Oregon Water Resources Congress
4	Additional subsidization	Marc Thalacker	Three Sisters Irrigation District
5	Green Infrastructure and Water Quality Trading Projects	Susie Smith	Oregon Association of Clean Water Agencies
6	Unknown	Jade Freund	Island Earth Group, LLC

Comments 1 and 2: Restructure and refinance CWSRF loans.

DEQ received two comments in this category.

a. Concern regarding the criteria for refinancing CWSRF loans.

USDA, Rural Development – Oregon provided a written comment stating that:

1. DEQ should not be in the business of refinancing its own debt by offering lower rates and terms than initially agreed because it would be supplanting the private market through refinancing CWSRF debt. It is not in the best interest of the commercial market place or government to have a governmental entity replace private market funding sources unless there are compelling reasons to do so.

2. DEQ should establish specific criteria and special circumstances that would warrant a refinance, such as:
    - Conditions that would jeopardize repayment such as a natural or fiscal disaster, and
    - Ensuring a borrower remains a good credit risk by keeping them in the affordability threshold when requesting additional CWSRF financing for a new project

3. DEQ should define the criteria used to determine "safeguarding the CWSRF's perpetuity."

DEQ's response

The proposed rule is within the statutory authority of Title VI of the Clean Water Act. Specifically:

- 33 U.S.C. §1383(d)(2) (2016) authorizes CWSRF programs to refinance debt
- 33 U.S.C. §1383(d)(1)(A) (2016) mandates that CWSRF interest rates be offered at or below market interest rates.

The proposed rule will establish DEQ's authority to refinance CWSRF loans under certain circumstances. After public comment, DEQ revised 340-054-0065(10) and 340-054-0005(2)(d) to further clarify the division's purpose to ensure the fund's perpetuity.

To address USDA-Rural Development – Oregon's comments:

1. The option to refinance CWSRF loans will limit the negative impact of large prepayments on the program's ability to earn the interest needed to sustain the fund. Interest earnings provide more money for loans.

2. Rule 340-054-0065(9) allows minor variation in loan terms. A minor variation in loan terms can include refinancing a CWSRF loan when there is the potential threat of default. The specific circumstances cited in USDA-Rural Development- Oregon's comment could lead to a potential threat of default that could qualify for a refinance under the current rule. The proposed rule will allow DEQ to consider a refinance based on a prepayment notification from a borrower.

3. "Safeguarding the fund's perpetuity" means ensuring the CWSRF is a reliable funding source for water quality improvement projects in Oregon indefinitely. DEQ will utilize cash flow modeling to evaluate the impact of a refinance on the fund's perpetuity and determine whether to refinance the loan. If the refinance is approved, DEQ will clearly document the rationale.

b. Support for restructuring and refinancing CWSRF loans.
The City of Albany gave oral testimony and provided a written comment supporting the proposed rule to allow restructure and refinance of CWSRF loans. The testimony described how savings associated with a refinance would allow the city to request additional CWSRF financing to construct a new water quality improvement project within the its current debt management plan. The commenter explained how refinancing the CWSRF loans support completion of planned infrastructure projects, further improving water quality.

The testimony recognized benefit for DEQ through the accrual of interest and fees to avoid the risk of a reduced CWSRF fund utilization rate.

DEQ's response
The City of Albany's testimony supports the proposed rules.

Comments 3 and 4: Support for Additional Subsidization

DEQ received comments in this category from two commenters.

a. General support for the proposed rules and support for clarifying recipients eligible for principal forgiveness.
Oregon Water Resources Congress expressed general support for the proposed rules. OWRC also expressed support for including federal language from the Water Infrastructure Improvements for the Nation Act that amended the Clean Water Act in late 2016. This changed the eligibility for additional subsidization to include special districts. OWRC collaborated with Oregon's congressional delegation to address the terminology change in the CWA to correct the unintended interpretation that irrigation districts were not considered municipal entities. They were, therefore, ineligible for additional subsidization.

OWRC stated that irrigation districts play an important role in improving Oregon's water quality through water infrastructure piping projects. Testimony recognized that a small reduction in principal repayment obligations can make a difference in whether a district moves forward with a project.

DEQ's response
The OWRC's testimony supports the proposed rules.

b. General support for the majority of the proposed rules, support for clarifying recipients eligible for principal forgiveness and concern with the maximum amount of principal forgiveness.
Three Sisters Irrigation District expressed support for the proposed language that incorporates recent changes in federal law clarifying the recipients eligible for principal

forgiveness. TSID expressed that CWSRF loans are a key component for financing irrigation districts' green conservation projects that improve water quality.

TSID commented that DEQ should award the maximum amount of principal forgiveness allowed by EPA and not limit the maximum award amount to $500,000.

DEQ's response
TSID's comment supports DEQ's proposal to adopt the federal definition of "eligible recipient" to ensure irrigation districts are eligible for principal forgiveness.

However, DEQ's advisory committee has not recommended increasing the maximum award amount for principal forgiveness. During the 2015 CWSRF rulemaking, the standing CWSRF advisory committee accepted a proposed rule to allow a broader distribution of principal forgiveness to more communities to enhance water quality improvement.

The EQC adopted the proposed rule. This established the maximum amount of principal forgiveness to $500,000 per project with 70 percent allocated to distressed communities and 30 percent allocated to green/sustainable projects.

Comment 5: Green Infrastructure and Water Quality Trading Projects

DEQ received one comment in this category.

Oregon Association of Clean Water Agencies stated that the proposed rules are positive improvements because communities will have cost-saving financing tools to increase the scope of project elements eligible for CWSRF financing. ACWA stated support for OAR 340-054-0065(12)(f)(B) Additional Subsidization, Award Amount, that limits the amount to 50 percent of the green/sustainable components of a project.

ACWA requested DEQ clarify eligibility for land costs associated with green infrastructure projects and water quality trading projects. ACWA asked for clarification about whether water quality trading activities tied to permit compliance would be considered eligible under Section 212 or 319 of the Clean Water Act. Additionally, ACWA requested clarification on green project reserve incentives as they relate to water quality trading activities.

DEQ's response
ACWA's comment supports the proposed rules that expand project eligibility and refine the principal forgiveness calculation for green/sustainable projects.

However, water quality trading activities are not part of this rulemaking. The water quality trading administrative rules and the CWSRF administrative rules allow for CWSRF financing when the activities meet CWSRF eligibilities cited in 340-054-0015.

DEQ reviews project eligibility on a case-by-case basis. The determination cannot be made solely by referring to the rules due to the complexity of factors, such as whether

an activity is compliance driven, that determine eligibility under Section 212 and 319 of the Clean Water Act.

Implementation

Notification

The proposed rules would become effective upon filing on approximately Nov. 6, 2017. DEQ would notify affected parties by email:

- Interested parties through the same email list used when noticing the public comment period
- DEQ regional and water quality program staff and Regional Solutions Team
- Advisory Committee members
- League of Oregon Cities membership
- Current applicants and borrowers
- Infrastructure finance agencies (USDA, Rural Development - Oregon and Business Oregon's IFA)

Systems

- Website: DEQ will update the rulemaking and program websites with applicable information.
- Necessary program forms and documents will be revised to reflect any new program requirements.

Training

- Affected parties: Stakeholder organizations, municipalities, consulting engineers, etc.
- DEQ staff: CWSRF statewide staff will be trained on the changes to the program
- Infrastructure finance agencies (USDA, Rural Development – Oregon and Business Oregon's IFA)

Five-year review

ORS 183.405

Requirement

Oregon law requires DEQ to review new rules within five years after EQC adopts them. The law also exempts some rules from review. DEQ determined whether the rules described in this report are subject to the five-year review on the law in effect when EQC adopted these rules.

Exemption from five-year rule review

The Administrative Procedures Act exempts all of the proposed rules from the five-year review because the proposed rules would:

- Amend or repeal an existing rule. ORS 183.405(4).

Draft Rules – With Edits Highlighted

Key to Identifying Changed Text:

~~Deleted Text~~
New/inserted text
~~Text deleted from one location~~ - and moved to another location

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 54

CLEAN WATER STATE REVOLVING FUND PROGRAM

340-054-0005

Purpose

(1) The rules in this division establish procedures and requirements for ~~the~~ funding ~~of~~ projects and activities that enhance, protect or restore water quality through the Water Pollution Control Revolving Fund, called the Clean Water State Revolving Fund.

(2) This division:

(a) Assists a public agency to obtain financing for a project that enhances, protects or restores water quality.

(b) Ensures the loan application and funding processes, procedures and requirements are clear.

(c) Promotes loan affordability by offering below-market interest rates.

(d) Ensures CWSRF's perpetuity ~~of the CWSRF~~ for ~~reliability of~~ project funding reliability to provide loans for future projects that enhance, protect or restore water quality.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0010

Definitions

The following definitions apply to this rule division:

(1) "Applicant" means a public agency that has applied for a CWSRF loan under this division.

(2) "Borrower" means a public agency that has signed a CWSRF loan agreement with DEQ.

(3) "Change order" means a written order, and supporting information from a borrower, to a borrower's contractor authorizing an addition, deletion or revision in the work within the scope of the contract documents, including any required adjustment in contract price or time.

(4) "Checklist of application requirements" means a list that DEQ provides of all documents an applicant must submit to DEQ under this division.

(5) "Clean Water Act" or "CWA" means the federal Water Pollution Control Act, 33 U.S.C. § 1251 – § 1387.

(6) "Clean Water State Revolving Fund" or "CWSRF" means the Water Pollution Control Revolving Fund established under ORS 468.427.

(7) "Construction" means ~~the~~ erecting~~on~~, install~~at~~ing~~on~~, expanding~~sion~~ or improving~~ement of~~ a wastewater or stormwater facility, nonpoint source control activity or estuary management project, and includes ~~the~~ demolishing~~tion of~~ an obsolete facility.

(8) "Cross-cutting authorities" means requirements of federal laws and Executive Orders that apply to projects and activities funded under the CWSRF program.

(9) "Default" means ~~the~~ failing~~ure~~ to pay principal, interest or annual fees, or to comply with other CWSRF loan terms or provisions, and includes ~~the~~ filing ~~of~~ bankruptcy or other written admission of an inability to satisfy a borrower's obligations under a CWSRF loan.

(10) "DEQ" means the Oregon Department of Environmental Quality.

(11) "Design" means preparing engineering drawings and specifications for the proposed construction, and may include pre-design activities.

(12) "Eligible recipient" means public agency with the meaning given in ORS 468.423.

(13~~2~~) "EPA" means the U.S. Environmental Protection Agency.

(14~~3~~) "Estuary management" means implementing actions identified in a Comprehensive Conservation Management Plan developed for a designated national estuary.

(154) “Federal loans” are loans DEQ designates yearly in its Intended Use Plan that represent projects that are funded with monies directly made available by the federal capitalization grant for the associated federal fiscal year.

(165) “Local community loan” means a loan, the proceeds of which a public agency uses to establish a local financial program that will fund an eligible nonpoint source control or estuary management activity.

(176) “Maintenance” means regularly scheduled work performed to repair, replace or upgrade equipment in a facility, or to prevent or correct a failure or a malfunction of a wastewater or stormwater facility, nonpoint source control or estuary management project.

(187) “Natural infrastructure” means the usinge of a natural form and ecosystem function to restore or augment a project’s intended water quality benefits.

(198) “Nonpoint source” has the meaning given in ORS 468B.005.

(2019) “Nonpoint source control” means implementingation of a nonpoint source control activity under section 319 of the Clean Water Act and 40 C.F.R. §§ 35.3115(b) that is included in the 2014 Oregon Nonpoint Source Management Program Plan.

(210) “Operation” means the controllling of wastewater collection system pumping stations and wastewater facility treatment unit processes, the controllling of equipment and processes of stormwater facilities, nonpoint source control and estuary management projects, and the financial and personnel management, records, laboratory control, process control, safety, and emergency planning for these facilities and projects.

(221) “Planning” means monitoring, data collection and measurement, evaluation, analysis, security evaluations, report preparation, environmental review, public education and review process and any other activity leading to a written plan for providing a wastewater or stormwater facility, nonpoint source control or estuary management project intended to remediate an existing or anticipated water pollution problem, but does not include the preparation of detailed bid documents for construction.

(232) “Point source” has the meaning given in ORS 468B.005.

(243) “Principal forgiveness” means additional subsidization that allows a borrower to repay only a specified portion of the loan principal.

(254) “Project” means the activities or tasks identified in a loan application or a loan agreement for which a borrower may expend or obligate funds.

(265) “Public agency” has the meaning given in ORS 468.423.

(276) "Ready to proceed" means, in regard to a project, that a loan applicant's project details have been published in the Intended Use Plan under OAR 340-054-0025(3)–340-054-0025(5) and the applicant has met all loan requirements set out in OAR 340-054-0022.

(287) "Replacement" means obtaining and installing equipment, accessories or appurtenances necessary for ~~the ongoing~~ operating~~on of~~ a wastewater or stormwater facility, nonpoint source control or estuary management project in order to maintain a facility or project for the purpose for which it was designed and constructed during its useful life, but does not mean ~~the~~ replacing~~ement of~~ a facility or project at the end of its useful life.

(298) "Small community" means a public agency serving a population of 10,000 or less.

(3029) "Sponsorship option" means DEQ's financing mechanism that allows a public agency with the authority to finance and implement a wastewater facility project and an eligible nonpoint source control or estuary management activity to be financed through one combined CWSRF application.

(310) "Stormwater" means water runoff from a precipitation event, snowmelt runoff, and surface runoff and drainage.

(321) "Sustainability" means the long term reliability and viability of finance, operations, environmental performance or technology, or ~~the~~ using~~e of~~ natural infrastructure.

(332) "Treatment works" has the meaning given in ORS 468.423.

(343) "Wastewater" has the meaning given for "sewage" in ORS 468B.005.

(354) "Wastewater collection system" means publicly owned pipelines, conduits, pumping stations, force mains and any other related structures, devices or equipment used to convey wastewater to a wastewater treatment facility.

(365) "Wastewater facility" means a wastewater collection system or wastewater treatment facility.

(376) "Wastewater treatment facility" means a publicly owned device, structure or equipment used to treat, neutralize, stabilize, reuse or dispose of wastewater and treatment residuals.

(387) "Water quality standards" means the surface water standards established in OAR 340-041 and the minimum groundwater protection requirements established in OAR 340-040.

[Publications: ~~Publications~~The Intended Use Plan referenced is~~are~~ available from the agency. The Oregon Nonpoint Source Management Program Plan is available as a PDF by clicking on this link: ONSMP]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0011

Authorized Fund Uses

DEQ will use the CWSRF only to:

(1) Make loans to eligible borrowers identified in the Intended Use Plan developed under OAR 340-054-0025;

(2) Fund loan reserves specified in OAR 340-054-0036;

(3) Purchase bonds or acquire other debt obligations incurred after March 7, 1985 as ~~provided in~~ OAR 340-054-0071 provides;

(4) Pay CWSRF program administration costs to the extent federal and state law allow;

(5) Earn interest on fund accounts;

(6) Establish reserves for bonds issued by the state for use by the fund; or

(7) Pay principal and interest of bond obligations sold to benefit the fund.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423–468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

~~**Clean Water State Revolving Fund Loans**~~

340-054-0015

Eligible Projects and Activities

(1) A public agency may apply for a CWSRF loan up to 100 percent of the cost of a water quality project or the project related costs for the following project types:

(~~2~~1a) Implementing a management program established under section 319 of the Clean Water Act.

(3b2) Developing and implementing a comprehensive conservation and management plan under section 320 of the Clean Water Act.

(3c) Constructing, repairing, or replacing decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage.

~~(1) To any municipality or intermunicipal, interstate, or State agency to construct publicly owned treatment works.~~

~~(2) Implementing a management program established under section 319 of the Clean Water Act.~~

~~(3) Developing and implementing a comprehensive conservation and management plan under section 320 of the Clean Wat~~ ~~(4) Constructing, repairing, or replacing decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage.~~

(54d) ~~Measures to manage, reduce, treat, or recapture~~Managing, reducing, treating, or recapturing stormwater or subsurface drainage water.

(75e) Developing and implementing watershed projects meeting the criteria set forth in section 122 of the Clean Water Act.

(96f) ~~For reusing~~Reusing or recycling wastewater, stormwater, or subsurface drainage water.

(2) A municipality or intermunicipal, interstate~~,~~ or State agency may apply for a CWSRF loan up to 100 percent of the cost of a water quality project or the project related costs for the following project types:

(1a8) ~~To any municipality or intermunicipal, interstate, or State agency to construct~~Constructing publicly owned treatment works.

(b) Acquiring the land that will be an integral part of the treatment process. These lands include land used for storing treated wastewater in land treatment systems prior to land application, or will be used for ultimate disposal of residues resulting from such treatment and acquiring other land, and interest in land, that are necessary for construction.

(6cb9) ~~To any municipality or intermunicipal, interstate, or State agency for measures to reduce~~Reducing the demand for publicly owned treatment works capacity through water conservation, efficiency, or reuse.

~~(7) Developing and implementing watershed projects meeting the criteria set forth in section 122 of the Clean Water Act.~~

(8dc0) ~~To any municipality or intermunicipal, interstate, or State agency for measures to reduce~~Reducing the energy consumption needs for publicly owned treatment works.

(107eg) For measures to increaseIncreasing the security of publicly owned treatment works.

(9) For reusing or recycling wastewater, stormwater, or subsurface drainage water.

(10) For measures to increase the security of publicly owned treatment works.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0022

Loan Application Requirements

(1) Application submittal. DEQ will notify interested parties at least annually of the opportunity to submit applications for a CWSRF loan. An eligible public agency may submit a CWSRF loan application to DEQ at any time.

(2) Consideration for funding. DEQ will consider an applicant for funding only if its project is included in the Intended Use Plan and its application meets all of this division's application requirements in this division are met.

(3) All CWSRF loans. An applicant must submit the following to DEQ:

(a) A complete application on the applicable DEQ form;

(b) Documents specified in the DEQ checklist of application requirements;

(c) Audited financial statements for the three years precedingprior to the application date and the applicant's current budget, unless waived in writing by DEQ;

(d) Evidence the applicant has the authority to undertake the project including, but not limited to, evidence of a loan approval resolution or similar authorization for signing a loan agreement and establishing a loan reserve account;

(e) Evidence the applicant has authority to collect and pledge the revenue offered as repayment for a CWSRF loan, repay a loan and, where applicable, the ability to ensure ongoing operation and maintenance of the proposed wastewater or stormwater facility, nonpoint source control or estuary management project. DEQ may require an applicant to meet the following criteria for a revenue-secured loan described under OAR 340-054-0065(2):

(A) An applicant's revenue stream is not at risk from undue dependence ~~up~~on a limited portion of the system's customer base or a pattern of delinquent payment from that portion of the system's customer base, and

(B) An applicant must have the ability to collect from delinquent customers;

(f) Pre-award compliance review report or other evidence DEQ requires showing compliance with federal nondiscrimination requirements;

(g) For projects serving two or more public agencies, the executed inter-agency agreements, contracts or other legally binding instruments necessary for financing, constructing~~on~~ and operating~~on of~~ the proposed project. The documents must be satisfactory to DEQ for determining an adequate pledge of security;

(h) Evidence of resolution, ordinance or other authorization approving bonds secured by sewer or other revenue sources if required by DEQ;

(i) Official statement of recently issued bonds if required by DEQ;

(j) A DEQ-approved certification that the requirements for the cost and effectiveness analysis and the subsequent project selection are completed as required by section 602(b)(13) of the CWA;

(k) Any other information DEQ requests as necessary to complete the loan application.

(4) Local community loan. In addition to the requirements in section (3) of this rule, an applicant applying for a CWSRF local community loan must submit the following to DEQ:

(a) A description of how the project will implement a nonpoint source control activity or estuary management effort.

(b) A projected cash flow statement based on anticipated number of local loans, their repayment schedule, amount and timing of department disbursement and amount and timing of repayments to DEQ.

(c) Unless waived by DEQ, evidence of a user charge system or other source of revenue if the applicant will be securing and repaying the loan with sewer system revenues.

(d) Unless waived by DEQ, demonstration of compliance with applicable federal environmental cross-cutting authorities.

(e) Documentation that demonstrates compliance with the land use requirements in OAR 340-018-0050.

(f) DEQ~~-~~-approved plans and specifications that comply with~~as required under~~ OAR chapter 340, division 52, unless waived by a DEQ engineer.

(g) An environmental determination obtained from DEQ for a nonpoint source pollution control (CWA §§ 319) or estuary management (CWA §§ 320) project that are construction and treatment works as defined in ORS 468.423. The environmental determination must meet the following conditions:

(A) An applicant must provide all necessary documentation to support DEQ's review of the entire projects' potential environmental impacts and include an analysis of a no action alternative and other reasonable alternatives considered.

(B) Project construction must begin within five years of the environmental determination.

(h) If an applicant does not obtain an environmental determination as specified in subsection (4)(g) of this section, an applicant may submit to DEQ, and DEQ may accept, an environmental determination made by another agency that meets the following conditions:

(A) The project scope must be essentially unchanged from the scope ~~that~~ the other agency accepted ~~by the other agency~~.

(B) The other agency's determination must have been made within the previous five years.

(C) The applicant met and documented ~~T~~the federal environmental cross-cutting authorities ~~have been met and documented~~.

(5) All design or construction loans. In addition to the requirements in section (3) of this rule, an applicant applying for a CWSRF design or construction loan must submit the following to DEQ:

(a) Unless waived by DEQ, evidence of a user charge system or other source of revenue if the applicant will be securing and repaying the loan with sewer system revenues.

(b) Unless waived by DEQ, demonstration of compliance with applicable federal environmental cross-cutting authorities for a construction project.

(c) An environmental determination obtained from DEQ for a construction project of a treatment works as defined in ORS 468.423, including a nonpoint source pollution control (CWA §§ 319) or estuary management (CWA §§ 320) project, that are construction and treatment works as defined in ORS 468.423. The environmental determination must meet the following conditions:

(A) An applicant must provide all necessary documentation to support DEQ's review of the entire projects' potential environmental impacts and include an analysis of a no action alternative and other reasonable alternatives considered.

(B) Project construction must begin within five years of the environmental determination.

(d) If an applicant does not obtain an environmental determination, as specified in subsection (5)(c) of this section, an applicant may submit to DEQ, and DEQ may accept, an environmental determination made by another agency that meets the following conditions:

(A) The project scope must be essentially unchanged from that the other agency accepted ~~by the other agency~~.

(B) The other agency's determination must have been made within the previous five years.

(C) The applicant met and documented ~~T~~the federal environmental cross-cutting authorities ~~have been met and documented~~.

(e) Documentation that demonstrates compliance with the land use requirements in OAR 340-018-0050.

(f) For a construction-only loan, DEQ-approved plans and specifications for the project as OAR chapter 340, division 052 requires.

(g) If the estimated cost of a project is in excess of $10 million, a value engineering study satisfactory to DEQ done prior to beginning construction. The study must be a specialized cost control technique specifically applicable to the wastewater treatment facility design identifying cost savings that can be made without sacrificing project reliability or efficiency.

(6) Design or construction loan for a point source project. In addition to the requirements in sections (3) and (5) of this rule, an applicant applying for a CWSRF design or construction loan for a point source project must submit the following to DEQ:

(a) An engineered planning document in the form of either a facility plan or project pre-design report that provides a comprehensive evaluation of environmental factors, engineering alternatives and financial considerations affecting the project area. This document must adequately describe the effectiveness and suitability of the proposed project to address the identified water quality problem. An applicant must have DEQ review and approve this document before signing a design or construction loan.

(b) Evidence of a sewer use ordinance or equivalent authority that prohibits:

(A) New connections from inflow sources into the wastewater collection system; and

(B) Introducing ~~W~~wastewater ~~introduced~~ into the wastewater collection system containing toxics or other pollutants in amounts or concentrations that have the potential of endangering public safety, adversely affecting the project or precluding ~~the~~ selecting~~on of~~ the most cost-effective alternative for the project.

(c) When a public agency applies for a wastewater facility construction loan that includes a sponsorship option, complete information about the nonpoint source control or estuary management activity on the applicable application form. DEQ will only consider a

sponsorship option if a nonpoint source control or estuary management activity is included as part of the entire project scope.

(7) Design or construction loan for a nonpoint source project. In addition to the requirements in sections (3) and (5) of this rule, an applicant applying for a CWSRF design or construction loan for a nonpoint source project must submit an engineered planning report to DEQ. The report must define the water quality problem and specify actions an applicant will implement to correct the problem.

(8) Federal loans. In addition to the applicable requirements in sections (3)–(7) of this rule, a loan designated as a federal loan must meet the requirements for federally funded projects in ~~accordance with~~ the Clean Water Act Title VI and EPA's January 6, 2015, memo "Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Titles I, II, V, and VI of the Federal Water Pollution Control Act."

[Ed. Note: Publications referred to are not included here. The CWSRF Intended Use Plan is available from the agency. The EPA Interpretive Guidance can be viewed in PDF form by clicking on this link.]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0025

Intended Use Plan (IUP) and Project Priority List

(1) IUP development. DEQ will annually develop and submit an IUP to EPA as described in the CWA §§ 606 and 40 C.F.R. §§ 35.3150. DEQ will update the IUP as specified in section (2) of this rule. The IUP will describe how DEQ proposes to fund projects through the CWSRF and will include a project priority list that numerically ranks all eligible applications received.

(2) IUP update.

(a) Except as specified in subsection (b) of this section, DEQ will update the annual IUP and project priority list at least every four months or when DEQ receives five eligible applications, whichever timeframe is shorter, and will submit the updated plan to EPA.

(b) If DEQ does not receive an eligible application during a four month period and determines the project priority list does not need to be updated, DEQ will not update the IUP.

(3) IUP public notice. DEQ will provide public notice and 30 days for the public to comment on a proposed draft IUP.

(a) DEQ will notify all new applicants of their project application ranking on the project priority list when DEQ develops and updates an annual IUP.

(b) An applicant may ask DEQ to reevaluate their project application's score and ranking on the proposed project priority list or to make other changes to an IUP during the public comment period.

(c) DEQ will consider and respond to all comments submitted during the public comment period before finalizing an IUP.

(4) Project priority list development. DEQ will include an eligible project under OAR 340-054-0015 on the project priority list if an applicant submits a completed application on a DEQ-approved form.

(5) Project priority list ranking. DEQ will numerically rank all eligible proposed project applications based on the point sum from the criteria specified in OAR 340-054-0026 and 340-054-0027.

(a) Except as specified in subsection (b) of this section, DEQ will evaluate each criterion in OAR 340-054-0026 and 340-054-0027 on a point scale from one to five as follows:

(A) One point = No or very low likelihood.

(B) Two points = Low or in some minor way.

(C) Three points = Moderate to significant likelihood.

(D) Four points = High likelihood.

(E) Five points = Very high likelihood.

(b) DEQ will evaluate criteria 1(c), 1(d), 2(b), 2(c), 2(d), 2(e), and 3(d) in OAR 340-054-0026 and criterion 5 in OAR 340-054-0027 by doubling the point scale specified in subsection (a) of this section.

(6) Removal of application from the project priority list.

(a) DEQ may retain an applicant's ranked project on the project priority list in an IUP for up to 36 months while an applicant pursues all applicable CWSRF financing requirements specified in this division.

(b) After DEQ initially includes a ranked project on the project priority list, an applicant must submit to DEQ an annual written project status report to remain on the project priority list.

(c) DEQ may provide one ~~six~~twelve-month extension to an applicant asking to remain on the project priority list beyond the 36-month limit. An applicant asking for an extension must submit to DEQ a written project status report on the applicant's project progress and an updated time frame indicating when the applicant will complete all CWSRF financing requirements.

(d) DEQ will provide written notice to an applicant before removing the applicant's project from the project priority list.

(e) DEQ will remove a project from the project priority list if:

(A) An applicant does not submit an annual written project status report as subsection (b) of this section requires;

(B) An applicant does not ask for a ~~six~~twelve-month extension beyond the 36-month limit and submit the project status report as subsection (c) of this section requires;

(C) DEQ determines the project scope changed from the original ranked application;

(D) DEQ determines a project does not meet eligibility requirements;

(E) An applicant does not require CWSRF financing; or

(F) An applicant asks to be removed from the project priority list.

(f) If DEQ removes a project from the project priority list as specified in paragraph (e)(A through C) of this section, an applicant may resubmit to DEQ a loan application for an eligible project that DEQ will evaluate under section (5) of this rule.

[Ed. Note: Publications referred to are not included here. The Project Priority List is contained within the CWSRF Intended Use Plan. That document is available from the agency.]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 1-2009(Temp), f. 4-27-09, cert. ef. 5-1-09 thru 10-27-09; DEQ 7-2009, f. & cert. ef. 10-28-09; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0026

CWSRF Project Ranking Criteria for Non-planning Loans

(1) Category 1. Water quality standards and public health considerations.

(a) Does the project improve water quality by addressing water quality parameters including, but not limited to: temperature, dissolved oxygen, contaminated sediments, toxic substances, bacteria or nutrients?

(b) Does the project ensure that a facility currently in compliance, but at risk of noncompliance, remains ~~maintains~~ in compliance?

(c) Does the project address noncompliance with water quality standards, public health issues or effluent limits related to surface waters, biosolids, water reuse or groundwater?

(d) If the project is not implemented, is a water quality standard likely to be exceeded or an existing exceedance likely to worsen?

(2) Category 2. Watershed and health benefits.

(a) Does the project improve or sustain aquatic habitat supporting native species or state or federally threatened or endangered species?

(b) Does the project address a water quality or public health issue within a federally designated wild and scenic river or sole source aquifer, state designated scenic waterway, the Lower Columbia River or Tillamook Bay estuary, a river designated under OAR 340-041-0350, or a significant wetland and riparian area identified and listed by a local government?

(c) Does the project support implementation of a total maximum daily load (TMDL) allocation, a department water quality status and action plan or designated groundwater management area declared under ORS 468B.180?

(d) Does the project provide performance-based water quality improvements supported by monitoring and reasonable assurance that the project will continue to function over time?

(e) Does the project integrate or expand sustainability or ~~the~~ usinge ~~of~~ natural infrastructure, or use approaches including, but not limited to, water quality trading, that are not specified in subsections (f) through (i) of this section of the rule?

(f) Does the project incorporate or expand green ~~stormwater~~ infrastructure including, but not limited to, practices that manage wet weather and that maintain and restore natural hydrology by infiltrating, evapotranspiring, harvesting or using stormwater on a local or regional scale?

(g) Does the project incorporate or expand water efficiency including, but not limited to, using improved technologies and practices to deliver equal or better services with less water, such as conservation, reuse efforts or water loss reduction and prevention?

(h) Does the project incorporate or expand energy efficiency including, but not limited to, using improved technologies and practices to reduce energy consumption of water quality projects, use energy in a more efficient way or to produce or utilize renewable energy?

(i) Does the project incorporate or expand environmentally innovative projects including, but not limited to, demonstrating new or innovative approaches to deliver services or manage water resources in a more sustainable way?

(3) Category 3. Other considerations.

(a) Does the project include a long-term planning effort that addresses financial, managerial or technical capability, or asset planning that ensures the project will be maintained?

(b) Does the project include a significant on-going educational or outreach component?

(c) Does the project incorporate other resources including, but not limited to, in-kind support, other funding sources or a partnership with a governmental, tribal or non-governmental organization?

(d) Does the project address a small community's water quality improvement or restoration need?

(e) Does the project include a sponsorship option?

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0036

Reserves, CWSRF General Fund and Project Funding

(1) Allocation to reserves and CWSRF general fund. DEQ will allocate available CWSRF funds in a state fiscal year first to the small community, planning and green project reserves, and then to the CWSRF general fund based on the following amounts:

(a) A maximum of 25 percent of the total available CWSRF funds to the small community reserve;~~.~~

(b) A maximum of $3 million to the planning reserve;~~.~~

(c) An amount at least equal to the minimum required by the federal capitalization grant to the green project reserve;~~.~~

(d) Amount of funds remaining, after allocation to the reserves as specified in subsections (a) through (c) of this section of the rule, to the CWSRF general fund.

(2) Project funding increase.

(a) DEQ will offer a funding increase to a borrower for an existing project based on the original project priority list ranking before offering a loan to an applicant for a new project loan if:

(A) Funds are available in the CWSRF; and

(B) The borrower submits a written request to DEQ for additional funding, has the legal authority to borrow the increased loan amount and has the financial capability to repay the increased loan amount.

(b) Any funding increase DEQ awards to a borrower will be in an amount specified in section (3) of this rule and will be done by increasing the amount of the borrower's existing loan or by DEQ making an additional loan to the borrower at the current interest rate.

(3) Project funding allocation.

(a) During a state fiscal year DEQ will assign a project to an appropriate reserve, to the CWSRF general fund or to both.

(b) Based on availability of funds in the CWSRF at the time of allocation, DEQ will allocate an amount to a borrower in project priority list rank order that:

(A) Is not more than the greater of $2.5 million or 15 percent of the total available CWSRF funds in a state fiscal year. DEQ may allocate additional funds if funds are available after allocating the maximum amount under paragraph~~subsection~~ (b)(A) of this section of the rule to each borrower who requested project funding in a state fiscal year;

(B) Is not more than the greater of $750,000 or 25 percent of the small community reserve, until all eligible small community requests have been allocated;

(C) Is not more than $250,000 of the planning reserve; and

(D) Only finances the portion of a project funded under the green project reserve that DEQ determines meets federal requirements for green infrastructure, water or energy efficiency improvement, or other environmentally innovative activities as defined by EPA requirements.

(c) During a state fiscal year DEQ will allocate funding for a new design or construction project loan from the CWSRF general fund if the project is not funded from a reserve.

(d) DEQ will allocate in project priority list rank order available funding from the CWSRF general fund for a small community or planning project that was not allocated from their respective reserves, or allocated less than the total loan amount requested.

(4) Reallocation of reserve funds.

(a) DEQ may reallocate funds between small community and planning reserves and the CWSRF general fund unless demand exceeds available funds.

(b) DEQ will not reallocate funds remaining in the green project reserve to the CWSRF general fund.

(5) Sponsorship option allocation. DEQ will determine the total amount of CWSRF funds to be allocated at a reduced interest rate through the sponsorship option in each state fiscal year.

Stat. Auth.: ORS 468.020, 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0056

CWSRF Loan Use Conditions

(1) Clean Water Act plans. DEQ will only provide a loan to a project that is consistent with plans developed under sections 303(e), 319 or 320 of the Clean Water Act.

(2) Refinancing a long-term loan. DEQ will not provide a loan that will be used to refinance another lender's ~~for refinancing a~~ long-term loan or other debt obligations.

(3) Refinancing an interim loan. DEQ may provide a loan to refinance an interim loan or self-generated funds used to pay DEQ-approved project costs if the borrower:

(a) Provides DEQ with a written notice of intent to apply for long-term financing;

(b) Wants to proceed with the project using interim financing or self-generated funds; and

(c) Agrees to proceed at its own risk whether or not the CWSRF is available to provide long-term financing.

(4) Interim financing. DEQ may provide short-term, construction-~~-~~period financing for an eligible project if the following conditions are met:

(a) The CWSRF's liquidity is sufficient to provide financing without adversely affecting the amount and timing of disbursements needed for prior obligations;

(b) The borrower has a legally enforceable obligation for long-term project financing satisfactory to DEQ; and

(c) The loan agreement for interim financing will stipulate DEQ is not obligated to provide long-term financing for the project.

Stat. Auth.: ORS 468.020, 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0060

Loan Agreement and Conditions

DEQ will include conditions in a loan agreement that apply~~are applicable~~ to the type of project being financed, including, but not limited to, the following:

(1) Timely use of loan funding.

(a) DEQ may cancel a loan agreement if a borrower fails to begin using loan proceeds within two years after signing a loan agreement.

(b) Borrowers that do not begin using loan proceeds within two years after signing a loan agreement will have a choice of canceling the loan and reapplying for DEQ funding or paying holding costs to DEQ.

(A) Holding costs are, on an annual basis, the estimated amount of the loan interest payable to DEQ, less the amount of the interest DEQ earned from the Treasurer's investment of funds for DEQ's account. DEQ will itemize holding costs on a semi-annual invoice DEQ sends to the borrower. The borrower must pay these costs within 30 days after DEQ sends the invoice.~~Holding costs shall be itemized on a semi-annual invoice sent by DEQ to the Borrower and paid within 30 days of the date of such invoice.~~

(B) A borrower may apply for a one-time one year extension to begin using loan proceeds.

(2) Accounting. A borrower must maintain all CWSRF project accounts as separate accounts and must use accounting, audit and fiscal procedures that conform to Generally Accepted Governmental Accounting Standards and the requirements of the Governmental Accounting Standards Board.

(3) Records retention. A borrower must retain project files and records for six years after project performance affirmative certification or project completion as DEQ determines~~d by DEQ~~ or such longer period as applicable state or federal law requires. A borrower must also retain financial files and records for three years after the loan is repaid in full.

(4) Wage requirements.

(a) A borrower for constructing~~on of~~ a treatment works project must comply with all provisions of the Davis-Bacon Act, as amended, 40 U.S.C. §§ 3141 to 3144 and 3146, as detailed in section 513 of the Clean Water Act. Wage rates must be based on the wage requirements of the Davis Bacon Act or the prevailing wage rate requirements for public

works projects under ORS 279C.800 to 279C.870 and OAR 839-025-0000 to 839-025-0540, whichever is higher.

(b) A borrower for a project not specified in subsection (a) of this section of the rule must comply with the prevailing wage rate requirements under ORS 279C.800 to 279C.870 and OAR 839-025-0000 to 839-025-0540.

(5) Construction materials. A borrower for ~~construction of~~ a treatments works construction project must ensure that all of the iron and steel products used in the project are produced in the United States as required by section 608 of the Clean Water Act.

(6) Debarment and suspension. A borrower must comply with Subpart C of 2 C.F.R part 180, Responsibilities of Participants Regarding Transactions Doing Business with Other Persons and Subpart C of 2 C.F.R part 1532, Responsibilities of Participants Regarding Transactions.

(7) Engineering documents. If a borrower uses CWSRF financing to construct a wastewater facility subject to OAR 340-052, it must submit to DEQ plans and specifications, operation and maintenance manuals, inspection and certification of proper construction, and any other applicable documentation OAR 340-052 and 340-054-022 require.

(8) Inspections and progress reports.

(a) A borrower must have a qualified inspector under the direction of a registered civil, mechanical or electrical engineer, as appropriate, conduct on-going inspections during the construction phase of a wastewater facility subject to OAR 340-052 to ensure the project complies with approved plans and specifications. DEQ or its representative may enter property the borrower owns or controls to conduct interim inspections. DEQ may require progress reports sufficient to determine compliance with approved plans and specifications and with other loan agreement provisions.

(b) DEQ may request review and analysis of construction plans from relevant agencies or offices to ensure the project plans not subject to department review under OAR 340-052 support the project's successful implementation and completion ~~of the project~~. A borrower must allow inspections by appropriately qualified persons during project construction or implementation to ensure the project as constructed conforms to project plans and other provisions of the loan agreement.

(9) Loan amendments.

(a) DEQ will not require a loan amendment for changes in project work that are consistent with project objectives and within the loan scope and funding level.

(b) DEQ will execute a loan amendment if:

(A) DEQ awards a borrower an increase in the original approved loan amount at any time during the project;

(B) The borrower requests a decrease in the original loan amount at any time during the project or completes the project and does not request disbursement of all loan proceeds; or

(C) DEQ determines a borrower must meet additional federal or state requirements for CWSRF financing.

(10) Change orders. DEQ may approve or reject a change order based on the loan eligibility of the project modification and on engineering value under OAR 340-052-0015. A borrower must submit a change order to DEQ for engineering and financial review:

(a) When any change order is executed, and

(b) BeforePrior to executing any change order that exceeds $100,000 or will alter project performance.

(11) Project performance certification for a wastewater facility. A borrower must submit to DEQ, within a timeframe DEQ specifies, project performance documents to verify whether the facility meets performance and operational requirements and specifications which the project was planned, designed and built to achieve. The documents may include, but are not limited to, construction certification, performance evaluation report or performance certification.

(12) Eligible construction costs. DEQ will only disburse loan funds for construction costs forlimited to work that complies with plans, specifications, change orders and addenda DEQ reviewed or approved.

(13) Adjustments. DEQ may at any time review and audit requests for payment and make adjustments for eligibility, math errors, items not built or bought, unacceptable construction or other discrepancies.

(14) Contract and bid documents. A borrower must submit a copy of the awarded contract and bid documents to DEQ, including a tabulation of all bids received.

(15) Architectural and engineering services. Contractors for program management, construction management, feasibility studies, preliminary engineering design, design, engineering, surveying, mapping, or architectural related services for federal loans must be selected as provided in ORS 279C.110 and OAR chapter 137, division 048 0220.; or equivalent federal requirement for selection of architectural and engineering services.

(16) Audit.

(a) If DEQ requests it, a borrower must submit audited financial statements to DEQ each year until the loan is repaid.

(b) If a borrower expends $500,000 or more in federal funds, (from all sources,) in its fiscal year beginning beforeprior to December 26, 2014, the borrower mustshall have a single

organization-wide audit conducted under~~in accordance with~~ the Single Audit Act, as amended. If a borrower expends $750,000 or more in federal funds, ~~(~~from all sources~~,)~~ in a fiscal year beginning on or after December 26, 2014, borrower must~~shall~~ have a single organization-wide audit conducted under~~in accordance with~~ the provisions of 2 C.F.R. Subtitle B, with guidance at 2 C.F.R. part 200. The borrower must submit ~~C~~copies of all audits ~~must be submitted~~ to DEQ within 30 days of completion. If a borrower expends less than $500,000 in federal funds in a fiscal year beginning prior to December 26, 2014, or less than $750,000 in a fiscal year beginning on or after that date, the borrower is exempt from federal audit requirements for that year. Records must be available to DEQ, the Oregon Secretary of State's Office, the federal government and their duly authorized representatives for the purpose of making audits, examinations and copies.

(17) Default remedies. A loan agreement must provide adequate remedies for DEQ to enforce the agreement's terms. Upon default by a borrower, DEQ may proceed with one or more of the following:

(a) Pursuing any remedy available to it against the borrower.

(b) Appointing a receiver at the borrower's expense ~~of the borrower~~ to operate the facility that generates the pledged revenues.

(c) Setting and collecting utility rates and charges pledged as security for the loan.

(d) Withholding any amounts otherwise due to the borrower from the State of Oregon and directing such funds be applied to the debt service and fees due on the CWSRF loan. If DEQ finds the loan to the borrower is otherwise adequately secured, DEQ may waive this right in the loan agreement or other loan documentation.

(e) Declaring all or any part of the indebtedness immediately due and payable.

(18) Release. A borrower must release and discharge DEQ, its officers, agents and employees from all liabilities, obligations and claims occurring from project work or under the loan, subject only to exceptions previously agreed upon in a written contract between DEQ and the borrower.

(19) Effect of document approval or certification.

(a) DEQ's review and approval of facilities plans, design drawings and specifications, or any other documents ~~by or for DEQ~~ does not relieve a borrower of responsibility to properly plan, design, build and effectively operate and maintain a wastewater or stormwater facility, nonpoint source control or estuary management project as required by law, regulations, permits and good management practices.

(b) DEQ may not be held responsible for:

(A) Any project costs or any losses or damages resulting from defects in plans, design drawings and specifications, or other sub-agreement documents; or

(B) Verifying cost-effectiveness, cost comparisons or adherence to state procurement regulations.

(20) Reservation of rights.

(a) A borrower may~~is not prohibited from~~ require~~ing~~ such assurances, guarantees, indemnity or other contractual requirements as it deems necessary or prudent from any party performing project work.

(b) This rule does not affect DEQ's right to take remedial action, including, but not limited to, administrative enforcement action and actions for breach of contract against a borrower that fails to carry out its obligations under OAR chapter 340.

(21) Other provisions and documentation. DEQ may include other provisions in a CWSRF loan agreement necessary to meet the Clean Water Act and ORS 468.423 to 468.440. DEQ may require documentation including, but not limited to, a legal counsel opinion that the loan agreement is enforceable.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 31-1989(Temp), f. & cert. ef. 12-14-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; Administrative Correction; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 2-2008, f. & cert. ef. 2-27-08; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0065

Loan Types, Terms and Interest Rates

(1) Loan types. A CWSRF loan must be one of the following:

(a) A loan secured by a general obligation bond, as defined in ORS 287A.001(1).

(b) A loan secured by the borrower's pledge of its full faith and credit and taxing power, as described in ORS 287A.315.

(c) A loan agreement, bond or other unconditional obligation that meets the requirements specified in section (2) of this rule.

(d) An alternative loan that meets the requirements specified in section (3) of this rule.

(2) A CWSRF loan that is ~~A~~a revenue secured loan ~~that~~ must:

(a) Be represented by a properly executed loan agreement, bonds or other unconditional obligations to pay from specified revenues that are pledged by the borrower to DEQ. The obligation to pay must include a pledge of security DEQ acceptsable to DEQ.

(b) Include a rate provision that requires the borrower to impose and collect revenues sufficient to pay:

(A) All expenses of operatingon, maintainingenance and replaceingment of a wastewater or stormwater facility, nonpoint source control or estuary management project;

(B) All debt service;

(C) All other financial obligations including, but not limited to, contributions to reserve accounts imposed in connection with prior lien obligations; and

(D) An amount equal to the loan's coverage requirements. This requirement is the product of the coverage factor times the debt service due in that year on the CWSRF loan. The coverage factor used must correspond to the coverage factor and reserve percentage selected by the borrower selects from subsection (d) of this section of the rule.

(c) Include a debt service reserve provision requiring the borrower to maintain a pledged reserve dedicated to the CWSRF loan payment and that meets the following requirements:

(A) The debt service reserve must be maintained in an amount at least equal to the product of the reserve percentage listed in subsection (d) of this section of the rule times one half the average annual debt service during the repayment period based on the repayment schedule or revised repayment schedule in the loan agreement. The reserve percentage selected from subsection (d) of this section of the rule must correspond to the coverage factor selected for the CWSRF loan.

(B) A loan reserve may be funded with the borrower's cash, a letter of credit, repayment guaranty or other third party commitment to advance funds that is satisfactory to DEQ. If DEQ determines reserve funding imposes an undue hardship on the borrower, DEQ may allow reserves to be funded with CWSRF loan proceeds.

(d) Comply with the one of the following coverage factors (net income to debt service) and reserve percentages (percentage of one-half the average annual debt service):

(A) 1.05:1-100 percent.

(B) 1.15:1-75 percent.

(C) 1.25:1-50 percent.

(D) 1.35:1-25 percent.

(e) Include a requirement for the borrower to conduct a periodic rate review and rate adjustment ~~of rates~~, if necessary, to ensure estimated revenues in subsequent years are sufficient.

(f) Include a requirement that, if revenues fail to achieve the required rate level, the borrower must promptly adjust rates and charges to assure future compliance with the rate requirements. DEQ may determine that not~~failure to~~ adjusting rates does not constitute a default if the borrower transfers unencumbered resources in an amount equal to the revenue deficiency to the utility system that generates the revenues.

(g) Include a requirement that if the reserve account is depleted for any reason, the borrower must take prompt action to restore the reserve to the required minimum amount.

(h) Include a requirement restricting additional debt appropriate to the borrower's financial condition.

(i) Prohibit the borrower from selling, transferring or encumbering any financial or fixed asset of the utility system that produces the pledged revenues if the borrower is in violation of a CWSRF loan requirement, or if such sale, transfer or encumbrance may cause a violation of a CWSRF loan requirement.

(3) Alternative loans. DEQ may authorize an alternative loan for a reasonable alternative financing method if the borrower demonstrates to DEQ's satisfaction that:

(a) Borrowing money from the CWSRF through general obligation bonds, revenue bonds or a revenue-secured loan, as described in subsection (a), (b), (c), or (d) of section (1) of this rule, is unduly burdensome or costly to the borrower; and

(b) The alternative loan has a credit quality substantially equal to, or better than, the revenue secured loan credit quality to the borrower. DEQ may consult with a financial advisor and may charge the borrower reasonable consultation costs to determine if an alternative loan meets the credit quality requirement.

(4) Interest rates.

(a) Effective date. The interest rates as specified in this section are effective for all loan agreements executed on or after January 1, 2013.

(b) Base rate. DEQ will determine the base rate used in computing the interest rates on all direct loans for a quarter based on the weekly average of state and local government bond interest rates for the preceding quarter. This base rate will be the "state and local bonds" entry reported in "Selected Interest Rates, H.15" posted by the Federal Reserve from the "Bond Buyer Index" for general obligation bonds (20 years to maturity, mixed quality).

(c) Planning loans. The interest rate for a planning loan will be equal to 25 percent of the base rate.

(d) Local community loans. The interest rate for a local community loan will be equal to 50 percent of the base rate.

(e) Federal loans. DEQ will determine the interest rate for federal loans. DEQ will not set a rate that exceeds the highest rate described in Table 2 of this rule.

(f) All other direct loans. Except as provided in OAR 340-054-0065(10), DEQ will provide the following interest rates for all other CWSRF loans:

(A) For loans with a maximum repayment period of up to 20 years, DEQ will provide the following interest rates as detailed in Table 1 of this rule.

OAR 340-054-0065

Table 1

Interest Rates (percent of base rate) for Loans with Terms of Up to 20 Years

Borrowers	Repayment Period			
	0-5 Years	Over 5 up to10 Years	Over 10 up to15 Years	Over 15 up to 20 Years
Small communities with less than statewide median household income	25%	30%	35%	40%
All other borrowers	25%	45%	50%	55%

(B) (Effective January 1, 2016) For loans with a maximum repayment period of up to 30 years, DEQ will provide the following interest rates as detailed in Table 2 of this rule.

OAR 340-054-0065

Table 2

Interest Rates for Loans with Terms of Over 20 Years but No More Than 30 Years

Borrowers	Rates (percent of base rate)
Small communities with less than statewide median household income	40%

Communities other than small communities with less that the statewide median household income	55% plus an interest premium
Communities with equal to or more than the statewide median household income	55% plus an incrementally higher interest premium than for the borrower type listed directly above

DEQ will set ~~I~~interest rate premiums as described in Tables 1 and~~,~~ 2 in this rule~~, and Table 3 in OAR 340-054-0072,~~ ~~will be set~~ so as to safeguard the fund's perpetuity ~~of the fund~~ and DEQ will ~~be~~ reevaluate~~d~~ them from time to time.

(g) Sponsorship option. When a sponsorship option is implemented within the scope of a construction loan, DEQ:

(A) Will calculate the debt service on the wastewater facility project based on subsection (f) of this section of the rule;

(B) Will calculate the debt service on a combined sponsorship loan by reducing the interest rate so the debt service on the sponsorship loan equals the debt service as calculated in paragraph~~subsection~~ (g)(A) of this section of the rule; and

(C) May not reduce the resulting interest rate below one percent.

(h) Bond proceeds for direct loans. DEQ may use bond proceeds that are matching funds for federal capitalization grants to fund direct loans at the interest rates listed in this section. Any change in the source of repayment for matching bonds will not affect this subsection's requirements.

(5) Interest accrual and payment period. Interest begins accru~~al begins~~ when DEQ makes the first CWSRF loan disbursement to a borrower. A borrower must include all outstanding accrued interest with each loan repayment.

(6) Annual loan fee.

(a) Except as provided in subsection (b) of this section of the rule, a borrower must pay DEQ an annual loan fee of 0.5 percent on the unpaid loan balance specified in the payment schedule in its loan agreement. This annual loan fee is in addition to any other payments a borrower is required to make under its loan agreement.

(b) DEQ will not charge a borrower any annual loan fee for a planning loan.

(7) Commencement of loan repayment. A borrower must begin its loan principal and interest repayments within one year of the date the facility is operationally complete and ready for the purpose for which it was planned, designed, and built or DEQ determines that the project is completed.

(8) Loan term.

(a) A borrower must fully repay a loan under~~in accordance with~~ a repayment schedule DEQ determine~~sd by DEQ~~. DEQ will consider the useful life of the assets financed when determining the repayment schedule. The repayment term for:

(A) A planning loan may~~will~~ not exceed five years;

(B) A local community loan may~~will~~ not exceed ten years;

(C) All other loans may~~will~~ not exceed 20 years after project completion; and

(D) Effective January 1, 2016, loan terms may~~will~~ not exceed 30 years after project completion.

(b) DEQ will allow prepayments without penalty on all CWSRF loans except as section (11~~0~~) of this rule specifies~~d in section (10) of this rule~~. Borrowers must provide a written prepayment notification at least 30 days before the estimated pay off date. ~~at any time without penalty on all CWSRF loans except as specified in section (10) of this rule.~~

(c) A loan must be fully amortized by the maturity date of the loan.

(9) Minor variations in loan terms. DEQ may authorize minor variations in financial terms of loans described in this rule to facilitate administration and repayment of a loan.

(10) Restructure and refinance of CWSRF loans.

(a) DEQ may consider a one-time loan restructure, such as combining two or more existing CWSRF loans, if such restructure safeguards the CWSRF's perpetuity. DEQ has the discretion as to whether or not to offer a restructure in any individual case. DEQ also has the discretion to set all terms of any restructure.

(A) The existing CWSRF loans must have at least 10 years term remaining except where a Planning loan is combined with a Construction loan.

(B) A Sponsorship loan may not be combined with any other loan except its sponsoring point source project and only after the construction period for the nonpoint source control project has closed.

(b) DEQ may consider a one-time refinance of an existing CWSRF loan if such refinance safeguards the CWSRF's perpetuity and fund utilization rate. DEQ has the discretion as to

whether or not to offer refinancing in any individual case. DEQ also has the discretion to set all terms of any refinance.

(A) The existing CWSRF loan must have at least 10 years term remaining.

(B) Any extension of term must not exceed the project's useful life.

(C) The refinance may not reduce the interest rate below one percent.

(D) A refinance may only be for rate, term, or rate and term and may not include any funding disbursed to the borrower.

(c) DEQ may not charge a fee for a restructure or refinance.

(~~10~~11) Leveraged loans.

(a) DEQ may fund loans with bond proceeds through a leveraged loan program under the following terms and conditions:

(A) Interest rates will be less than the interest rate paid by the state on bonds sold to fund the leveraged loans. Rates will be fixed at 65 percent of the base rate.

(B) Loan fees will be calculated in accordance with section (6) of this rule.

(C) Notwithstanding other provisions of this rule, DEQ may make changes to the terms and conditions of a leveraged CWSRF loan to make it marketable. To the maximum extent practicable, the terms and conditions will be the same as for direct loans.

(b) Bond issuance and related transaction costs will be paid out of bond proceeds to the extent permitted by law.

(12~~1~~) Additional subsidization ~~(principal forgiveness).~~ DEQ may provide additional subsidization in the form of principal forgiveness to the maximum extent ~~allowed by~~ the federal capitalization grant allows and as~~in accordance with~~ the criteria established in this section require. A loan with ~~principal forgiveness~~additional subsidization is subject to standard interest rates, fees, and loan terms as defined in this rule.

(a) Eligibility. Except as specified in subsection (b) of this section of the rule, the following applicants are eligible for ~~principal forgiveness~~additional subsidization:

(A) Applicants that are ~~a municipality or intermunicipal, interstate, or State agency~~ an eligible recipient and meet affordability criteria as specified in subsection (c) of this section of the rule;

(B) Applicants that are ~~a municipality or intermunicipal, interstate, or State agency~~ an eligible recipient with a project~~,~~ that ~~determined by~~ DEQ determines~~, that~~ implements a

process, material, technique, or technology to address water-efficiency goals~~;, and~~ energy-efficiency goals,~~;~~ to mitigate stormwater runoff,~~;~~ or to encourage sustainable project planning, design, and construction; or

(C) Applicants that are ~~a municipality or intermunicipal, interstate, or State agency~~an eligible recipient and that do not meet the requirements of paragraph~~subsection~~ (a)(A) or (a)(B) in this section of the rule but have individual ratepayers who will experience financial hardship from a rate increase that~~resulting from~~ financing a project causes. Applicants qualifying under this section must have an established ratepayer hardship assistance program. DEQ will review the applicant's ratepayer hardship assistance program for duration and effectiveness.

(b) Ineligible Loans. The following types of loans are not eligible for ~~principal forgiveness~~additional subsidization:

(A) Loans for projects that are not ready to proceed;

(B) Loans that have ~~L~~loan agreements that include incentives such as sponsorship option loans;

(C) Interim loans; and

(D) Planning loans, except for planning loans for projects described in subsection (a)(B) of this section of the rule.

(c) Affordability Criteria. DEQ will use the following criteria to determine affordability, with the most weight added to paragraph~~subsection~~ (c)(A) of this section of the rule:

(A) Distressed as calculated by the Oregon Business Development Department's Oregon Distressed Index using the methodology described in OAR 123-024-0031; and

(B) Negative population trends as calculated by the annual United States' Census Bureau's American Community Survey.

(d) Additional subsidization allocation amount. DEQ may allocate or adjust the allocation of ~~principal forgiveness~~additional subsidization every federal fiscal year as a percentage of the annual federal capitalization grant, not to exceed the maximum ~~permitted by~~ the federal allocation regulation permits. DEQ will determine the maximum allowable annual percentage allocation of ~~principal forgiveness~~subsidization from time to time to safeguard the ~~perpetuity of~~CWSRF's perpetuity.

(e) Alternate subsidy. DEQ may offer an alternate subsidy in lieu of principal forgiveness, such as a reduced interest rate, to eligible recipients that meet all other additional subsidization criteria. DEQ will include any alternate subsidy awarded in the total additional subsidization allocated in any fiscal year and may not exceed the individual award amount in subsection (f) of this rule.

(~~e~~f) Award Amount.

(A) Eligible applicants may receive additional subsidization ~~principal forgiveness~~ for up to fifty percent of their loan but not to exceed $500,000.

(B) For applicants that qualify for additional subsidization under paragraph 12(a)(B), DEQ will limit the additional subsidization to 50 percent of the project components qualifying under paragraph 12(a)(B), not to exceed 50 percent of the loan amount or $500,000, whichever is less.

(~~B~~C) Applicants may only receive one ~~principal forgiveness~~additional subsidization award per project.

(~~f~~g) Award Reserves.

(A) DEQ will reserve seventy percent of the ~~principal forgiveness~~additional subsidization allocation for applicants meeting the affordability criteria in subsection (a)(A) of this section of the rule.

(B) DEQ will reserve thirty percent of the ~~principal forgiveness~~additional subsidization allocation for applicants with projects eligible under paragraph~~subsection~~ 12(a)(B) of this section of the rule.

(C) At the close of the federal fiscal year, DEQ may reallocate any unawarded allocation of ~~principal forgiveness~~additional subsidization in one reserve to the other ~~reserve, and if~~reserve. If~~,~~ after such reallocation, unawarded allocation still remains, DEQ may reallocate unawarded ~~principal forgiveness~~additional subsidization to those borrowers that are eligible under paragraph~~subsection~~ (a)(C) of this section of the rule.

(~~g~~h) Loan Term. Applicants eligible for ~~principal forgiveness~~additional subsidization under the affordability criteria as specified in paragraph~~subsection~~ (a)(A) of this section of the rule must take the longest term available for their loan. All other applicants may choose any term permitted in section (8) of this rule. A borrower may prepay its loan without penalty.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 31-1989(Temp), f. & cert. ef. 12-14-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

Purchase and Refinancing of Debt Obligation

340-054-0071

Debt Obligation Purchase

DEQ may use the CWSRF to buy a public agency's debt obligation subject to all of the following limitations:

(1) The debt was incurred after March 7, 1985.

(2) The debt obligation does not exceed ~~20~~ 30 years ~~except for a bond purchase as specified in OAR 340-054-0072~~.

~~(3) DEQ will not use the purchase of a debt obligation to refinance a pre-existing CWSRF loan or other debt obligation except as specified in OAR 340-054-0072(5)(b).~~

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0072

Bond Purchase

(1) Application requirements. All application requirements for a CWSRF loan as specified in OAR 340-054-0022 apply to a bond purchase under this rule.

(2) Intended Use Plan and project priority list. All applications for a bond purchase are subject to IUP and project priority list development in the same manner as specified in OAR 340-054-0025.

(3) Project ranking criteria. All applicants for a bond purchase will be ranked based on the point sum from the criteria specified in OAR 340-054-0026 and 340-054-0027.

(4) Reserves, CWSRF general fund and project funding. DEQ will allocate reserves and CWSRF general funds for a bond purchase in the same manner as specified in OAR 340-054-0036.

(5) Requirements for a bond purchase.

(a) Clean Water Act plans. DEQ will only purchase a bond whose proceeds are used to finance a project that is consistent with plans developed under sections 303(e), 319 or 320 of the Clean Water Act.

~~(b) Refunding an existing CWSRF loan or debt obligation is not an eligible use of the proceeds of a bond purchase for treatment works unless all of the following apply:~~

~~(A) All of the following conditions must be met on February 1, 2014:~~

~~(i) The public agency's existing CWSRF loan or debt obligation for treatment works is not in default.~~

~~(ii) The median household income in the area that the treatment works of the public agency serves is less than 70 percent of the statewide median household income.~~

~~(iii) The public agency's existing CWSRF loan or debt obligation for treatment works has a remaining term of 10 years or greater.~~

~~(iv) The public agency's existing CWSRF loan or debt obligation for treatment works does not include any American Recovery and Reinvestment Act funds or provide for principal forgiveness.~~

~~(B) The public agency must:~~

~~(i) Submit written confirmation to DEQ by May 1, 2014 that it intends to refinance its existing CWSRF loan or debt obligation for treatment works with the proceeds of a bond for treatment works issued by the public agency and purchased by DEQ; and~~

~~(ii) Complete the issuance and sale of the bond for treatment works by February 1, 2016.~~

~~(C) When DEQ purchases a debt obligation to replace an existing CWSRF loan or debt obligation, the amortization period of the debt obligation may not exceed the lesser of:~~

~~(i) The useful life of the asset, or~~

~~(ii) Thirty years minus the number of years that the existing CWSRF loan or debt obligation has been in repayment. (D) The interest rate for the bond for treatment works DEQ purchases as described in subsection (b) of this section of the rule is determined under subsection (b) of section (7) of this rule.~~

(b~~c~~) Refinancing an interim loan. A public agency may sell a bond to DEQ to refinance an interim loan or reimburse itself for self-generated funds used to pay DEQ-approved project costs for treatment works if the public agency meets the conditions in OAR 340-054-0056(3).

(6) Conditions for bond purchase. The terms, conditions and requirements set out in OAR 340-054-0060 apply to a bond purchase.

(7) Bond purchase, terms and interest rates.

(a) Bonds. A bond DEQ purchases under this rule must be a revenue bond for a term not to exceed 30 years and meet the requirements specified in OAR 340-054-0065(2).

(b) Interest rates. OAR 340-054-0065(4)(b) specifies the base rate for a bond purchase. DEQ will ~~provide the following interest rates for bond purchases:~~calculate interest rates

~~(A) For bond purchase agreements for treatment works executed between February 1, 2014 and January 31, 2016, DEQ will calculate the interest rates as~~in accordance with Table 3 of this section ~~specifies.~~

~~(A~~B) ~~F~~for bond purchase agreements executed on or after February 1, 2016, ~~interest rates will be calculated~~ under~~in accordance with~~ OAR 340-054-0065(4)(f)(B).

(c) Interest accrual and payment. OAR 340-054-0065(5) sets the terms for interest accrual and payment for bond purchases under this rule.

(d) Annual fee. OAR 340-054-0065(6) specifies the annual fee for a bond purchase.

(e) Commencement of bond repayment. OAR 340-054-0065(7) prescribes when a public agency must begin principal and interest repayment for a bond DEQ purchased under this rule.

(f) Term. A public agency must fully repay bond purchases under this rule under~~in accordance with~~ a schedule DEQ prescribes. The term of the bond DEQ purchases under this rule will not exceed 30 years after project completion or the useful life of the asset financed by the bond, whichever is less.

(g) Minor variations in bond terms. DEQ may, as OAR 340-054-0065(9) specifies, authorize minor variations in financial terms of a bond purchased under this rule to facilitate administration and repayment of the bond.

(h) ~~Principal forgiveness~~Additional subsidization. DEQ may provide ~~principal forgiveness~~additional subsidization for a bond purchase in the same manner as for a loan under OAR 340-054-0065(12~~1~~).

~~OAR 340-054-0072~~

~~Table # 3~~

~~Bond Purchase Interest Rates~~

~~Borrowers~~	~~Rates (percent of base rate)~~
~~Small communities with less than statewide median household income~~	~~40~~
~~Communities other than small communities with less that the statewide median household income~~	~~55 plus 0.25%~~

~~Communities with equal to or more than the statewide median household income~~	~~55 plus 0.5%~~

~~[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]]~~

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

Draft Rules – With Edits Included

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 54

CLEAN WATER STATE REVOLVING FUND PROGRAM

340-054-0005

Purpose

(1) The rules in this division establish procedures and requirements for funding projects and activities that enhance, protect or restore water quality through the Water Pollution Control Revolving Fund, called the Clean Water State Revolving Fund.

(2) This division:

(a) Assists a public agency to obtain financing for a project that enhances, protects or restores water quality.

(b) Ensures the loan application and funding processes, procedures and requirements are clear.

(c) Promotes loan affordability by offering below-market interest rates.

(d) Ensures CWSRF's perpetuity for project funding reliability to provide loans for future projects that enhance, protect or restore water quality.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0010

Definitions

The following definitions apply to this rule division:

(1) “Applicant” means a public agency that has applied for a CWSRF loan under this division.

(2) “Borrower” means a public agency that has signed a CWSRF loan agreement with DEQ.

(3) “Change order” means a written order, and supporting information from a borrower, to a borrower’s contractor authorizing an addition, deletion or revision in the work within the scope of the contract documents, including any required adjustment in contract price or time.

(4) “Checklist of application requirements” means a list that DEQ provides of all documents an applicant must submit to DEQ under this division.

(5) “Clean Water Act” or “CWA” means the federal Water Pollution Control Act, 33 U.S.C. § 1251 – § 1387.

(6) “Clean Water State Revolving Fund” or “CWSRF” means the Water Pollution Control Revolving Fund established under ORS 468.427.

(7) “Construction” means erecting, installing, expanding or improving a wastewater or stormwater facility, nonpoint source control activity or estuary management project, and includes demolishing an obsolete facility.

(8) “Cross-cutting authorities” means requirements of federal laws and Executive Orders that apply to projects and activities funded under the CWSRF program.

(9) “Default” means failing to pay principal, interest or annual fees, or to comply with other CWSRF loan terms or provisions, and includes filing bankruptcy or other written admission of an inability to satisfy a borrower’s obligations under a CWSRF loan.

(10) “DEQ” means the Oregon Department of Environmental Quality.

(11) “Design” means preparing engineering drawings and specifications for the proposed construction, and may include pre-design activities.

(12) “Eligible recipient” means public agency with the meaning given in ORS 468.423.

(13) “EPA” means the U.S. Environmental Protection Agency.

(14) “Estuary management” means implementing actions identified in a Comprehensive Conservation Management Plan developed for a designated national estuary.

(15) “Federal loans” are loans DEQ designates yearly in its Intended Use Plan that represent projects that are funded with monies directly made available by the federal capitalization grant for the associated federal fiscal year.

(16) “Local community loan” means a loan, the proceeds of which a public agency uses to establish a local financial program that will fund an eligible nonpoint source control or estuary management activity.

(17) “Maintenance” means regularly scheduled work performed to repair, replace or upgrade equipment in a facility, or to prevent or correct a failure or a malfunction of a wastewater or stormwater facility, nonpoint source control or estuary management project.

(18) “Natural infrastructure” means using a natural form and ecosystem function to restore or augment a project’s intended water quality benefits.

(19) “Nonpoint source” has the meaning given in ORS 468B.005.

(20) “Nonpoint source control” means implementing a nonpoint source control activity under section 319 of the Clean Water Act and 40 C.F.R. § 35.3115(b) that is included in the 2014 Oregon Nonpoint Source Management Program Plan.

(21) “Operation” means controlling wastewater collection system pumping stations and wastewater facility treatment unit processes, controlling equipment and processes of stormwater facilities, nonpoint source control and estuary management projects, and the financial and personnel management, records, laboratory control, process control, safety, and emergency planning for these facilities and projects.

(22) “Planning” means monitoring, data collection and measurement, evaluation, analysis, security evaluations, report preparation, environmental review, public education and review process and any other activity leading to a written plan for providing a wastewater or stormwater facility, nonpoint source control or estuary management project intended to remediate an existing or anticipated water pollution problem, but does not include the preparation of detailed bid documents for construction.

(23) “Point source” has the meaning given in ORS 468B.005.

(24) “Principal forgiveness” means additional subsidization that allows a borrower to repay only a specified portion of the loan principal.

(25) “Project” means the activities or tasks identified in a loan application or a loan agreement for which a borrower may expend or obligate funds.

(26) “Public agency” has the meaning given in ORS 468.423.

(27) “Ready to proceed” means, in regard to a project, that a loan applicant’s project details have been published in the Intended Use Plan under OAR 340-054-0025(3)–340-054-0025(5) and the applicant has met all loan requirements set out in OAR 340-054-0022.

(28) “Replacement” means obtaining and installing equipment, accessories or appurtenances necessary for operating a wastewater or stormwater facility, nonpoint source control or

estuary management project in order to maintain a facility or project for the purpose for which it was designed and constructed during its useful life, but does not mean replacing a facility or project at the end of its useful life.

(29) “Small community” means a public agency serving a population of 10,000 or less.

(30) “Sponsorship option” means DEQ’s financing mechanism that allows a public agency with the authority to finance and implement a wastewater facility project and an eligible nonpoint source control or estuary management activity to be financed through one combined CWSRF application.

(31) “Stormwater” means water runoff from a precipitation event, snowmelt runoff, and surface runoff and drainage.

(32) “Sustainability” means the long term reliability and viability of finance, operations, environmental performance or technology, or using natural infrastructure.

(33) “Treatment works” has the meaning given in ORS 468.423.

(34) “Wastewater” has the meaning given for “sewage” in ORS 468B.005.

(35) “Wastewater collection system” means publicly owned pipelines, conduits, pumping stations, force mains and any other related structures, devices or equipment used to convey wastewater to a wastewater treatment facility.

(36) “Wastewater facility” means a wastewater collection system or wastewater treatment facility.

(37) “Wastewater treatment facility” means a publicly owned device, structure or equipment used to treat, neutralize, stabilize, reuse or dispose of wastewater and treatment residuals.

(38) “Water quality standards” means the surface water standards established in OAR 340-041 and the minimum groundwater protection requirements established in OAR 340-040.

[Publications: The Intended Use Plan referenced is available from the agency. The Oregon Nonpoint Source Management Program Plan is available as a PDF by clicking on this link: ONSMP]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0011

Authorized Fund Uses

DEQ will use the CWSRF only to:

(1) Make loans to eligible borrowers identified in the Intended Use Plan developed under OAR 340-054-0025;

(2) Fund loan reserves specified in OAR 340-054-0036;

(3) Purchase bonds or acquire other debt obligations incurred after March 7, 1985 as OAR 340-054-0071 provides;

(4) Pay CWSRF program administration costs to the extent federal and state law allow;

(5) Earn interest on fund accounts;

(6) Establish reserves for bonds issued by the state for use by the fund; or

(7) Pay principal and interest of bond obligations sold to benefit the fund.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423–468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0015

Eligible Projects and Activities

(1) A public agency may apply for a CWSRF loan up to 100 percent of the cost of a water quality project or the project related costs for the following project types:

(a) Implementing a management program established under section 319 of the Clean Water Act.

(b) Developing and implementing a comprehensive conservation and management plan under section 320 of the Clean Water Act.

(c) Constructing, repairing, or replacing decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage.

(d) Managing, reducing, treating, or recapturing stormwater or subsurface drainage water.

(e) Developing and implementing watershed projects meeting the criteria set forth in section 122 of the Clean Water Act.

(f) Reusing or recycling wastewater, stormwater, or subsurface drainage water.

(2) A municipality or intermunicipal, interstate or State agency may apply for a CWSRF loan up to 100 percent of the cost of a water quality project or the project related costs for the following project types:

(a) Constructing publicly owned treatment works.

(b) Acquiring the land that will be an integral part of the treatment process. These lands include land used for storing treated wastewater in land treatment systems prior to land application, or will be used for ultimate disposal of residues resulting from such treatment and acquiring other land, and interest in land, that are necessary for construction.

(c) Reducing the demand for publicly owned treatment works capacity through water conservation, efficiency, or reuse.

(d) Reducing the energy consumption needs for publicly owned treatment works.

(e) Increasing the security of publicly owned treatment works.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0022

Loan Application Requirements

(1) Application submittal. DEQ will notify interested parties at least annually of the opportunity to submit applications for a CWSRF loan. An eligible public agency may submit a CWSRF loan application to DEQ at any time.

(2) Consideration for funding. DEQ will consider an applicant for funding only if its project is included in the Intended Use Plan and its application meets all of this division’s requirements.

(3) All CWSRF loans. An applicant must submit the following to DEQ:

(a) A complete application on the applicable DEQ form;

(b) Documents specified in the DEQ checklist of application requirements;

(c) Audited financial statements for the three years preceding the application date and the applicant's current budget, unless waived in writing by DEQ;

(d) Evidence the applicant has the authority to undertake the project including, but not limited to, evidence of a loan approval resolution or similar authorization for signing a loan agreement and establishing a loan reserve account;

(e) Evidence the applicant has authority to collect and pledge the revenue offered as repayment for a CWSRF loan, repay a loan and, where applicable, the ability to ensure ongoing operation and maintenance of the proposed wastewater or stormwater facility, nonpoint source control or estuary management project. DEQ may require an applicant to meet the following criteria for a revenue-secured loan described under OAR 340-054-0065(2):

(A) An applicant's revenue stream is not at risk from undue dependence on a limited portion of the system's customer base or a pattern of delinquent payment from that portion of the system's customer base, and

(B) An applicant must have the ability to collect from delinquent customers;

(f) Pre-award compliance review report or other evidence DEQ requires showing compliance with federal nondiscrimination requirements;

(g) For projects serving two or more public agencies, the executed inter-agency agreements, contracts or other legally binding instruments necessary for financing, constructing and operating the proposed project. The documents must be satisfactory to DEQ for determining an adequate pledge of security;

(h) Evidence of resolution, ordinance or other authorization approving bonds secured by sewer or other revenue sources if required by DEQ;

(i) Official statement of recently issued bonds if required by DEQ;

(j) A DEQ-approved certification that the requirements for the cost and effectiveness analysis and the subsequent project selection are completed as required by section 602(b)(13) of the CWA;

(k) Any other information DEQ requests as necessary to complete the loan application.

(4) Local community loan. In addition to the requirements in section (3) of this rule, an applicant applying for a CWSRF local community loan must submit the following to DEQ:

(a) A description of how the project will implement a nonpoint source control activity or estuary management effort.

(b) A projected cash flow statement based on anticipated number of local loans, their repayment schedule, amount and timing of department disbursement and amount and timing of repayments to DEQ.

(c) Unless waived by DEQ, evidence of a user charge system or other source of revenue if the applicant will be securing and repaying the loan with sewer system revenues.

(d) Unless waived by DEQ, demonstration of compliance with applicable federal environmental cross-cutting authorities.

(e) Documentation that demonstrates compliance with the land use requirements in OAR 340-018-0050.

(f) DEQ-approved plans and specifications that comply with OAR chapter 340, division 52, unless waived by a DEQ engineer.

(g) An environmental determination obtained from DEQ for a nonpoint source pollution control (CWA § 319) or estuary management (CWA § 320) project that are construction and treatment works as defined in ORS 468.423. The environmental determination must meet the following conditions:

(A) An applicant must provide all necessary documentation to support DEQ's review of the entire projects' potential environmental impacts and include an analysis of a no action alternative and other reasonable alternatives considered.

(B) Project construction must begin within five years of the environmental determination.

(h) If an applicant does not obtain an environmental determination as specified in subsection (4)(g) of this section, an applicant may submit to DEQ, and DEQ may accept, an environmental determination made by another agency that meets the following conditions:

(A) The project scope must be essentially unchanged from the scope the other agency accepted.

(B) The other agency's determination must have been made within the previous five years.

(C) The applicant met and documented the federal environmental cross-cutting authorities.

(5) All design or construction loans. In addition to the requirements in section (3) of this rule, an applicant applying for a CWSRF design or construction loan must submit the following to DEQ:

(a) Unless waived by DEQ, evidence of a user charge system or other source of revenue if the applicant will be securing and repaying the loan with sewer system revenues.

(b) Unless waived by DEQ, demonstration of compliance with applicable federal environmental cross-cutting authorities for a construction project.

(c) An environmental determination obtained from DEQ for a construction project of a treatment works as defined in ORS 468.423, including a nonpoint source pollution control (CWA § 319) or estuary management (CWA § 320) project, that are construction and treatment works as defined in ORS 468.423. The environmental determination must meet the following conditions:

(A) An applicant must provide all necessary documentation to support DEQ's review of the entire projects' potential environmental impacts and include an analysis of a no action alternative and other reasonable alternatives considered.

(B) Project construction must begin within five years of the environmental determination.

(d) If an applicant does not obtain an environmental determination, as specified in subsection (5)(c) of this section, an applicant may submit to DEQ, and DEQ may accept, an environmental determination made by another agency that meets the following conditions:

(A) The project scope must be essentially unchanged from that the other agency accepted.

(B) The other agency's determination must have been made within the previous five years.

(C) The applicant met and documented the federal environmental cross-cutting authorities.

(e) Documentation that demonstrates compliance with the land use requirements in OAR 340-018-0050.

(f) For a construction-only loan, DEQ-approved plans and specifications for the project as OAR chapter 340, division 052 requires.

(g) If the estimated cost of a project is in excess of $10 million, a value engineering study satisfactory to DEQ done prior to beginning construction. The study must be a specialized cost control technique specifically applicable to the wastewater treatment facility design identifying cost savings that can be made without sacrificing project reliability or efficiency.

(6) Design or construction loan for a point source project. In addition to the requirements in sections (3) and (5) of this rule, an applicant applying for a CWSRF design or construction loan for a point source project must submit the following to DEQ:

(a) An engineered planning document in the form of either a facility plan or project pre-design report that provides a comprehensive evaluation of environmental factors, engineering alternatives and financial considerations affecting the project area. This document must adequately describe the effectiveness and suitability of the proposed project to address the identified water quality problem. An applicant must have DEQ review and approve this document before signing a design or construction loan.

(b) Evidence of a sewer use ordinance or equivalent authority that prohibits:

(A) New connections from inflow sources into the wastewater collection system; and

(B) Introducing wastewater into the wastewater collection system containing toxics or other pollutants in amounts or concentrations that have the potential of endangering public safety, adversely affecting the project or precluding selecting the most cost-effective alternative for the project.

(c) When a public agency applies for a wastewater facility construction loan that includes a sponsorship option, complete information about the nonpoint source control or estuary management activity on the applicable application form. DEQ will only consider a sponsorship option if a nonpoint source control or estuary management activity is included as part of the entire project scope.

(7) Design or construction loan for a nonpoint source project. In addition to the requirements in sections (3) and (5) of this rule, an applicant applying for a CWSRF design or construction loan for a nonpoint source project must submit an engineered planning report to DEQ. The report must define the water quality problem and specify actions an applicant will implement to correct the problem.

(8) Federal loans. In addition to the applicable requirements in sections (3)–(7) of this rule, a loan designated as a federal loan must meet the requirements for federally funded projects in the Clean Water Act Title VI and EPA's January 6, 2015, memo "Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Titles I, II, V, and VI of the Federal Water Pollution Control Act."

[Ed. Note: Publications referred to are not included here. The CWSRF Intended Use Plan is available from the agency. The EPA Interpretive Guidance can be viewed in PDF form by clicking on this link.]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0025

Intended Use Plan (IUP) and Project Priority List

(1) IUP development. DEQ will annually develop and submit an IUP to EPA as described in the CWA § 606 and 40 C.F.R. § 35.3150. DEQ will update the IUP as specified in section (2) of this rule. The IUP will describe how DEQ proposes to fund projects through the CWSRF and will include a project priority list that numerically ranks all eligible applications received.

(2) IUP update.

(a) Except as specified in subsection (b) of this section, DEQ will update the annual IUP and project priority list at least every four months or when DEQ receives five eligible applications, whichever timeframe is shorter, and will submit the updated plan to EPA.

(b) If DEQ does not receive an eligible application during a four month period and determines the project priority list does not need to be updated, DEQ will not update the IUP.

(3) IUP public notice. DEQ will provide public notice and 30 days for the public to comment on a proposed draft IUP.

(a) DEQ will notify all new applicants of their project application ranking on the project priority list when DEQ develops and updates an annual IUP.

(b) An applicant may ask DEQ to reevaluate their project application's score and ranking on the proposed project priority list or to make other changes to an IUP during the public comment period.

(c) DEQ will consider and respond to all comments submitted during the public comment period before finalizing an IUP.

(4) Project priority list development. DEQ will include an eligible project under OAR 340-054-0015 on the project priority list if an applicant submits a completed application on a DEQ-approved form.

(5) Project priority list ranking. DEQ will numerically rank all eligible proposed project applications based on the point sum from the criteria specified in OAR 340-054-0026 and 340-054-0027.

(a) Except as specified in subsection (b) of this section, DEQ will evaluate each criterion in OAR 340-054-0026 and 340-054-0027 on a point scale from one to five as follows:

(A) One point = No or very low likelihood.

(B) Two points = Low or in some minor way.

(C) Three points = Moderate to significant likelihood.

(D) Four points = High likelihood.

(E) Five points = Very high likelihood.

(b) DEQ will evaluate criteria 1(c), 1(d), 2(b), 2(c), 2(d), 2(e), and 3(d) in OAR 340-054-0026 and criterion 5 in OAR 340-054-0027 by doubling the point scale specified in subsection (a) of this section.

(6) Removal of application from the project priority list.

(a) DEQ may retain an applicant's ranked project on the project priority list in an IUP for up to 36 months while an applicant pursues all applicable CWSRF financing requirements specified in this division.

(b) After DEQ initially includes a ranked project on the project priority list, an applicant must submit to DEQ an annual written project status report to remain on the project priority list.

(c) DEQ may provide one twelve-month extension to an applicant asking to remain on the project priority list beyond the 36-month limit. An applicant asking for an extension must submit to DEQ a written project status report on the applicant's project progress and an updated time frame indicating when the applicant will complete all CWSRF financing requirements.

(d) DEQ will provide written notice to an applicant before removing the applicant's project from the project priority list.

(e) DEQ will remove a project from the project priority list if:

(A) An applicant does not submit an annual written project status report as subsection (b) of this section requires;

(B) An applicant does not ask for a twelve-month extension beyond the 36-month limit and submit the project status report as subsection (c) of this section requires;

(C) DEQ determines the project scope changed from the original ranked application;

(D) DEQ determines a project does not meet eligibility requirements;

(E) An applicant does not require CWSRF financing; or

(F) An applicant asks to be removed from the project priority list.

(f) If DEQ removes a project from the project priority list as specified in paragraph (e)(A through C) of this section, an applicant may resubmit to DEQ a loan application for an eligible project that DEQ will evaluate under section (5) of this rule.

[Ed. Note: Publications referred to are not included here. The Project Priority List is contained within the CWSRF Intended Use Plan. That document is available from the agency.]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993,

f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 1-2009(Temp), f. 4-27-09, cert. ef. 5-1-09 thru 10-27-09; DEQ 7-2009, f. & cert. ef. 10-28-09; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0026

CWSRF Project Ranking Criteria for Non-planning Loans

(1) Category 1. Water quality standards and public health considerations.

(a) Does the project improve water quality by addressing water quality parameters including, but not limited to: temperature, dissolved oxygen, contaminated sediments, toxic substances, bacteria or nutrients?

(b) Does the project ensure that a facility currently in compliance, but at risk of noncompliance, remains in compliance?

(c) Does the project address noncompliance with water quality standards, public health issues or effluent limits related to surface waters, biosolids, water reuse or groundwater?

(d) If the project is not implemented, is a water quality standard likely to be exceeded or an existing exceedance likely to worsen?

(2) Category 2. Watershed and health benefits.

(a) Does the project improve or sustain aquatic habitat supporting native species or state or federally threatened or endangered species?

(b) Does the project address a water quality or public health issue within a federally designated wild and scenic river or sole source aquifer, state designated scenic waterway, the Lower Columbia River or Tillamook Bay estuary, a river designated under OAR 340-041-0350, or a significant wetland and riparian area identified and listed by a local government?

(c) Does the project support implementation of a total maximum daily load (TMDL) allocation, a department water quality status and action plan or designated groundwater management area declared under ORS 468B.180?

(d) Does the project provide performance-based water quality improvements supported by monitoring and reasonable assurance that the project will continue to function over time?

(e) Does the project integrate or expand sustainability or using natural infrastructure, or use approaches including, but not limited to, water quality trading, that are not specified in subsections (f) through (i) of this section of the rule?

(f) Does the project incorporate or expand green infrastructure including, but not limited to, practices that manage wet weather and that maintain and restore natural hydrology by infiltrating, evapotranspiring, harvesting or using stormwater on a local or regional scale?

(g) Does the project incorporate or expand water efficiency including, but not limited to, using improved technologies and practices to deliver equal or better services with less water, such as conservation, reuse efforts or water loss reduction and prevention?

(h) Does the project incorporate or expand energy efficiency including, but not limited to, using improved technologies and practices to reduce energy consumption of water quality projects, use energy in a more efficient way or to produce or utilize renewable energy?

(i) Does the project incorporate or expand environmentally innovative projects including, but not limited to, demonstrating new or innovative approaches to deliver services or manage water resources in a more sustainable way?

(3) Category 3. Other considerations.

(a) Does the project include a long-term planning effort that addresses financial, managerial or technical capability, or asset planning that ensures the project will be maintained?

(b) Does the project include a significant on-going educational or outreach component?

(c) Does the project incorporate other resources including, but not limited to, in-kind support, other funding sources or a partnership with a governmental, tribal or non-governmental organization?

(d) Does the project address a small community's water quality improvement or restoration need?

(e) Does the project include a sponsorship option?

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0036

Reserves, CWSRF General Fund and Project Funding

(1) Allocation to reserves and CWSRF general fund. DEQ will allocate available CWSRF funds in a state fiscal year first to the small community, planning and green project reserves, and then to the CWSRF general fund based on the following amounts:

(a) A maximum of 25 percent of the total available CWSRF funds to the small community reserve;

(b) A maximum of $3 million to the planning reserve;

(c) An amount at least equal to the minimum required by the federal capitalization grant to the green project reserve;

(d) Amount of funds remaining, after allocation to the reserves as specified in subsections (a) through (c) of this section of the rule, to the CWSRF general fund.

(2) Project funding increase.

(a) DEQ will offer a funding increase to a borrower for an existing project based on the original project priority list ranking before offering a loan to an applicant for a new project loan if:

(A) Funds are available in the CWSRF; and

(B) The borrower submits a written request to DEQ for additional funding, has the legal authority to borrow the increased loan amount and has the financial capability to repay the increased loan amount.

(b) Any funding increase DEQ awards to a borrower will be in an amount specified in section (3) of this rule and will be done by increasing the amount of the borrower's existing loan or by DEQ making an additional loan to the borrower at the current interest rate.

(3) Project funding allocation.

(a) During a state fiscal year DEQ will assign a project to an appropriate reserve, to the CWSRF general fund or to both.

(b) Based on availability of funds in the CWSRF at the time of allocation, DEQ will allocate an amount to a borrower in project priority list rank order that:

(A) Is not more than the greater of $2.5 million or 15 percent of the total available CWSRF funds in a state fiscal year. DEQ may allocate additional funds if funds are available after allocating the maximum amount under paragraph (b)(A) of this section of the rule to each borrower who requested project funding in a state fiscal year;

(B) Is not more than the greater of $750,000 or 25 percent of the small community reserve, until all eligible small community requests have been allocated;

(C) Is not more than $250,000 of the planning reserve; and

(D) Only finances the portion of a project funded under the green project reserve that DEQ determines meets federal requirements for green infrastructure, water or energy efficiency improvement, or other environmentally innovative activities as defined by EPA requirements.

(c) During a state fiscal year DEQ will allocate funding for a new design or construction project loan from the CWSRF general fund if the project is not funded from a reserve.

(d) DEQ will allocate in project priority list rank order available funding from the CWSRF general fund for a small community or planning project that was not allocated from their respective reserves, or allocated less than the total loan amount requested.

(4) Reallocation of reserve funds.

(a) DEQ may reallocate funds between small community and planning reserves and the CWSRF general fund unless demand exceeds available funds.

(b) DEQ will not reallocate funds remaining in the green project reserve to the CWSRF general fund.

(5) Sponsorship option allocation. DEQ will determine the total amount of CWSRF funds to be allocated at a reduced interest rate through the sponsorship option in each state fiscal year.

Stat. Auth.: ORS 468.020, 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0056

CWSRF Loan Use Conditions

(1) Clean Water Act plans. DEQ will only provide a loan to a project that is consistent with plans developed under sections 303(e), 319 or 320 of the Clean Water Act.

(2) Refinancing a long-term loan. DEQ will not provide a loan that will be used to refinance another lender's long-term loan or other debt obligations.

(3) Refinancing an interim loan. DEQ may provide a loan to refinance an interim loan or self-generated funds used to pay DEQ-approved project costs if the borrower:

(a) Provides DEQ with a written notice of intent to apply for long-term financing;

(b) Wants to proceed with the project using interim financing or self-generated funds; and

(c) Agrees to proceed at its own risk whether or not the CWSRF is available to provide long-term financing.

(4) Interim financing. DEQ may provide short-term, construction-period financing for an eligible project if the following conditions are met:

(a) The CWSRF's liquidity is sufficient to provide financing without adversely affecting the amount and timing of disbursements needed for prior obligations;

(b) The borrower has a legally enforceable obligation for long-term project financing satisfactory to DEQ; and

(c) The loan agreement for interim financing will stipulate DEQ is not obligated to provide long-term financing for the project.

Stat. Auth.: ORS 468.020, 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0060

Loan Agreement and Conditions

DEQ will include conditions in a loan agreement that apply to the type of project being financed, including, but not limited to, the following:

(1) Timely use of loan funding.

(a) DEQ may cancel a loan agreement if a borrower fails to begin using loan proceeds within two years after signing a loan agreement.

(b) Borrowers that do not begin using loan proceeds within two years after signing a loan agreement will have a choice of canceling the loan and reapplying for DEQ funding or paying holding costs to DEQ.

(A) Holding costs are, on an annual basis, the estimated amount of the loan interest payable to DEQ, less the amount of the interest DEQ earned from the Treasurer's investment of funds for DEQ's account. DEQ will itemize holding costs on a semi-annual invoice DEQ sends to the borrower. The borrower must pay these costs within 30 days after DEQ sends the invoice.

(B) A borrower may apply for a one-time one year extension to begin using loan proceeds.

(2) Accounting. A borrower must maintain all CWSRF project accounts as separate accounts and must use accounting, audit and fiscal procedures that conform to Generally Accepted Governmental Accounting Standards and the requirements of the Governmental Accounting Standards Board.

(3) Records retention. A borrower must retain project files and records for six years after project performance affirmative certification or project completion as DEQ determines or such longer period as applicable state or federal law requires. A borrower must also retain financial files and records for three years after the loan is repaid in full.

(4) Wage requirements.

(a) A borrower for constructing a treatment works project must comply with all provisions of the Davis-Bacon Act, as amended, 40 U.S.C. §§ 3141 to 3144 and 3146, as detailed in section 513 of the Clean Water Act. Wage rates must be based on the wage requirements of the Davis Bacon Act or the prevailing wage rate requirements for public works projects under ORS 279C.800 to 279C.870 and OAR 839-025-0000 to 839-025-0540, whichever is higher.

(b) A borrower for a project not specified in subsection (a) of this section of the rule must comply with the prevailing wage rate requirements under ORS 279C.800 to 279C.870 and OAR 839-025-0000 to 839-025-0540.

(5) Construction materials. A borrower for a treatments works construction project must ensure that all of the iron and steel products used in the project are produced in the United States as required by section 608 of the Clean Water Act.

(6) Debarment and suspension. A borrower must comply with Subpart C of 2 C.F.R part 180, Responsibilities of Participants Regarding Transactions Doing Business with Other Persons and Subpart C of 2 C.F.R part 1532, Responsibilities of Participants Regarding Transactions.

(7) Engineering documents. If a borrower uses CWSRF financing to construct a wastewater facility subject to OAR 340-052, it must submit to DEQ plans and specifications, operation and maintenance manuals, inspection and certification of proper construction, and any other applicable documentation OAR 340-052 and 340-054-022 require.

(8) Inspections and progress reports.

(a) A borrower must have a qualified inspector under the direction of a registered civil, mechanical or electrical engineer, as appropriate, conduct on-going inspections during the construction phase of a wastewater facility subject to OAR 340-052 to ensure the project complies with approved plans and specifications. DEQ or its representative may enter property the borrower owns or controls to conduct interim inspections. DEQ may require progress reports sufficient to determine compliance with approved plans and specifications and with other loan agreement provisions.

(b) DEQ may request review and analysis of construction plans from relevant agencies or offices to ensure the project plans not subject to department review under OAR 340-052 support the project's successful implementation and completion. A borrower must allow inspections by appropriately qualified persons during project construction or implementation to ensure the project as constructed conforms to project plans and other provisions of the loan agreement.

(9) Loan amendments.

(a) DEQ will not require a loan amendment for changes in project work that are consistent with project objectives and within the loan scope and funding level.

(b) DEQ will execute a loan amendment if:

(A) DEQ awards a borrower an increase in the original approved loan amount at any time during the project;

(B) The borrower requests a decrease in the original loan amount at any time during the project or completes the project and does not request disbursement of all loan proceeds; or

(C) DEQ determines a borrower must meet additional federal or state requirements for CWSRF financing.

(10) Change orders. DEQ may approve or reject a change order based on the loan eligibility of the project modification and on engineering value under OAR 340-052-0015. A borrower must submit a change order to DEQ for engineering and financial review:

(a) When any change order is executed, and

(b) Before executing any change order that exceeds $100,000 or will alter project performance.

(11) Project performance certification for a wastewater facility. A borrower must submit to DEQ, within a timeframe DEQ specifies, project performance documents to verify whether the facility meets performance and operational requirements and specifications which the project was planned, designed and built to achieve. The documents may include, but are not limited to, construction certification, performance evaluation report or performance certification.

(12) Eligible construction costs. DEQ will only disburse loan funds for construction costs for work that complies with plans, specifications, change orders and addenda DEQ reviewed or approved.

(13) Adjustments. DEQ may at any time review and audit requests for payment and make adjustments for eligibility, math errors, items not built or bought, unacceptable construction or other discrepancies.

(14) Contract and bid documents. A borrower must submit a copy of the awarded contract and bid documents to DEQ, including a tabulation of all bids received.

(15) Architectural and engineering services. Contractors for program management, construction management, feasibility studies, preliminary engineering design, design, engineering, surveying, mapping, or architectural related services for federal loans must be selected as provided in ORS 279C.110 and OAR chapter 137, division 048; or equivalent federal requirement for selection of architectural and engineering services.

(16) Audit.

(a) If DEQ requests it, a borrower must submit audited financial statements to DEQ each year until the loan is repaid.

(b) If a borrower expends $500,000 or more in federal funds, from all sources, in its fiscal year beginning before December 26, 2014, the borrower must have a single organization-wide audit conducted under the Single Audit Act, as amended. If a borrower expends $750,000 or more in federal funds, from all sources, in a fiscal year beginning on or after December 26, 2014, borrower must have a single organization-wide audit conducted under the provisions of 2 C.F.R. Subtitle B, with guidance at 2 C.F.R. part 200. The borrower must submit copies of all audits to DEQ within 30 days of completion. If a borrower expends less than $500,000 in federal funds in a fiscal year beginning prior to December 26, 2014, or less than $750,000 in a fiscal year beginning on or after that date, the borrower is exempt from federal audit requirements for that year. Records must be available to DEQ, the Oregon Secretary of State's Office, the federal government and their duly authorized representatives for the purpose of making audits, examinations and copies.

(17) Default remedies. A loan agreement must provide adequate remedies for DEQ to enforce the agreement's terms. Upon default by a borrower, DEQ may proceed with one or more of the following:

(a) Pursuing any remedy available to it against the borrower.

(b) Appointing a receiver at the borrower's expense to operate the facility that generates the pledged revenues.

(c) Setting and collecting utility rates and charges pledged as security for the loan.

(d) Withholding any amounts otherwise due to the borrower from the State of Oregon and directing such funds be applied to the debt service and fees due on the CWSRF loan. If DEQ finds the loan to the borrower is otherwise adequately secured, DEQ may waive this right in the loan agreement or other loan documentation.

(e) Declaring all or any part of the indebtedness immediately due and payable.

(18) Release. A borrower must release and discharge DEQ, its officers, agents and employees from all liabilities, obligations and claims occurring from project work or under the loan, subject only to exceptions previously agreed upon in a written contract between DEQ and the borrower.

(19) Effect of document approval or certification.

(a) DEQ's review and approval of facilities plans, design drawings and specifications, or any other documents does not relieve a borrower of responsibility to properly plan, design, build and effectively operate and maintain a wastewater or stormwater facility, nonpoint source

control or estuary management project as required by law, regulations, permits and good management practices.

(b) DEQ may not be held responsible for:

(A) Any project costs or any losses or damages resulting from defects in plans, design drawings and specifications, or other sub-agreement documents; or

(B) Verifying cost-effectiveness, cost comparisons or adherence to state procurement regulations.

(20) Reservation of rights.

(a) A borrower may require such assurances, guarantees, indemnity or other contractual requirements as it deems necessary or prudent from any party performing project work.

(b) This rule does not affect DEQ's right to take remedial action, including, but not limited to, administrative enforcement action and actions for breach of contract against a borrower that fails to carry out its obligations under OAR chapter 340.

(21) Other provisions and documentation. DEQ may include other provisions in a CWSRF loan agreement necessary to meet the Clean Water Act and ORS 468.423 to 468.440. DEQ may require documentation including, but not limited to, a legal counsel opinion that the loan agreement is enforceable.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 31-1989(Temp), f. & cert. ef. 12-14-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; Administrative Correction; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 2-2008, f. & cert. ef. 2-27-08; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0065

Loan Types, Terms and Interest Rates

(1) Loan types. A CWSRF loan must be one of the following:

(a) A loan secured by a general obligation bond, as defined in ORS 287A.001(1).

(b) A loan secured by the borrower's pledge of its full faith and credit and taxing power, as described in ORS 287A.315.

(c) A loan agreement, bond or other unconditional obligation that meets the requirements specified in section (2) of this rule.

(d) An alternative loan that meets the requirements specified in section (3) of this rule.

(2) A CWSRF loan that is a revenue secured loan must:

(a) Be represented by a properly executed loan agreement, bonds or other unconditional obligations to pay from specified revenues that are pledged by the borrower to DEQ. The obligation to pay must include a pledge of security DEQ accepts.

(b) Include a rate provision that requires the borrower to impose and collect revenues sufficient to pay:

(A) All expenses of operating, maintaining and replacing a wastewater or stormwater facility, nonpoint source control or estuary management project;

(B) All debt service;

(C) All other financial obligations including, but not limited to, contributions to reserve accounts imposed in connection with prior lien obligations; and

(D) An amount equal to the loan's coverage requirements. This requirement is the product of the coverage factor times the debt service due in that year on the CWSRF loan. The coverage factor used must correspond to the coverage factor and reserve percentage the borrower selects from subsection (d) of this section of the rule.

(c) Include a debt service reserve provision requiring the borrower to maintain a pledged reserve dedicated to the CWSRF loan payment and that meets the following requirements:

(A) The debt service reserve must be maintained in an amount at least equal to the product of the reserve percentage listed in subsection (d) of this section of the rule times one half the average annual debt service during the repayment period based on the repayment schedule or revised repayment schedule in the loan agreement. The reserve percentage selected from subsection (d) of this section of the rule must correspond to the coverage factor selected for the CWSRF loan.

(B) A loan reserve may be funded with the borrower's cash, a letter of credit, repayment guaranty or other third party commitment to advance funds that is satisfactory to DEQ. If DEQ determines reserve funding imposes an undue hardship on the borrower, DEQ may allow reserves to be funded with CWSRF loan proceeds.

(d) Comply with the one of the following coverage factors (net income to debt service) and reserve percentages (percentage of one-half the average annual debt service):

(A) 1.05:1-100 percent.

(B) 1.15:1-75 percent.

(C) 1.25:1-50 percent.

(D) 1.35:1-25 percent.

(e) Include a requirement for the borrower to conduct a periodic rate review and rate adjustment, if necessary, to ensure estimated revenues in subsequent years are sufficient.

(f) Include a requirement that, if revenues fail to achieve the required rate level, the borrower must promptly adjust rates and charges to assure future compliance with the rate requirements. DEQ may determine that not adjusting rates does not constitute a default if the borrower transfers unencumbered resources in an amount equal to the revenue deficiency to the utility system that generates the revenues.

(g) Include a requirement that if the reserve account is depleted for any reason, the borrower must take prompt action to restore the reserve to the required minimum amount.

(h) Include a requirement restricting additional debt appropriate to the borrower's financial condition.

(i) Prohibit the borrower from selling, transferring or encumbering any financial or fixed asset of the utility system that produces the pledged revenues if the borrower is in violation of a CWSRF loan requirement, or if such sale, transfer or encumbrance may cause a violation of a CWSRF loan requirement.

(3) Alternative loans. DEQ may authorize an alternative loan for a reasonable alternative financing method if the borrower demonstrates to DEQ's satisfaction that:

(a) Borrowing money from the CWSRF through general obligation bonds, revenue bonds or a revenue-secured loan, as described in subsection (a), (b), (c), or (d) of section (1) of this rule, is unduly burdensome or costly to the borrower; and

(b) The alternative loan has a credit quality substantially equal to, or better than, the revenue secured loan credit quality to the borrower. DEQ may consult with a financial advisor and may charge the borrower reasonable consultation costs to determine if an alternative loan meets the credit quality requirement.

(4) Interest rates.

(a) Effective date. The interest rates as specified in this section are effective for all loan agreements executed on or after January 1, 2013.

(b) Base rate. DEQ will determine the base rate used in computing the interest rates on all direct loans for a quarter based on the weekly average of state and local government bond interest rates for the preceding quarter. This base rate will be the "state and local bonds" entry reported in "Selected Interest Rates, H.15" posted by the Federal Reserve from the "Bond Buyer Index" for general obligation bonds (20 years to maturity, mixed quality).

(c) Planning loans. The interest rate for a planning loan will be equal to 25 percent of the base rate.

(d) Local community loans. The interest rate for a local community loan will be equal to 50 percent of the base rate.

(e) Federal loans. DEQ will determine the interest rate for federal loans. DEQ will not set a rate that exceeds the highest rate described in Table 2 of this rule.

(f) All other direct loans. Except as provided in OAR 340-054-0065(10), DEQ will provide the following interest rates for all other CWSRF loans:

(A) For loans with a maximum repayment period of up to 20 years, DEQ will provide the following interest rates as detailed in Table 1 of this rule.

OAR 340-054-0065

Table 1

Interest Rates (percent of base rate) for Loans with Terms of Up to 20 Years

Borrowers	Repayment Period			
	0-5 Years	Over 5 up to10 Years	Over 10 up to15 Years	Over 15 up to 20 Years
Small communities with less than statewide median household income	25%	30%	35%	40%
All other borrowers	25%	45%	50%	55%

(B) (Effective January 1, 2016) For loans with a maximum repayment period of up to 30 years, DEQ will provide the following interest rates as detailed in Table 2 of this rule.

OAR 340-054-0065

Table 2

Interest Rates for Loans with Terms of Over 20 Years but No More Than 30 Years

Borrowers	Rates (percent of base rate)

Small communities with less than statewide median household income	40%
Communities other than small communities with less that the statewide median household income	55% plus an interest premium
Communities with equal to or more than the statewide median household income	55% plus an incrementally higher interest premium than for the borrower type listed directly above

DEQ will set interest rate premiums as described in Tables 1 and 2 in this rule so as to safeguard the fund's perpetuity and DEQ will reevaluate them from time to time.

(g) Sponsorship option. When a sponsorship option is implemented within the scope of a construction loan, DEQ:

(A) Will calculate the debt service on the wastewater facility project based on subsection (f) of this section of the rule;

(B) Will calculate the debt service on a combined sponsorship loan by reducing the interest rate so the debt service on the sponsorship loan equals the debt service as calculated in paragraph (g)(A) of this section of the rule; and

(C) May not reduce the resulting interest rate below one percent.

(h) Bond proceeds for direct loans. DEQ may use bond proceeds that are matching funds for federal capitalization grants to fund direct loans at the interest rates listed in this section. Any change in the source of repayment for matching bonds will not affect this subsection's requirements.

(5) Interest accrual and payment period. Interest begins accruing when DEQ makes the first CWSRF loan disbursement to a borrower. A borrower must include all outstanding accrued interest with each loan repayment.

(6) Annual loan fee.

(a) Except as provided in subsection (b) of this section of the rule, a borrower must pay DEQ an annual loan fee of 0.5 percent on the unpaid loan balance specified in the payment schedule in its loan agreement. This annual loan fee is in addition to any other payments a borrower is required to make under its loan agreement.

(b) DEQ will not charge a borrower any annual loan fee for a planning loan.

(7) Commencement of loan repayment. A borrower must begin its loan principal and interest repayments within one year of the date the facility is operationally complete and ready for the purpose for which it was planned, designed, and built or DEQ determines that the project is completed.

(8) Loan term.

(a) A borrower must fully repay a loan under a repayment schedule DEQ determines. DEQ will consider the useful life of the assets financed when determining the repayment schedule. The repayment term for:

(A) A planning loan may not exceed five years;

(B) A local community loan may not exceed ten years;

(C) All other loans may not exceed 20 years after project completion; and

(D) Effective January 1, 2016, loan terms may not exceed 30 years after project completion.

(b) DEQ will allow prepayments without penalty on all CWSRF loans except as section (11) of this rule specifies. Borrowers must provide a written prepayment notification at least 30 days before the estimated pay off date.

(c) A loan must be fully amortized by the maturity date of the loan.

(9) Minor variations in loan terms. DEQ may authorize minor variations in financial terms of loans described in this rule to facilitate administration and repayment of a loan.

(10) Restructure and refinance of CWSRF loans.

(a) DEQ may consider a one-time loan restructure, such as combining two or more existing CWSRF loans, if such restructure safeguards the CWSRF's perpetuity. DEQ has the discretion as to whether or not to offer a restructure in any individual case. DEQ also has the discretion to set all terms of any restructure.

(A) The existing CWSRF loans must have at least 10 years term remaining except where a Planning loan is combined with a Construction loan.

(B) A Sponsorship loan may not be combined with any other loan except its sponsoring point source project and only after the construction period for the nonpoint source control project has closed.

(b) DEQ may consider a one-time refinance of an existing CWSRF loan if such refinance safeguards the CWSRF's perpetuity and fund utilization rate. DEQ has the discretion as to whether or not to offer refinancing in any individual case. DEQ also has the discretion to set all terms of any refinance.

(A) The existing CWSRF loan must have at least 10 years term remaining.

(B) Any extension of term must not exceed the project's useful life.

(C) The refinance may not reduce the interest rate below one percent.

(D) A refinance may only be for rate, term, or rate and term and may not include any funding disbursed to the borrower.

(c) DEQ may not charge a fee for a restructure or refinance.

(11) Leveraged loans.

(a) DEQ may fund loans with bond proceeds through a leveraged loan program under the following terms and conditions:

(A) Interest rates will be less than the interest rate paid by the state on bonds sold to fund the leveraged loans. Rates will be fixed at 65 percent of the base rate.

(B) Loan fees will be calculated in accordance with section (6) of this rule.

(C) Notwithstanding other provisions of this rule, DEQ may make changes to the terms and conditions of a leveraged CWSRF loan to make it marketable. To the maximum extent practicable, the terms and conditions will be the same as for direct loans.

(b) Bond issuance and related transaction costs will be paid out of bond proceeds to the extent permitted by law.

(12) Additional subsidization DEQ may provide additional subsidization in the form of principal forgiveness to the maximum extent the federal capitalization grant allows and as the criteria established in this section require. A loan with additional subsidization is subject to standard interest rates, fees, and loan terms as defined in this rule.

(a) Eligibility. Except as specified in subsection (b) of this section of the rule, the following applicants are eligible for additional subsidization:

(A) Applicants that are an eligible recipient and meet affordability criteria as specified in subsection (c) of this section of the rule;

(B) Applicants that are an eligible recipient with a project that DEQ determines implements a process, material, technique, or technology to address water-efficiency goals, energy-efficiency goals, to mitigate stormwater runoff, or to encourage sustainable project planning, design, and construction; or

(C) Applicants that are an eligible recipient and that do not meet the requirements of paragraph (a)(A) or (a)(B) in this section of the rule but have individual ratepayers who will

experience financial hardship from a rate increase that financing a project causes. Applicants qualifying under this section must have an established ratepayer hardship assistance program. DEQ will review the applicant's ratepayer hardship assistance program for duration and effectiveness.

(b) Ineligible Loans. The following types of loans are not eligible for additional subsidization:

(A) Loans for projects that are not ready to proceed;

(B) Loans that have loan agreements that include incentives such as sponsorship option loans;

(C) Interim loans; and

(D) Planning loans, except for planning loans for projects described in subsection (a)(B) of this section of the rule.

(c) Affordability Criteria. DEQ will use the following criteria to determine affordability, with the most weight added to paragraph (c)(A) of this section of the rule:

(A) Distressed as calculated by the Oregon Business Development Department's Oregon Distressed Index using the methodology described in OAR 123-024-0031; and

(B) Negative population trends as calculated by the annual United States' Census Bureau's American Community Survey.

(d) Additional subsidization allocation amount. DEQ may allocate or adjust the allocation of additional subsidization every federal fiscal year as a percentage of the annual federal capitalization grant, not to exceed the maximum the federal allocation regulation permits. DEQ will determine the maximum allowable annual percentage allocation of subsidization from time to time to safeguard the CWSRF's perpetuity.

(e) Alternate subsidy. DEQ may offer an alternate subsidy in lieu of principal forgiveness, such as a reduced interest rate, to eligible recipients that meet all other additional subsidization criteria. DEQ will include any alternate subsidy awarded in the total additional subsidization allocated in any fiscal year and may not exceed the individual award amount in subsection (f) of this rule.

(f) Award Amount.

(A) Eligible applicants may receive additional subsidization for up to fifty percent of their loan but not to exceed $500,000.

(B) For applicants that qualify for additional subsidization under paragraph 12(a)(B), DEQ will limit the additional subsidization to 50 percent of the project components qualifying

under paragraph 12(a)(B), not to exceed 50 percent of the loan amount or $500,000, whichever is less.

(C) Applicants may only receive one additional subsidization award per project.

(g) Award Reserves.

(A) DEQ will reserve seventy percent of the additional subsidization allocation for applicants meeting the affordability criteria in subsection (a)(A) of this section of the rule.

(B) DEQ will reserve thirty percent of the additional subsidization allocation for applicants with projects eligible under paragraph 12(a)(B) of this section of the rule.

(C) At the close of the federal fiscal year, DEQ may reallocate any unawarded allocation of additional subsidization in one reserve to the other reserve. If after such reallocation, unawarded allocation still remains, DEQ may reallocate unawarded additional subsidization to those borrowers that are eligible under paragraph (a)(C) of this section of the rule.

(h) Loan Term. Applicants eligible for additional subsidization under the affordability criteria as specified in paragraph (a)(A) of this section of the rule must take the longest term available for their loan. All other applicants may choose any term permitted in section (8) of this rule. A borrower may prepay its loan without penalty.

[ED. NOTE: Tables referenced are not included in rule text. Click here for PDF copy of table(s).]

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 – 468.440
Hist.: DEQ 2-1989, f. & cert. ef. 3-10-89; DEQ 31-1989(Temp), f. & cert. ef. 12-14-89; DEQ 30-1990, f. & cert. ef. 8-1-90; DEQ 1-1993, f. & cert. ef. 1-22-93; DEQ 3-1995, f. & cert. ef. 1-23-95; DEQ 10-2003, f. & cert. ef. 5-27-03; DEQ 3-2010(Temp), f. & cert. ef. 5-4-10 thru 10-29-10; DEQ 13-2010, f. & cert. ef. 10-27-10; DEQ 11-2012, f. & cert. ef. 12-14-12; DEQ 9-2015, f. & cert. ef. 10-16-15

Purchase and Refinancing of Debt Obligation

340-054-0071

Debt Obligation Purchase

DEQ may use the CWSRF to buy a public agency's debt obligation subject to all of the following limitations:

(1) The debt was incurred after March 7, 1985.

(2) The debt obligation does not exceed 30 years.

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

340-054-0072

Bond Purchase

(1) Application requirements. All application requirements for a CWSRF loan as specified in OAR 340-054-0022 apply to a bond purchase under this rule.

(2) Intended Use Plan and project priority list. All applications for a bond purchase are subject to IUP and project priority list development in the same manner as specified in OAR 340-054-0025.

(3) Project ranking criteria. All applicants for a bond purchase will be ranked based on the point sum from the criteria specified in OAR 340-054-0026 and 340-054-0027.

(4) Reserves, CWSRF general fund and project funding. DEQ will allocate reserves and CWSRF general funds for a bond purchase in the same manner as specified in OAR 340-054-0036.

(5) Requirements for a bond purchase.

(a) Clean Water Act plans. DEQ will only purchase a bond whose proceeds are used to finance a project that is consistent with plans developed under sections 303(e), 319 or 320 of the Clean Water Act.

(b) Refinancing an interim loan. A public agency may sell a bond to DEQ to refinance an interim loan or reimburse itself for self-generated funds used to pay DEQ-approved project costs for treatment works if the public agency meets the conditions in OAR 340-054-0056(3).

(6) Conditions for bond purchase. The terms, conditions and requirements set out in OAR 340-054-0060 apply to a bond purchase.

(7) Bond purchase, terms and interest rates.

(a) Bonds. A bond DEQ purchases under this rule must be a revenue bond for a term not to exceed 30 years and meet the requirements specified in OAR 340-054-0065(2).

(b) Interest rates. OAR 340-054-0065(4)(b) specifies the base rate for a bond purchase. DEQ will calculate interest rates for bond purchase agreements executed on or after February 1, 2016, under OAR 340-054-0065(4)(f)(B).

(c) Interest accrual and payment. OAR 340-054-0065(5) sets the terms for interest accrual and payment for bond purchases under this rule.

(d) Annual fee. OAR 340-054-0065(6) specifies the annual fee for a bond purchase.

(e) Commencement of bond repayment. OAR 340-054-0065(7) prescribes when a public agency must begin principal and interest repayment for a bond DEQ purchased under this rule.

(f) Term. A public agency must fully repay bond purchases under this rule under a schedule DEQ prescribes. The term of the bond DEQ purchases under this rule will not exceed 30 years after project completion or the useful life of the asset financed by the bond, whichever is less.

(g) Minor variations in bond terms. DEQ may, as OAR 340-054-0065(9) specifies, authorize minor variations in financial terms of a bond purchased under this rule to facilitate administration and repayment of the bond.

(h) Additional subsidization. DEQ may provide additional subsidization for a bond purchase in the same manner as for a loan under OAR 340-054-0065(12).

Stat. Auth.: ORS 468.020 & 468.440
Stats. Implemented: ORS 468.423 - 468.440
Hist.: DEQ 2-2014, f. 1-28-14, cert. ef. 2-3-14; DEQ 9-2015, f. & cert. ef. 10-16-15

Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Titles I, II, V and VI of the Federal Water Pollution Control Act

Clean Water
State Revolving Fund

This page intentionally left blank.

Table of Contents

Background

On June 10, 2014, President Obama signed into law the Water Resources Reform and Development Act of 2014 (WRRDA). Among its provisions are amendments to Titles I, II, V, and VI of the Federal Water Pollution Control Act (FWPCA). Interpretive guidance was issued on September 18, 2014 for those provisions affecting the Clean Water State Revolving Fund (CWSRF) program. This document includes additional supplemental information on section 602(b)(13), as well as several appendices and a set of questions and answers.

Subtitle A: Amended Provisions in Title VI

Sec. 5001. General Authority for Capitalization Grants (Section 601)

Section 601(a)
As amended, the FWPCA section 601(a) now states:

> *(a) GENERAL AUTHORITY.—Subject to the provisions of this title, the Administrator shall make capitalization grants to each State for the purpose of establishing a water pollution control revolving fund to accomplish the objectives, goals, and policies of this Act by providing assistance for projects and activities identified in section 603(c).*

The FWPCA section 601(a) incorporates the expanded list of activities or projects identified in 603(c) as eligible for assistance from a CWSRF. States should make certain when selecting projects for funding that the purpose of the project is consistent with the objectives, goals, and policies of the FWPCA.

Section 5002. Capitalization Grant Agreements (Section 602)

Section 602(b)(6)
As amended, the FWPCA section 602(b)(6) now states:

> *(6) treatment works eligible under this Act which will be constructed in whole or in part with assistance made available by a State water pollution control revolving fund authorized under this title, or section 205(m) of this Act, or both, will meet the requirements of, or otherwise be treated (as determined by the Governor of the State) under sections 511(c)(1) and 513 of this Act in the same manner as treatment works constructed with assistance under title II of this Act;*

The FWPCA section 511(c)(1) applies the National Environmental Policy Act (NEPA) to assistance for the construction of treatment works. The FWPCA section 513 is a prevailing wage provision that requires all laborers and mechanics employed by contractors working on treatment works to be paid prevailing wages as determined by the Secretary of Labor. It is considered a Davis-Bacon related Act.

National Environmental Policy Act Provision
All CWSRF-funded projects involving the construction of treatment works, regardless of the source of the funding (e.g., prior years' appropriations, state match, bond proceeds, interest earnings, principal repayments, etc.), must undergo an environmental review. The Environmental Protection Agency (EPA) has consistently interpreted the statement "with assistance made available by a State water pollution control revolving fund authorized under this title" to mean that the specific requirement identified applies to all CWSRF-funded projects, not just equivalency projects. Consistent with this prior interpretation, any project that is considered a "treatment work" as defined in the FWPCA section 212, now incorporated in FWPCA Section 502(26), must comply with the FWPCA 511(c)(1) regardless of which eligibility it is funded under (*see section 603(c)*).

A State may choose to apply its own "NEPA-like" State environmental review process for complying with the FWPCA section 511(c)(1) provided that the elements in 40 CFR 35.3140(b)(1) through (5) are met.

Davis-Bacon Related Act Provision
The FWPCA section 602(b)(6) permanently applies the prevailing wage (Davis-Bacon) provision of the FWPCA section 513 to any projects for treatment works that are funded by a CWSRF. Consistent with EPA's prior implementation of this provision, application of the Davis-Bacon Act requirements extend not only to assistance agreements funded with capitalization grants, but to all CWSRF-funded projects involving the construction of treatment works regardless of the source of the funding (e.g., prior years' appropriations, state match, bond proceeds, interest earnings, principal repayments, etc.). Any project that is considered a "treatment work" as defined in the FWPCA section 212, now incorporated in FWPCA Section 502(26), must comply with the FWPCA 513, regardless of which eligibility it is funded under (*see section 603(c)*).

Section 602(b)(9)
As amended, the FWPCA section 602(b)(9) now states:

> *(9) the State will require as a condition of making a loan or providing other assistance, as described in section 603(d) of this Act, from the fund that the recipient of such assistance will maintain project accounts in accordance with generally accepted government accounting standards, including standards relating to the reporting of infrastructure assets;*

The State must require assistance recipients to maintain project accounts according to Generally Accepted Accounting Principles (GAAP) as issued by the Governmental Accounting Standards Board (GASB). This provision requires assistance recipients to use standards relating to the reporting of infrastructure assets. The most recent applicable standard is GASB Statement No. 34 (GASB 34), issued in June 1999, which details governmental reporting requirements including standards for reporting of infrastructure assets.[1] Further details on the requirements, as well as the full text of GASB 34, can be obtained through the GASB.

[1] Assistance recipients that follow GAAP standards other than GASB 34 are still required to maintain project accounts according to GAAP and apply GAAP standards for reporting on infrastructure assets.

The State must include language in assistance agreements requiring that recipients' project accounts are GAAP compliant, including GAAP requirements relating to the reporting of infrastructure assets. The State should consult with their State Auditor or equivalent entity to determine whether or not existing CWSRF assistance agreement language meets these requirements. Because of the effective date of GASB 34, the State may find that these requirements are already in place.

Section 602(b)(11)

As amended, the FWPCA now includes section 602(b)(11), which states:

> *(11) the State will establish, maintain, invest, and credit the fund with repayments, such that the fund balance will be available in perpetuity for activities under this Act;*

This provision requires States to manage CWSRFs in such a way that the funds will be available in perpetuity for activities under the FWPCA. The language provides specific authority for States to "invest" funds so that the fund balance will be available in perpetuity.

Section 602(b)(12)

As amended, the FWPCA now includes section 602(b)(12), which states:

> (12) *any fees charged by the State to recipients of assistance that are considered program income will be used for the purpose of financing the cost of administering the fund or financing projects or activities eligible for assistance from the fund;*

Fees considered to be program income may be deposited into the fund and used for administration and other activities eligible for assistance from the fund (i.e., loans, refinancing, insurance, guarantees, etc.). Program income is defined in 40 CFR 31.25(b) as "gross income received by the grantee or subgrantee directly generated by a grant support activity, or earned only as a result of the grant agreement during the grant period." In the CWSRF program, grant supported activities are those activities funded in an amount equal to the amount of the capitalization grant (i.e., funds directly made available by the capitalization grant). Only fees earned during the grant period from projects directly made available by the capitalization grant (equivalency projects) are program income. The grant period starts with the awarding of the grant and is considered closed once all funds have been disbursed. Fees collected after all funds are disbursed are no longer program income and may be used for water quality purposes.

Fees deposited into the fund may not be used for State match; however, if fees considered as program income are held outside the CWSRF, they may be used for State match in addition to administration and other activities eligible for assistance from the fund.

If program income generated through fees is added to the fund and used for administration, those fees are not considered part of the limit on administrative costs (*see section 603(d)(7)*).

Section 602(b)(13)

As amended, the FWPCA now includes section 602(b)(13), which states:

> *(13) beginning in fiscal year 2016, the State will require as a condition of providing assistance to a municipality or intermunicipal, interstate, or State agency that the recipient of such assistance certify, in a manner determined by the Governor of the State, that the recipient—*
>
> *(A) has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under this title; and*
>
> *(B) has selected, to the maximum extent practicable, a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account—*
>
> *(i) the cost of constructing the project or activity;*
>
> *(ii) the cost of operating and maintaining the project or activity over the life of the project or activity; and*
>
> *(iii) the cost of replacing the project or activity;*

Under the FWPCA section 602(b)(13), Clean Water State Revolving Fund (CWSRF) programs must require all assistance recipients meeting the definition of municipality or intermunicipal, interstate, or State agency to certify that they have conducted the studies and evaluations described in 602(b)(13)(A) and (B), herein referred to collectively as a cost and effectiveness analysis. A cost and effectiveness analysis is an eligible cost, and CWSRFs can provide assistance for planning and/or engineering activities that involve this analysis; however, the certification must be provided before CWSRF assistance is provided for final design or construction. If planning, design, and construction activities are combined into one assistance agreement, the agreement must be conditioned such that the certification is provided before an assistance recipient is allowed to proceed with final design or construction. This provision applies to all types of assistance provided to the public entities described above for which the recipient submits an application[2] on or after October 1, 2015.

The statute requires that a cost and effectiveness analysis involve, at a minimum:

- the study and evaluation of the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project or activity for which assistance is sought under this title; and
- the selection, to the maximum extent practicable, of a project or activity that maximizes the potential for efficient water use, reuse, recapture, and conservation, and energy conservation, taking into account—
  - the cost of constructing the project or activity;
  - the cost of operating and maintaining the project or activity over the life of the project or activity; and
  - the cost of replacing the project or activity.

[2] States will determine what constitutes an application and must be consistent.

Each CWSRF program must ensure that assistance recipients complete a cost and effectiveness analysis that meets these minimum requirements. As a best practice, it is recommended that each CWSRF program develop specific criteria and/or guidance for an analysis that meets these minimum requirements. States may consider creating tiered requirements that scale the complexity of the analysis to the size of the project and/or the assistance recipient (e.g., population of a municipality or millions of gallons treated for a utility). States may also consider recognizing within the certification process how certain categories of projects, such as purchasing land and planting trees, are handled.

The State has the discretion to decide how an assistance recipient will certify that it has completed the required cost and effectiveness analysis and that it has selected, to the maximum extent practicable, a project or activity that maximizes the potential for water and energy conservation, as appropriate. A CWSRF must have a consistent process/procedure in place for ensuring compliance with the requirement, and it is recommended that the CWSRF obtain the certification in writing (e.g., a professional engineer's certification or a report with a professional engineer's seal). As a best practice, it is recommended that CWSRFs also review the cost and effectiveness analysis for selected projects, particularly if paid for by the CWSRF.

Section 602(b)(14)

As amended, the FWPCA now includes section 602(b)(14), which states:

> *(14) a contract to be carried out using funds directly made available by a capitalization grant under this title for program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping, or architectural related services shall be negotiated in the same manner as a contract for architectural and engineering services is negotiated under chapter 11 of title 40, United States Code, or an equivalent State qualifications-based requirement (as determined by the Governor of the State).*

For any capitalization grant awarded after October 1, 2014, the State must ensure that all architectural and engineering (A/E)[3] contracts for projects identified as using funds "directly made available by" a capitalization grant (i.e. equivalency projects) comply with the elements of the procurement processes for A/E services as identified in 40 U.S.C. 1101 *et seq.*, or an equivalent State requirement. New solicitations, significant contractual amendments,[4] and contract renewals initiated on or after the effective date of October 1, 2014 are subject to this requirement.

To the extent possible, the State should identify all equivalency projects in its Intended Use Plan (IUP). The State should also identify all equivalency projects in its Annual Report and specify whether those projects include any A/E services. Only the SRF-funded contracts for A/E services associated with equivalency projects must comply with this requirement.

[3] Applies to contracts for program management, construction management, feasibility studies, preliminary engineering, design, engineering, surveying, mapping, or A/E services as defined in 40 U.S.C. 1102(2)(A-C).
[4] States shall determine what constitutes a significant amendment using best professional judgment to analyze increases to both scope and cost of work.

The State should also detail in its IUP or Operating Agreement whether it intends to satisfy this requirement through compliance with 40 U.S.C. 1101 *et seq.* or through an equivalent State requirement. In the case of the latter, the source of the requirement (e.g., existing State legislation or regulation, etc.) must be stated, and a certification from the Governor of the State that the State's A/E procurement requirements are equivalent to 40 U.S.C. 1101 *et seq*. must accompany the capitalization grant application. In lieu of a certification from the Governor, the Attorney General's certification submitted with each capitalization grant application may include this certification. The requirements of 40 U.S.C. 1101 *et seq.* are:

- Public announcement of the solicitation (e.g., a Request for Qualifications);
- Evaluation and ranking of the submitted qualifications statements based on established, publicly available criteria (e.g., identified in the solicitation);
  - Evaluation criteria should be based on demonstrated competence and qualification for the type of professional services required (e.g., past performance, specialized experience, and technical competence in the type of work required);
- Discussion with at least three firms to consider anticipated concepts and compare alternative methods for furnishing services;
- Selection of at least three firms considered to be the most highly qualified to provide the services required; and
- Contract negotiation with the most highly qualified firm to determine compensation that is fair and reasonable based on a clear understanding of the project scope, complexity, professional nature, and the estimated value of the services to be rendered;
  - In the event that a contract cannot be negotiated with the most highly qualified firm, negotiation continues in order of qualification.

In the event that the State has no existing equivalent qualifications-based requirement for procurement, the federal requirements in 40 U.S.C. *et seq.* apply.

Section 5003. Water Pollution Control Revolving Funds (Section 603)

Section 603(c)

As amended, the FWPCA section 603(c) now states:

> *(c) Projects and Activities Eligible for Assistance.—The amounts of funds available to each State water pollution control revolving fund shall be used only for providing financial assistance—*

The FWPCA section 603(c) provides the project types eligible for CWSRF assistance. Each of the eleven project types is an independent eligibility with its own criteria and requirements. Treatment works projects, as defined in the FWPCA section 212, now incorporated in FWPCA Section 502(26), are subject to the following three requirements, regardless of which eligibility they are funded under:

- the State must agree to conduct an environmental review of the potential environmental impacts of all treatment works projects;
- the State must apply the prevailing wage provision (Davis-Bacon) to all treatment works projects; and
- the State must apply American Iron and Steel (AIS) to all treatment works projects.

Section 603(c)(1-3)

The FWPCA section 603(c)(1-3) states:

> *(1) to any municipality or intermunicipal, interstate, or State agency for construction of publicly owned treatment works (as defined in Section 212);*
> *(2) for the implementation of a management program established under section 319;*
> *(3) for development and implementation of a conservation and management plan under section 320;*

The projects eligible for assistance under the FWPCA sections 603(c)(1), 603(c)(2), and 603(c)(3) remain unchanged.

Section 603(c)(4)

As amended, the FWPCA now includes section 603(c)(4), which states that each CWSRF may provide financial assistance:

> *(4) for the construction, repair, or replacement of decentralized wastewater treatment systems that treat municipal wastewater or domestic sewage;*

Publicly and privately owned decentralized wastewater treatment projects are eligible. Eligible projects include, but are not limited to, the construction of new decentralized systems (e.g., individual onsite systems and cluster systems), as well as the upgrade, repair, or replacement of existing systems.

Section 603(c)(5)

As amended, the FWPCA now includes section 603(c)(5), which states that each CWSRF may provide financial assistance:

> (5) *for measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water;*

Publicly and privately owned, permitted and unpermitted projects that manage, reduce, treat, or recapture stormwater or subsurface drainage water are eligible. This language eliminates ownership constraints on regulated stormwater projects. For example, projects that are

specifically required by a Municipal Separate Storm Sewer System (MS4) permit are now eligible, regardless of ownership. Projects may include, but are not limited to green roofs, rain gardens, roadside plantings, porous pavement, and rainwater harvesting.

Section 603(c)(6)

As amended, the FWPCA now includes section 603(c)(6), which states that each CWSRF may provide financial assistance:

> (6) *to any municipality or intermunicipal, interstate, or State agency for measures to reduce the demand for publicly owned treatment works capacity through water conservation, efficiency, or reuse;*

Assistance for water conservation, efficiency, or reuse may be provided to municipalities, intermunicipal, or State agencies. Only the specified public entities are eligible for assistance; however, project activities may take place at publicly or privately owned properties, provided the project reduces demand for publicly owned treatment works (POTW) capacity. For example, a city may receive CWSRF assistance to make loans or grants to city residents for the installation of water efficient appliances. Other eligible projects include, but are not limited to, the installation, replacement, or upgrade of water meters; plumbing fixture retrofits or replacement; and gray water recycling. Water audits and water conservation plans are also eligible. Equipment to reuse effluent (e.g., gray water, condensate, and wastewater effluent reuse systems) is eligible.

Section 603(c)(7)

As amended, the FWPCA now includes section 603(c)(7), which states that each CWSRF may provide financial assistance:

> (7) *for the development and implementation of watershed projects meeting the criteria set forth in section 122;*

Projects that develop or implement a watershed pilot project related to at least one of the six areas identified in section 122 are eligible: watershed management of wet weather discharges, stormwater best management practices, watershed partnerships, integrated water resource planning, municipality-wide stormwater management planning, or increased resilience of treatment works. Assistance recipients may be public or private entities.

Section 603(c)(8)

As amended, the FWPCA now includes section 603(c)(8), which states that each CWSRF may provide financial assistance:

> (8) *to any municipality or intermunicipal, interstate, or State agency for measures to reduce the energy consumption needs for publicly owned treatment works;*

Projects to reduce the energy consumption needs for POTWs are eligible. Only the specified public entities are eligible for assistance; however, project activities may take place at public or private properties, provided the project reduces the energy consumption needs for a POTW. Projects may include, but are not limited to, the installation of energy efficient lighting, HVAC,

process equipment, and electronic equipment and systems at POTWs. Planning activities, such as energy audits and optimization studies are also eligible.

Section 603(c)(9)

As amended, the FWPCA now includes section 603(c)(9), which states that each CWSRF may provide financial assistance:

> (9) *for reusing or recycling wastewater, stormwater, or subsurface drainage water;*

Projects involving the reuse or recycling of wastewater, stormwater, or subsurface drainage water are eligible. This includes, as part of a reuse project, the purchase and installation of treatment equipment sufficient to meet reuse standards. Other eligible projects include, but are not limited to, distribution systems to support effluent reuse, including piping the effluent on the property of a private consumer, recharge transmission lines, injection wells, and equipment to reuse effluent (e.g., gray water, condensate, and wastewater effluent reuse systems). Eligible recipients may be public or private entities.

Section 603(c)(10)

As amended, the FWPCA now includes section 603(c)(10), which states that each CWSRF may provide financial assistance:

> (10) *for measures to increase the security of publicly owned treatment works;*

Security measures for publicly-owned treatment works might include, but are not limited to: vulnerability assessments, contingency/emergency response plans, fencing, security cameras/lighting, motion detectors, redundancy (systems and power), secure chemical and fuel storage, lab equipment, securing large sanitary sewers, and tamper-proof manholes. The CWSRF cannot fund operations and maintenance (O&M) activities. Therefore, maintaining a human presence (i.e. security guards) and monitoring activities are not eligible.

Section 603(c)(11)

As amended, the FWPCA now includes section 603(c)(11), which states that each CWSRF may provide financial assistance:

> (11) *to any qualified nonprofit entity, as determined by the Administrator, to provide assistance to owners and operators of small and medium publicly owned treatment works*
>
> *(A) to plan, develop, and obtain financing for eligible projects under this subsection, including planning, design, and associated preconstruction activities; and*
>
> *(B) to assist such treatment works in achieving compliance with this Act.*

Projects to provide assistance to small and medium POTWs are eligible. The definition of small and medium POTWs shall be determined by the State. Assistance recipients must be a nonprofit entity. A nonprofit entity is one which has Federal tax-exempt status. The CWSRF cannot fund ongoing O&M activities; however, planning and design costs for capital projects, as well as

broader water quality planning projects, are eligible. The development and initial implementation of training activities are also eligible.

Section 603(d)(1)(A)&(B)
As amended, the FWPCA section 603(d)(1)(A)&(B) now states:

> *(d) TYPES OF ASSISTANCE.—Except as otherwise limited by State law, a water pollution control revolving fund of a State under this section may be used only—*
> *(1) to make loans, on the condition that—*
> *(A) such loans are made at or below market interest rates, including interest free loans, at terms not to exceed the lesser of 30 years and the projected useful life (as determined by the State) of the project to be financed with proceeds of the loan;*
> *(B) annual principal and interest payments will commence not later than one year after completion of any project and loans will be fully amortized upon the expiration of the term of the loan;*

Loan terms may extend up to 30 years, but must not exceed the useful life of the project. Existing CWSRF loans may be restructured to reflect the change to loan terms. For example, an existing 20 year loan with 10 years left to maturity could be restructured to add another 10 years to the maturity date provided the useful life of the project is 30 years or more. For a CWSRF project that has multiple components each with a different useful life, the State may use a weighted average of the components in determining the useful life of the project.

Section 603(d)(1)(E)
As amended, the FWPCA now includes section 603(d)(1)(E), which states:

> *(E) for a treatment works proposed for repair, replacement, or expansion, and eligible for assistance under subsection (c)(1), the recipient of a loan shall—*
> *(i) develop and implement a fiscal sustainability plan that includes—*
> *(I) an inventory of critical assets that are a part of the treatment works;*
> *(II) an evaluation of the condition and performance of inventoried assets or asset groupings;*
> *(III) a certification that the recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and*
> *(IV) a plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities; or*
> *(ii) certify that the recipient has developed and implemented a plan that meets the requirements under clause (i);*

The FWPCA section 603(d)(1)(E) requires a recipient of a loan for a project that involves the repair, replacement, or expansion[5] of a publicly owned treatment works to develop and

[5] FSPs are not required for new treatment works (unless they are physically replacing an existing treatment works or expanding the treatment capacity of an existing system) or for projects involving an upgrade that does not involve repair/replacement or expand the treatment capacity (e.g., adding advanced treatment).

implement a fiscal sustainability plan (FSP) or certify that it has developed and implemented such a plan. This provision applies to all loans for which the borrower submitted an application[6] on or after October 1, 2014.

FSPs should be treated as "living documents" that are regularly reviewed, revised, expanded, and implemented as an integral part of the operation and management of the system. From this perspective, there may be no final deadline for the completion of an FSP; however, it is necessary to set a date for submission of an FSP certification in order to ensure compliance with this provision. An FSP certification is a certification by the borrower that the FSP has been developed and is being implemented. For systems that self-certify under the FWPCA section 603(d)(1)(E)(ii), certification is due at the time of loan closing. For systems developing an FSP under the FWPCA section 603(d)(1)(E)(i), the requirement to develop and implement an FSP must be a condition of the loan agreement, which must also specify when the FSP certification is due. CWSRF programs may establish a program-wide deadline or a unique deadline for each project relative to the borrower's size, ability, and experience with fiscal sustainability planning. It is recommended that CWSRFs require borrowers to submit the FSP certification before the final disbursement is approved.

The statute requires that FSPs include, at a minimum:

- an inventory of critical assets that are part of the treatment works;
- an evaluation of the condition and performance of inventoried assets or asset groupings;
- a certification that the assistance recipient has evaluated and will be implementing water and energy conservation efforts as part of the plan; and
- a plan for maintaining, repairing, and, as necessary, replacing the treatment works and a plan for funding such activities.

Each CWSRF program must develop specific criteria for the contents of the FSP that meet these minimum requirements (*see Appendix I for energy and water conservation resources*). CWSRFs may consider allowing recipients to take a phased approach such that the initial FSP covers only the funded project and closely associated components.[7] This approach should be applied in such a way that a comprehensive and cohesive plan that covers the entire treatment works eventually results as the utility continues to repair, replace, and expand the system. States may also consider creating tiered requirements that scale the level of complexity of the FSP to the size of the municipality or utility (e.g., population served, millions of gallons treated, etc.).

At a minimum, CWSRFs must require loan recipients to certify that an FSP has been developed and is being implemented and, if deemed necessary, review the FSP. Such a review could occur during an on-site project evaluation; CWSRFs are not required to collect FSPs, but could document this review process with a memorandum to the file, a letter to the loan recipient, or an

[6] States will determine what constitutes an application and must be consistent.
[7] The treatment works should be broken down into logical sections using best professional judgment. For a sewer rehabilitation or replacement project, for example, it may be appropriate to segment a large collection system into areas or zones and create an FSP for the affected area only. On the other hand, for a small system it may be more appropriate to create a plan that covers the entire collection system.

evaluation form (e.g., a checklist). An FSP review could include the following elements: ensure the loan recipient developed an FSP, that the FSP has an appropriate level of depth and complexity, and that the recipient is implementing the FSP. Regarding the water and energy efficiency provision, CWSRFs should ensure the statutorily required certification is included in the FSP. It is recommended that the CWSRFs also evaluate whether the recipient has incorporated, to the maximum extent practicable, water and energy efficient approaches into the funded project.

Development of an FSP is an eligible cost. It is recommended that CWSRFs review and accept any FSP developed as a condition of the loan or paid for by the CWSRF, including cases of self-certification where the loan recipient is reimbursed for the cost of developing the equivalent plan. As a best practice, EPA encourages CWSRFs to review all FSPs during the final inspections.

Section 603(d)(7)

As amended, the FWPCA section 603(d)(7) now states:

> *(7) for the reasonable costs of administering the fund and conducting activities under this title, except that such amounts shall not exceed 4 percent of all grant awards to such fund under this title, $400,000 per year, or 1/5 percent per year of the current valuation of the fund, whichever amount is greatest, plus the amount of any fees collected by the State for such purpose regardless of the source.*

The maximum annual amount of CWSRF money (not including any fees collected that are placed in the fund) that may be used to cover the reasonable costs of administering the fund is the greatest of the following:

- an amount equal to 4 percent of all grant awards received by a State CWSRF less any amounts that have been used in previous years to cover administrative expenses;
- $400,000; or
- 1/5 percent of the current valuation of the fund.

The current valuation of the fund must be a representation of the equity of the CWSRF that properly takes into account its assets and liabilities. This valuation needs to be verifiable and consistent across the States; therefore, this calculation must be based on the most recent audited financial statements of the CWSRF and must reflect the "Total Net Position," which is defined by the GASB as the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources.[8] If the "Total Net Position" cannot be derived from audited CWSRF financial statements, a State may still provide a calculation of the current valuation of the fund. However, an auditor must certify that this calculation is accurate and consistent with the definition of "Total Net Position." The EPA will periodically review and update the definition of the current valuation of the fund to reflect future updates by the GASB.

[8] For more information, please refer to *Statement No. 63 Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position* and other relevant GASB pronouncements.

Any fees deposited in the fund and used by a State to pay for administering the fund or conducting activities under this title will not count against the maximum amount of CWSRF money that may be used for such purposes.

Section 603(i)

As amended, the FWPCA now includes section 603(i), which states:

(i) ADDITIONAL SUBSIDIZATION.—

(1) IN GENERAL.—In any case in which a State provides assistance to a municipality or intermunicipal, interstate, or State agency under subsection (d), the State may provide additional subsidization, including forgiveness of principal and negative interest loans—

(A) to benefit a municipality that—

(i) meets the affordability criteria of the State established under paragraph (2); or

(ii) does not meet the affordability criteria of the State if the recipient—

(I) seeks additional subsidization to benefit individual ratepayers in the residential user rate class;

(II) demonstrates to the State that such ratepayers will experience a significant hardship from the increase in rates necessary to finance the project or activity for which assistance is sought; and

(III) ensures, as part of an assistance agreement between the State and the recipient, that the additional subsidization provided under this paragraph is directed through a user charge rate system (or other appropriate method) to such ratepayers; or

(B) to implement a process, material, technique, or technology—

(i) to address water-efficiency goals;

(ii) to address energy-efficiency goals;

(iii) to mitigate stormwater runoff; or

(iv) to encourage sustainable project planning, design, and construction.

(2) AFFORDABILITY CRITERIA.—

(A) ESTABLISHMENT.—

(i) IN GENERAL.—Not later than September 30, 2015, and after providing notice and an opportunity for public comment, a State shall establish affordability criteria to assist in identifying municipalities that would experience a significant hardship raising the revenue necessary to finance a project or activity eligible for assistance under subsection (c)(1) if additional subsidization is not provided.

(ii) CONTENTS.—The criteria under clause (i) shall be based on income and unemployment data, population trends, and other data determined relevant by the State, including whether the project or

activity is to be carried out in an economically distressed area, as described in section 301 of the Public Works and Economic Development Act of 1965 (42 U.S.C. 3161).

(B) EXISTING CRITERIA.—If a State has previously established, after providing notice and an opportunity for public comment, affordability criteria that meet the requirements of subparagraph (A)—

(i) the State may use the criteria for the purposes of this subsection; and

(ii) those criteria shall be treated as affordability criteria established under this paragraph.

(C) INFORMATION TO ASSIST STATES.—The Administrator may publish information to assist States in establishing affordability criteria under subparagraph (A).

(3) LIMITATIONS.—

(A) IN GENERAL.—A State may provide additional subsidization in a fiscal year under this subsection only if the total amount appropriated for making capitalization grants to all States under this title for the fiscal year exceeds $1,000,000,000.

(B) ADDITIONAL LIMITATION.—

(i) GENERAL RULE.—Subject to clause (ii), a State may use not more than 30 percent of the total amount received by the State in capitalization grants under this title for a fiscal year for providing additional subsidization under this subsection.

(ii) EXCEPTION.—If, in a fiscal year, the amount appropriated for making capitalization grants to all States under this title exceeds $1,000,000,000 by a percentage that is less than 30 percent, clause (i) shall be applied by substituting that percentage for 30 percent.

(C) APPLICABILITY.—The authority of a State to provide additional subsidization under this subsection shall apply to amounts received by the State in capitalization grants under this title for fiscal years beginning after September 30, 2014.

(D) CONSIDERATION.—If the State provides additional subsidization to a municipality or intermunicipal, interstate, or State agency under this subsection that meets the criteria under paragraph (1)(A), the State shall take the criteria set forth in section 602(b)(5) into consideration.

The FWPCA section 603(i) provides a CWSRF with the permanent authority to provide a certain percentage of its total capitalization grant award as additional subsidization under the circumstances outlined in the statute. This authority only applies to capitalization grants made from the FY 2015 and later appropriations; it does not impact any capitalization grant made from the FY 2014 or prior appropriations. Going forward, there is no minimum additional subsidy requirement that CWSRFs must comply with, but CWSRFs that have not met the additional subsidy requirements from previous capitalization grants must still meet those requirements. Any additional subsidization provided from previous capitalization grants is not subject to the restrictions outlined in the WRRDA statute and may still be provided to any eligible recipient of CWSRF assistance.

The maximum percentage that may be provided as additional subsidization will range from 0 percent to 30 percent based on the amount of the total appropriation as follows:[9]

- total appropriation less than or equal to $1 billion: no additional subsidy authorized;
- total appropriation greater than or equal to $1.3 billion: additional subsidy up to 30 percent of the capitalization grant authorized;
- total appropriation greater than $1 billion, but less than $1.3 billon: a percentage equal to the percentage by which the appropriation exceeds $1 billion authorized. For example, if the total annual appropriation is $1.1 billion, the total amount of additional subsidization available for all States would be $110 million, with each CWSRF able to provide up to 10 percent of its total capitalization grant as additional subsidization.

A CWSRF may only provide additional subsidization to a municipality or intermunicipal, interstate, or State agency; however, eligible recipients of a principal forgiveness or negative interest loan may use a "pass through" loan structure to pass the subsidy along to any eligible recipient of CWSRF assistance for projects that would otherwise be eligible to receive additional subsidization under this subsection, including non-profits and other private entities. This flexibility cannot be extended to additional subsidization that has been provided as a grant.

Additional subsidization may only be provided to eligible recipients for the following:

- to benefit a municipality that meets the State's affordability criteria as established under the FWPCA section 603(i)(2);[10]
- to benefit a municipality that does not meet the State's affordability criteria but seeks additional subsidization to benefit individual ratepayers in the residential user rate class;[11] or
- to implement a process, material, technique, or technology that addresses water or energy efficiency goals; mitigates stormwater runoff; or encourages sustainable project planning, design, and construction.

The FWPCA section 603(i)(2) requires States to develop affordability criteria that will assist them in identifying applicants that would have difficulty financing projects without additional subsidization. Criteria must be established by September 30, 2015 after providing notice and an opportunity for public comment.

[9] For additional information, please refer to the chart provided in Appendix II.
[10] If a State provides additional subsidization to a municipality or intermunicipal, interstate, or State agency that meets the criteria under the FWPCA section 603(i)(1)(A), the State must consider first using all funds in the fund as a result of capitalization grants to assure maintenance of progress, as determined by the Governor of the State, toward compliance with enforceable deadlines, goals, and requirements of this Act, including the municipal compliance deadline, as set forth in section 602(b)(5).
[11] Ibid.

The FWPCA section 603(i)(2)(A) requires that criteria be based on:

- income;
- unemployment data;
- population trends; and
- other data determined relevant by the State.

Income, unemployment data, and population trends must be reflected in State affordability criteria; however, the statute does not prescribe the weight that must be given to each type of criteria. States have the flexibility to determine which of the required criteria are most relevant to their CWSRF programs and may structure their program's criteria accordingly.

If CWSRFs have existing affordability criteria that meet the requirements established in section 603(i)(2)(A), they may continue to use those criteria. Existing criteria must also have undergone the appropriate public notice and comment process within their respective States.

If additional subsidization is being used to benefit individual ratepayers in the residential user rate class of a municipality that does not meet the affordability criteria, then the recipient must demonstrate to the CWSRF's satisfaction that these ratepayers would otherwise experience a significant hardship from the increase in rates necessary to finance the project or activity for which assistance is being sought. Additionally, the assistance agreement between the CWSRF and the recipient must include language indicating that the additional subsidization would be provided to these ratepayers through a user charge rate system or other appropriate method.

Additional subsidization may be provided in the form of principal forgiveness, negative interest loans, or grants. However, additional subsidization provided in the form of grants must comply with certain Federal laws, Executive Orders, and Office of Management and Budget Circulars. A detailed description of these laws, orders, and implementing regulations is available through the Office of Grants and Debarment website at http://www.epa.gov/ogd/grants/regulations.htm.[12]

Section 5004. American Iron and Steel (Section 608)

Section 608

As amended, the FWPCA now includes section 608, which states:

> *SEC. 608. REQUIREMENTS.*
> *(a) IN GENERAL.—Funds made available from a State water pollution control revolving fund established under this title may not be used for a project for the construction, alteration, maintenance, or repair of treatment works unless all of the iron and steel products used in the project are produced in the United States.*
> *(b) DEFINITION OF IRON AND STEEL PRODUCTS.—In this section, the term `iron and steel products' means the following products made primarily of iron or steel: lined or*

[12] More information regarding these requirements is also available in the Additional Subsidies section (IV.B.5) of the *Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2012 Appropriations Affecting the Clean Water and Drinking Water State Revolving Fund Programs.*

unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, construction materials.

(c) APPLICATION.—Subsection (a) shall not apply in any case or category of cases in which the Administrator finds that—

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(d) WAIVER.—If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public, on an informal basis, a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet site of the Environmental Protection Agency.

(e) INTERNATIONAL AGREEMENTS.—This section shall be applied in a manner consistent with United States obligations under international agreements.

(f) MANAGEMENT AND OVERSIGHT.—The Administrator may retain up to 0.25 percent of the funds appropriated for this title for management and oversight of the requirements of this section.

(g) EFFECTIVE DATE.—This section does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of enactment of the Water Resources Reform and Development Act of 2014.

The FWPCA section 608 codifies a provision that had recently been included in EPA's SRF appropriations that requires assistance recipients, absent a waiver, to use iron and steel products that are produced in the United States for projects for the construction, alteration, maintenance, and repair of treatment works.

Except for applying the provision only to projects for treatment works that are funded by the CWSRF, the AIS language included in the WRRDA is identical to the AIS language used in the FY 2014 appropriations act. Therefore, EPA intends to interpret the language in the same manner as described in *Implementation of Iron and Steel Provisions of P.L.113-76, Consolidated Appropriations Act of 2014*.

The effective date for the newly codified provision is the date of enactment of the WRRDA, or June 10, 2014.

Section 5005. Report on the Allotment of Funds

The WRRDA includes the following provision:

> *(a) Review.—The Administrator of the Environmental Protection Agency shall conduct a review of the allotment formula in effect on the date of enactment of this Act for allocation of funds authorized under title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) to determine whether that formula adequately addresses the water quality needs of eligible States, territories, and Indian tribes, based on—*
>
> *(1) the most recent survey of needs developed by the Administrator under section 516(b) of that Act (33 U.S.C. 1375(b)); and*
>
> *(2) any other information the Administrator considers appropriate.*
>
> *(b) Report.—Not later than 18 months after the date of enactment of this Act, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives and make publicly available a report on the results of the review under subsection (a), including any recommendations for changing the allotment formula.*

A review of the CWSRF allotment formula will begin in FY 2015.

Section 5006. Effective date

The WRRDA includes the following provision:

> *This subtitle, including any amendments made by the subtitle, shall take effect on October 1, 2014.*

The amendments to the FWPCA apply to assistance provided after September 30, 2014 unless otherwise stated elsewhere in this document. States that have not met the statutory requirements in previous capitalization grants must still meet those requirements (e.g., the additional subsidy and green project reserve requirements).

Subtitle B: Amended Provisions in Title I, II, and V

Section 5011. Watershed Pilot Projects (Section 122)

Section 122
As amended, the FWPCA section 122 now states:

> *SEC. 122. WATERSHED PILOT PROJECTS.*
>
> *(a) IN GENERAL.—The Administrator, in coordination with the States, may provide technical assistance and grants to a municipality or municipal entity to carry out pilot projects relating to the following areas:*
>
> *(1) WATERSHED MANAGEMENT OF WET WEATHER DISCHARGES.—The management of municipal combined sewer overflows, sanitary sewer overflows,*

and stormwater discharges, on an integrated watershed or subwatershed basis for the purpose of demonstrating the effectiveness of a unified wet weather approach.
(2) STORMWATER BEST MANAGEMENT PRACTICES.—The control of pollutants from municipal separate storm sewer systems for the purpose of demonstrating and determining controls that are cost-effective and that use innovative technologies to manage, reduce, treat, recapture, or reuse municipal stormwater, including techniques that utilize infiltration, evapotranspiration, and reuse of stormwater onsite.
(3) WATERSHED PARTNERSHIPS.—Efforts of municipalities and property owners to demonstrate cooperative ways to address nonpoint sources of pollution to reduce adverse impacts on water quality.
(4) INTEGRATED WATER RESOURCE PLAN.—The development of an integrated water resource plan for the coordinated management and protection of surface water, ground water, and stormwater resources on a watershed or subwatershed basis to meet the objectives, goals, and policies of this Act.
(5) MUNICIPALITY-WIDE STORMWATER MANAGEMENT PLANNING.—The development of a municipality-wide plan that identifies the most effective placement of stormwater technologies and management approaches, to reduce water quality impairments from stormwater on a municipality-wide basis.
(6) INCREASED RESILIENCE OF TREATMENT WORKS.—Efforts to assess future risks and vulnerabilities of publicly owned treatment works to manmade or natural disasters, including extreme weather events and sea-level rise, and to carry out measures, on a systemwide or area-wide basis, to increase the resiliency of publicly owned treatment works.

(b) ADMINISTRATION.—The Administrator, in coordination with the States, shall provide municipalities participating in a pilot project under this section the ability to engage in innovative practices, including the ability to unify separate wet weather control efforts under a single permit.
(c) REPORT TO CONGRESS.—Not later than October 1, 2015, the Administrator shall transmit to Congress a report on the results of the pilot projects conducted under this section and their possible application nationwide.

Guidance implementing this section is under development.

Section 5012. Definition of Treatment Works (Section 212)

Section 212(2)(A)
As amended, the FWPCA section 212(2)(A) now states:

(2)(A) The term ‘‘treatment works’’ means any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement section 201 of this act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as

> *standby treatment units and clear well facilities; and acquisition of the land that will be an integral part of the treatment process (including land use for the storage of treated wastewater in land treatment systems prior to land* application*) or will be used for ultimate disposal of residues resulting from such treatment and acquisition of other land, and interests in land, that are necessary for construction.*

The FWPCA section 212(2)(A) expands the definition of treatment works to include land necessary for construction. For treatment works projects funded under section 603(c), the leasing and fee-simple purchase of land, as specified in section 212(2)(A), is eligible. This includes surface and subsurface easements, a place to store equipment and material during construction, land needed to locate eligible projects, and land integral to the treatment process (e.g., land for effluent application or recharge basins).

Section 5013. Funding for Indian Programs (Section 518)

Section 518

As amended, the FWPCA section 518 now states:

> *(c) RESERVATION OF FUNDS—*
>
> *(1) FISCAL YEARS 1987-2014.—The Administrator shall reserve each of fiscal years 1987 through 2014 beginning after September 30, 1986, before allotments to the States under section 1285(e) of this title, one-half of one percent of the sums appropriated under section 1287 of this title.*
>
> *(2) FISCAL YEAR 2015 AND THEREAFTER.—For fiscal year 2015 and each fiscal year thereafter, the Administrator shall reserve, before allotments to the States under section 604(a), not less than 0.5 percent and not more than 2.0 percent of the funds made available to carry out title VI.*
>
> *(3) USE OF FUNDS.—Funds reserved under this subsection shall be available only for grants for projects and activities eligible for assistance under section 603(c) to serve—*
>
> *(A) Indian tribes (as defined in subsection (h));*
>
> *(B) former Indian reservations in Oklahoma (as determined by the Secretary of the Interior); and*
>
> *(C) Native villages (as defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602)).*

Specific guidance on the FWPCA section 518 program that provides funding for tribal wastewater infrastructure will be included in the forthcoming Clean Water Indian Set Aside program guidance.

APPENDIX I

Supplemental Information for Implementing Section 603(d)(1)(E)(i)(III)

Under Section 603(d)(1)(E)(i)(III) of the Federal Water Pollution Control Act, as amended, a recipient of a Clean Water State Revolving Fund (CWSRF) loan for "repair, replacement, or expansion" of a treatment works must certify that it has evaluated and will be implementing water and energy conservation efforts as part of its fiscal sustainability plan. As stated in *Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Titles I, II, V and VI of the Federal Water Pollution Control Act*, the Environmental Protection Agency recommends that the CWSRFs evaluate whether a recipient has selected, to the maximum extent practicable, water and energy efficient approaches in the selected project.

Energy Conservation

One example of how CWSRFs can evaluate the energy portion of the certification is to use information developed by the recipient through energy assessments and audits. Energy assessments help utilities identify the amount of energy being used in various aspects of its operations. Energy audits, in turn, allow utilities to identify and prioritize projects that will result in operational and capital improvements to their infrastructure and operations, cost savings, and other climate-related benefits like reductions in greenhouse gas emissions and the use of renewable energy. EPA encourages CWSRFs to promote the use of these proven and objective methods by CWSRF borrowers.

Energy Use Assessments

A number of tools are available to help utilities conduct energy assessments, including:

- **EPA's Energy Use Assessment Tool—**this is a free Excel-based tool that can be downloaded and is specifically designed for small and medium sized wastewater and water utilities. It enables utilities to analyze their current energy bills and analyze energy consumption for major pieces of equipment. It also allows the utility to develop a printable summary report outlining current energy consumption and costs, generate graphs depicting energy use over time, and highlight areas of potential improvement in energy efficiency. It is available at http://water.epa.gov/infrastructure/sustain/energy_use.cfm.
- **NYSERDA Energy Benchmarking Tool—**The New York State Energy Research and Development Agency (NYSERDA) has developed a tool to help wastewater utilities assess and benchmark their current energy usage, along with a number of other useful self-audit checklists, available at http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Municipal-Water-and-Wastewater.aspx.

Energy Audits

Energy audits can be broadly characterized according to the following three levels:

- Level 1 (Walk Through Audits)
  - Generally last several hours at the facility
  - Usually result in suggestions for low cost improvements in areas like HVAC or lighting
- Level 2 (Energy Survey and Analysis Audits)
  - One or two days in duration, plus additional time to review energy bills, etc.
  - In addition to HVAC/lighting recommendations, usually result in recommendations for equipment upgrades in existing processes (e.g., variable frequency drives, more efficient motors, etc.)
- Level 3 (Process Energy Audit)
  - One or more days at the facility, time to analyze energy bills and pump curves, and time for additional data gathering
  - Audit covers energy use in both existing and alternative processes, potential design modifications, and optimization of processes and equipment
  - Audit suggestions covered detailed operational and process suggestions for both short-term and long-term payback periods as well as capital intensive projects that may require outside funding
  - Most likely to result in significant savings

EPA hosted a webinar in August 2014 describing a number of energy assessment and audit tools available to states and potential recipients of CWSRF funding. The webinar slides are available at http://water.epa.gov/infrastructure/sustain/upload/NRWA-Energy-Audits-for-Small-Utilities-8-4-14.pdf.

Tools available to help wastewater utilities obtain or conduct energy audits include:

- **EPA's Energy Use Assessment Tool**—described in more detail above. Available at http://water.epa.gov/infrastructure/sustain/energy_use.cfm.
- **EPRI Energy Audit Manual for Water and Wastewater Facilities**—available at www.cee1.org/ind/mot-sys/ww/epri-audit.pdf.
- **Maine DEP Sample Audit RFP Language**—designed to help utilities obtain assistance for Level 3 Audits, available at http://www.maine.gov/dep/water/grants/SRF/2014/model_energy_audit_rfp.pdf.
- **The Center for Energy Efficiency (CEE) self-audit checklists**—available at www.cee1.org/ind/mot-sys/ww/epri-audit.pdf.

Both energy assessments and audits are eligible for funding under the CWSRF, and a number of organizations can help utilities with these activities, including:

- State Energy Offices (http://www.naseo.org/members-states)
- Electric utilities serving wastewater utilities (http://www.dsireusa.org/)

- Technical assistance providers like the National Rural Water Association, RCAP, and others
- Department of Energy Industrial Assessment Centers (http://energy.gov/eere/amo/industrial-assessment-centers-iacs).

Water Conservation

Water conservation includes efficiency and reuse efforts to not only conserve our raw water supply, but to also reduce flow to wastewater treatment plants. Therefore, one way CWSRF borrowers can fulfill the water conservation requirement is to consider alternative or complementary projects that result in reduced wastewater flows and therefore reduce a treatment works' capacity needs. There are a number of water conservation projects borrowers can consider, including:

- **Water Reuse—**recycling and water reuse projects that replace potable sources with non-potable sources
  - Gray water, condensate, and wastewater effluent reuse systems
  - Extra treatment costs and distribution pipes associated with water reuse

- **Water Efficient Devices—**installing or retrofitting water efficient devices, such as plumbing fixtures and appliances
  - Shower heads, faucets, toilets, urinals, etc.
  - Education and incentive programs to conserve water such as rebates

- **Water Meters—**installing any type of water meter in a previously unmetered area, or replacing existing broken/malfunctioning water meters or upgrading them if rate structure is based on metered use

- **Water Audits and Conservation Plans—**performing audits of entire utilities or individual users (e.g., large corporations) to assess the amount of water being consumed, the need for retrofits, etc.

Utilities can also fulfill this requirement by considering water conservation projects that are not CWSRF eligible.

Water Efficiency Tools
Tools are readily available to help utilities determine how much water is being conserved, including:

- **EPA's WaterSense Program—**Tools and resources to promote water efficiency are available at http://www.epa.gov/watersense/. States, local governments, and utilities can partner with WaterSense to get access to additional tools and resources to help them design and implement water efficiency and conservation programs. Partnership is free.

- **EPA's Water Conservation Plan Guidelines—**Helpful recommendations to utilities for creating and implementing a Water Conservation Plan, depending on the size of the population served by the utility, available at http://epa.gov/watersense/pubs/guide.html.

- **AWWA Water Audit Software—**Free software specifically designed to help utilities perform water audits, to help quantify and track water losses, and determine areas for improved efficiency. Available at http://www.awwa.org/resources-tools/water-knowledge/water-loss-control.aspx.

- **AWE Water Conservation Tracking Tool—**A tool to evaluate water savings, costs, and benefits of conservation programs for a specific water utility, available to AWE members at http://www.allianceforwaterefficiency.org/tracking-tool.aspx.

- Many states have guidelines and example plans to help utilities develop water conservation plans. For example:

    - **TWDB Water Conservation Plan—**Texas Water Development Board has developed a set of guidelines, tutorials, and example plans to help utilities create a water conservation plan that can be adopted and utilized by different entities. Available at http://www.twdb.texas.gov/conservation/municipal/plans/.

APPENDIX II

Additional Subsidization Projections for Various Annual Appropriations

Annual Appropriation	Additional Subsidization (%)	Additional Subsidization ($)[13]
$1,000,000,000 or Less	0%	$0
$1,100,000,000	10%	$110,000,000
$1,200,000,000	20%	$240,000,000
$1,300,000,000	30%	$390,000,000
$1,400,000,000	30%	$420,000,000
$1,500,000,000	30%	$450,000,000
$1,600,000,000	30%	$480,000,000
$1,700,000,000	30%	$510,000,000
$1,800,000,000	30%	$540,000,000
$1,900,000,000	30%	$570,000,000
$2,000,000,000	30%	$600,000,000

[13] These amounts are approximations. The actual amounts will be less due to the fact that a portion of an annual CWSRF appropriation is used to fund other activities, including direct grants to the tribes and territories.

APPENDIX III

Questions and Answers on the *Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Titles I, II, V, and VI of the Federal Water Pollution Control Act*

Section 602(b)(6): Environmental Review and Davis-Bacon

Q1: Can CWSRFs utilize a Tier II State Environmental Review Process (SERP)?

A1: No. CWSRF projects may no longer use a Tier II State Environmental review process.

Prior to the WRRDA, a "NEPA-like" State environmental review process was required for all section 212 publicly-owned treatment works projects constructed "in whole or in part before FY 1995 with funds directly made available" by a capitalization grant (equivalency projects). A "Tier II" State environmental review process could be used for all other section 212 publicly owned treatment works constructed with SRF assistance.

The WRRDA now applies FWPCA section 511(c)(1) to CWSRF assistance for the construction of treatment works; therefore, a "NEPA-like" State environmental review process is now required for all CWSRF-funded treatment works projects. States may no longer accept a "Tier II" environmental review conducted after October 1, 2014. A "Tier II" environmental review conducted before October 1, 2014 is acceptable.

Q2: Do the Davis Bacon Related Act requirements apply to refinanced projects for the construction of treatment works?

A2: Yes. Davis Bacon Related Act requirements apply to the entirety of construction activities for treatment works that are financed or refinanced by the CWSRF on or after October 30, 2009. If a project began construction prior to October 30, 2009, but is refinanced through an SRF assistance agreement executed on or after October 30, 2009, Davis Bacon Related Act requirements will apply to all construction that occurs on or after October 30, 2009, through completion of construction. There is no retroactive application of Davis Bacon where a refinancing occurs for a project that has completed construction prior to October 30, 2009.

Section 602(b)(9): Generally Accepted Accounting Principles (GAAP)

Q3: Are private entities that receive CWSRF assistance required to maintain project accounts in accordance with GAAP?

A3: The Government Accounting Standards Board (GASB) establishes the accounting standards for governmental entities. GASB standards do not apply to the private sector or individuals. The private sector and individuals would be subject to generally accepted

accounting principles (GAAP), promulgated by the American Institute of Certified Public Accountants (AICPA), as applicable.

Section 602(b)(11): Fund Balance

Q4: How does EPA interpret "fund balance"?

A4: "Fund balance" is interpreted to mean the total federal and state contributions less any CWSRF funds used for administrative expenses and additional subsidization.

Section 602(b)(14): Procurement of A/E Services

Q5: If more than one assistance agreement is issued for the same project, can one assistance agreement be considered an equivalency project while the other assistance agreement is not?

A5: Yes. If more than one assistance agreement is issued for the same project, one or more of the assistance agreements may be "equivalency" while the others are not. For example, assistance, such as a loan, for the construction of a project may be considered an equivalency project while assistance for the planning and design of the same project may be considered a non-equivalency project. However, if one assistance agreement is made for the planning, design, and construction of a project, and that agreement is an "equivalency" project, then the recipient must comply with section 602(b)(14). Furthermore, if one or more assistance agreements for a project are rolled into one assistance agreement, and one of the agreements is an "equivalency" project, then the entire project is an "equivalency" project and the recipient must comply with section 602(b)(14).

Q6: Can cost/price be a selection factor for procurement of A/E services covered by section 602(b)(14)?

A6: No. Cost/price cannot be a selection factor under qualifications based selection procedures. Selection must be based on demonstrated competence and qualification only. As such, cost/price cannot be used as a criterion to evaluate, rank, or select the most highly qualified firm. However, 40 USC 1104 allows an assistance recipient to terminate contract negotiations with the most highly qualified firm if an agreement cannot be reached regarding fair and reasonable compensation. In that case, the assistance recipient must formally terminate negotiations and then undertake negotiations with the next most qualified of the selected firms, continuing the process until an agreement is reached.

Q7: What happens if an applicant/assistance recipient follows qualifications based selection procedures, but does not generate interest from at least three firms?

A7: A procurement of A/E services shall be considered in compliance with section 602(b)(14) even when the Request for Qualification does not generate three responses as long as the applicant/assistance recipient made a good faith effort to publicly advertise and directly solicit participation. On a case by case basis and using best professional judgement, a CWSRF shall determine whether a good faith effort was made.

Q8: Do A/E services contracts procured via design-build procedures satisfy the section 602(b)(14) requirement?

A8: No. The 602(b)(14) requirement pertains to the design portion of a design-bid-build process and is not compatible with a design-build process. Because it would be impossible to fully satisfy the 40 USC 1101 *et. seq.* requirements through a design-build procurement, A/E services procured via the design-build methodology cannot comply with section 602(b)(14) and should not be used as equivalency projects.

Q9: Are CWSRFs required to review borrowers' compliance with section 602(b)(14)? How should CWSRFs document borrowers' compliance?

A9: CWSRFs do not need to review the actual procurement process of A/E services contracts associated with equivalency projects, but the State must obtain a certification from the assistance recipient that those contracts were procured in accordance with 40 USC 1101 *et. seq*. This certification should be placed in the project file.

Section 603(c): Project Eligibilities

Q10: Can the CWSRF provide financial assistance for new eligible project types if the costs for the project were incurred prior to October 1, 2014?

A10: Yes. Project eligibilities that were added by the WRRDA amendments, and not previously eligible in the CWSRF program, are eligible for assistance agreements made after October 1, 2014, even if the cost was incurred prior to October 1, 2014. This includes refinancing and restructuring existing CWSRF assistance agreements.

Q11: How should states determine which projects are treatment works for the purpose of applying Davis Bacon, AIS, and environmental review?

A11: States should use best professional judgement to determine whether or not a project is a treatment work, based upon the definition in section 212 of the Federal Water Pollution Control Act (FWPCA). In cases where a project is determined to not be a treatment work, states should document the decision in the project file along with the reason for the determination.

Q12: Are stormwater management practices that do not provide any form of treatment eligible?

A12: Yes, section 603(c)(5) states that CWSRFs may provide financial assistance "for measures to manage, reduce, treat, or recapture stormwater or subsurface drainage water." Practices such as stormwater pipes, designed to manage, but not treat, stormwater are eligible.

Q13: What types of projects are eligible under Section 603(c)(7)?

A13: Section 603(c)(7) states that each CWSRF may provide financial assistance "for the development and implementation of watershed projects meeting the criteria set forth in section 122." Section 122 provides the following criteria:

- Watershed management of wet weather discharges: The management of municipal combined sewer overflows, sanitary sewer overflows, and stormwater discharges, on an integrated watershed or subwatershed basis for the purpose of demonstrating the effectiveness of a unified wet weather approach.
- Stormwater best management practices: The control of pollutants from municipal separate storm sewer systems for the purpose of demonstrating and determining controls that are cost-effective and that use innovative technologies to manage, reduce, treat, recapture, or reuse municipal stormwater, including techniques that utilize infiltration, evapotranspiration, and reuse of stormwater onsite.
- Watershed partnerships: Efforts of municipalities and property owners to demonstrate cooperative ways to address nonpoint sources of pollution to reduce adverse impacts on water quality.
- Integrated water resource plan: The development of an integrated water resource plan for the coordinated management and protection of surface water, ground water, and stormwater resources on a watershed or subwatershed basis to meet the objectives, goals, and policies of this Act.
- Municipality-wide stormwater management planning: The development of a municipality-wide plan that identifies the most effective placement of stormwater technologies and management approaches, to reduce water quality impairments from stormwater on a municipality-wide basis.
- Increased resilience of treatment works: Efforts to assess future risks and vulnerabilities or publicly owned treatment works to manmade or natural disasters, including extreme weather events and sea-level rise, and to carry out measures, on a systemwide or area-wide basis, to increase the resiliency of publicly owned treatment works.

Q14: What types of projects are eligible under Section 603(c)(11)?

A14: Section 603(c)(11) states that each CWSRF may provide financial assistance "to any qualified nonprofit entity… to provide assistance to owners and operators of small and medium publicly owned treatment works (A) to plan, develop, and obtain financing for

eligible projects under this subsection, including planning, design, and associated preconstruction activities; and (B) to assist such treatment works in achieving compliance with this Act." Assistance may include, but is not limited to, support with project planning (i.e. evaluation of technological alternatives, development of fiscal sustainability plans, etc.), development and initial implementation of training activities, and help with project financing (i.e. rate analysis, etc). Under this eligibility, only technical assistance activities are eligible. Assistance cannot be provided to a nonprofit entity for capital improvements or operations and maintenance at a POTW.

Q15: Can a CWSRF use administrative funds to hire a nonprofit to provide technical assistance to small systems/projects under section 603(c)(11)?

A15: Yes, but CWSRFs will need to include this as a line item in their administrative budget submitted with their capitalization grant application and, if federal funds are used, CWSRFs must comply with the Part 31 procurement regulations when procuring the nonprofit.

Section 603(d)(1)(A)&(B): Loan Terms

Q16: Does the restriction under section 603(d)(1)(A) limiting the terms of CWSRF loans to the lesser of 30 years and the useful life of the project also apply when a CWSRF is buying or refinancing debt obligations under section 603(d)(2)?

A16: Yes. A CWSRF may only purchase debt obligations where the term of the debt is the lesser of 30 years and the useful life of the project. In addition, a CWSRF can only refinance an existing debt obligation to the extent that the term does not exceed the lesser of 30 years and the useful life of the project. For example, if a CWSRF decided to refinance an outstanding 20-year municipal bond, it could only extend the term by either 10 years or to the end of the useful life of the project, whichever is sooner.

Q17: Can a CWSRF provide a loan that exceeds the useful life of a project?

A17: No. Section 603(d)(1)(A) as amended now restricts the terms of CWSRF loans to the lesser of 30 years or the useful life of the project.

Q18: Does the state need to provide documentation of the useful life of the project?

A18: Yes. Documentation of the useful life of the project should be included as part of the project file.

Q19: What impact does the new flexibility to provide up to 30 year loans under section 603(d)(1)(A) have on EPA's draft guidance on the approval of Extended Term Financing (ETF) proposals by CWSRFs?

A19: CWSRFs no longer need to submit a proposal for EPA's approval to offer this type of assistance. In addition, CWSRFs that have previously been approved to offer ETF may now provide this type of assistance to any eligible recipient and are no longer required to report annually to EPA on the financial impacts on the fund.

Section 603(d)(1)(E): Fiscal Sustainability Plans

Q20: To what types of assistance and assistance recipients does the section 603(d)(1)(E) fiscal sustainability planning (FSP) provision apply?

A20: Per the statue, the FSP requirement applies only to loans and only to projects eligible under section 603(c)(1); therefore, FSPs are required for loans involving the repair, replacement, or expansion of a publicly owned treatment works.

Section 603(i): Additional Subsidization and Affordability Criteria

Q21: If a CWSRF chooses not to provide additional subsidization from their capitalization grants are they still required to establish affordability criteria?

A21: Yes. CWSRFs must establish affordability criteria in accordance with WRRDA no later than September 30, 2015. Criteria must be established regardless of whether the CWSRF plans to distribute additional subsidization.

Q22: If a CWSRF chooses not to use affordability criteria to distribute additional subsidization do they still need to develop criteria?

A22: Yes. CWSRFs must establish affordability criteria in accordance with WRRDA no later than September 30, 2015. Criteria must be established regardless of how a CWSRF plans to distribute additional subsidization.

Q23: Will EPA Regions be required to approve CWSRF affordability criteria?

A23: No. The establishment of affordability criteria will be left to the CWSRFs' discretion. Beyond the statutory requirements regarding affordability criteria CWSRFs have the flexibility to establish and weight criteria according to their needs.

Section 608: American Iron and Steel

Q24: Does the American Iron and Steel requirement apply to refinanced projects?

A24: Yes. If a project began construction, financed from a non-SRF source, prior to June 10, 2014, but is refinanced through an SRF assistance agreement executed on or after October 1, 2014, AIS requirements will apply to all construction that occurs on or after June 10, 2014, through completion of construction, unless engineering plans and specifications were approved by a responsible state agency prior to June 10, 2014. For projects funded on or after October 1, 2014, there is no retroactive application of the AIS requirements where a refinancing occurs for a project that has completed construction prior to June 10, 2014.

Q25: Are projects for which plans and specifications were approved prior to the enactment of WRRDA exempt from complying with the American Iron and Steel requirement?

A25: Yes. Section 608(g) of the FWPCA, as amended, specifically exempts projects for which the plans and specifications were approved prior the date of enactment of WRRDA (June 10, 2014). This applies to projects funded on or after October 1, 2014.

General

Q26: How does DBE apply?

A26: DBE is an equivalency requirement. WRRDA does not present any basis to apply DBE differently from what is currently done.

Q27: What are the federal cross-cutters?

A27: Federal cross-cutters are requirements of other federal laws and Executive Orders that apply in federal financial assistance programs. In the CWSRF program, the cross-cutting requirements only apply to projects and activities receiving funds "directly made available by" capitalization grants. However, all CWSRF projects and activities are subject to federal anti-discrimination laws, including Civil Rights Act of 1964, section 504 of the Rehabilitation Act of 1973, section 13 of the Federal Water Pollution Control Act Amendments of 1972 and Executive Order 11246 on affirmative action in federal contracting. Below is a list of the current cross-cutters. This list can change by revisions to existing laws and/or the enactment of new laws.

Archeological and Historic Preservation Act
Clean Air Act
Coastal Barrier Resources Act
Coastal Zone Management Act
Endangered Species Act
Protection and Enhancement of the Cultural Environment
Floodplain Management
Protection of Wetlands
Farmland Protection Policy Act

Fish and Wildlife Coordination Act
National Historic Preservation Act
Safe Drinking Water Act
Wild and Scenic Rivers Act
Demonstration Cities and Metropolitan Development Act
Women's and Minority Business Enterprise
Uniform Relocation and Real Property Acquisition Policies Act
Debarment and Suspension
Migratory Bird Act
Magnuson-Stevens Act – Essential Fish Habitat
Environmental Justice

Q28: Can federal cross-cutters be banked?

A28: No, federal cross-cutters cannot be banked. Cross-cutters are requirements of other federal laws and Executive Orders. EPA does not have the authority to allow cross-cutters to be banked. Also, the Federal Funding Accountability and Transparency Act (FFATA) of 2010 requires SRF programs to report on recipients that receive federal funds into the FFATA reporting systems. In the SRF program, projects that receive federal funds or an amount equal to the capitalization grant (equivalency), are considered federal projects and all federal projects must comply with federal cross-cutters.

APPENDIX IV

Supplemental Information for Implementing Section 602(b)(13)

Under Section 602(b)(13) of the Federal Water Pollution Control Act, as amended, any municipality or intermunicipal, interstate, or State agency that is a recipient of Clean Water State Revolving Fund (CWSRF) assistance must certify that it has studied and evaluated the cost and effectiveness of the proposed project or activity and that it has selected, to the maximum extent practicable, a project or activity that maximizes the potential for water and energy conservation, as appropriate. As stated in *Interpretive Guidance for Certain Amendments in the Water Resources Reform and Development Act to Title VI of the Federal Water Pollution Control Act*, each CWSRF must ensure that applicants complete a cost and effectiveness analysis that meets the minimum statutory requirements. It is further recommended that each CWSRF program develop specific criteria and/or guidance for an analysis that meets these minimum requirements. This appendix contains examples, resources, and background information on some possible approaches to this type of analysis.[14]

Introduction

Analyzing the cost and effectiveness of a proposed project or activity will usually involve comparing a set of alternatives[15] that achieve a given water quality objective or address a given need based on a common set of monetary and nonmonetary factors. Monetary factors are often evaluated using a present worth analysis. Nonmonetary factors are influenced by National, Regional, State, and/or local considerations and priorities and may include climate-related considerations, stormwater management priorities, specific contaminants of concern, socioeconomic factors, and others.

Monetary Analysis

Present worth analysis offers a standard method for calculating and comparing the costs over time of alternative approaches, including capital, operations and maintenance (O&M) costs, and the salvage value of the system/asset at the end of the projected useful life. Other costs may also be relevant, such as mitigation costs and cost savings associated with energy and water efficiency.

One State that has already established guidance for this type of analysis is Oregon. Oregon's guidelines for facilities planning[16] provide a list of the elements found in a comprehensive life cycle cost present worth analysis (adapted):

1. The analysis converts all costs to present day dollars;

---

[14] None of the examples, resources, or background information should be interpreted as endorsing or requiring a particular approach.
[15] Generally, at least three mutually exclusive alternatives, including a "do nothing" alternative, are considered. Mutually exclusive alternatives are independent alternatives to a proposed project.
[16] http://www.deq.state.or.us/wq/loans/docs/FacilitiesPlansGuidelines.pdf

2. The planning period is normally 20 years, but may be any period determined reasonable by the engineer and concurred on by the State or federal agency, particularly if the useful life of the project or the loan terms vary;
3. The discount rate is from an accepted authority;
4. The total capital cost includes both construction plus non-construction costs;
5. Annual O&M costs are converted to present day dollars using a uniform series present worth (USPW) calculation;
6. The salvage value of the constructed project is estimated using the anticipated life expectancy of the constructed items using straight line depreciation calculated at the end of the planning period and converted to present day dollars;
7. The present worth of the salvage value is subtracted from the present worth costs;
8. The net present value (NPV) is calculated for each technically feasible alternative as the sum of the capital cost (C) plus the present worth of the uniform series of annual O&M (USPW (O&M)) costs minus the single payment present worth of the salvage value (SPPW(S)):

$$NPV = C + USPW\ (O\&M) - SPPW\ (S)$$

9. A table of the capital cost, annual O&M cost, salvage value, present worth of each of these values, and the NPV is developed for each alternative;
10. Short lived asset costs should also be included in the life cycle cost analysis if determined appropriate by the consulting engineer or State. Life cycles of short-lived assets can be tailored to the facilities being constructed and be based on generally accepted design life. Different features in the system may have different life cycles.

Pennsylvania's *Handbook for PENNVEST Wastewater Projects*[17] contains example present worth analyses for wastewater treatment plant, decentralized system, and land application projects.

Nonmonetary Factors

Nonmonetary factors are used to analyze each alternative's maximization of positive and/or minimization of negative technical, environmental, and socioeconomic outcomes. Such an analysis can also incorporate National, Regional, State, and local objectives. Examples of some nonmonetary factors are listed below.[18] Not all of these will apply to every State, project type, or community; this list is intended to provide ideas only.

National, Regional, State, or Local Priorities

- Current National priorities defined by the U.S. EPA, such as sustainability and climate resilience
- Region-specific considerations, including water quality objectives/initiatives
- Other State-specific or local priorities
    - Consolidation/regionalization
    - Contaminants of concern

[17] http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-47480/381-5511-113.pdf
[18] Some nonmonetary factors, such as energy savings through conservation, also have a monetary component.

Technical Factors

- Project location and physical aspects
- Project reliability
- Project feasibility and operability
    - Presence of qualified personnel to operate and maintain infrastructure
    - Flexibility and adaptability to future conditions and demographics
    - Project's compatibility with current infrastructure

Environmental Factors

- Opportunities for water conservation, reuse, and/or recapture
- Opportunities for energy conservation, including alternative energy sources
- Opportunities to recover and recycle other resources (e.g., nutrients)
- Use of green infrastructure
- Other environmental impacts, including:
    - Land use impacts
    - Impacts to wildlife and/or habitat
    - Impacts to wetlands or other critical water bodies
    - Impacts on air/water quality

Socioeconomic Factors

- Specific industries using or served by the infrastructure or project type
- Local trends and/or demographics affecting need or demand
- Environmental justice considerations
- Project acceptability/affordability

Other Factors

- Other factors considered relevant by the State

Integrating Cost and Effectiveness

There is no requirement that communities select the least-cost alternative. In developing specific criteria and/or guidance for evaluating cost and effectiveness, CWSRF programs should identify how much emphasis is placed on monetary versus nonmonetary factors. Given the water and energy conservation provision in section 602(b)(13)(B), these specific considerations should be emphasized in the cost and effectiveness analysis (*see Appendix I for energy and water conservation resources*).

Integrating cost and effectiveness can be approached qualitatively or quantitatively, or through a combination of both. Some ideas for each approach are provided below.

Qualitative Assessment

While an analysis of monetary factors will always be quantitative, it will not always be possible or desirable to quantify nonmonetary factors. Therefore, an integrative analysis of monetary and nonmonetary factors is necessary. A qualitative assessment might involve a cost summary of the

alternatives plus a description of the nonmonetary factors, including significance and impact on project selection.

Quantitative Assessment

Nonmonetary factors can be evaluated using a numerical scoring system that assigns a maximum point value to each nonmonetary factor and then scoring each alternative accordingly. Cost could be evaluated within the same scoring system or separately. An overall score could be calculated for each alternative and compared to the other alternatives.

2014 Final Oregon Nonpoint Source Management Program Plan

Watershed Management
811 SW 6th Avenue
Portland, OR 97204
Phone: 503-229-5696
800-452-4011
Fax: 503-229-6037
www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

State of Oregon
Department of Environmental Quality

Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
1-800-452-4011
www.oregon.gov/deq

Alternative formats (Braille, large type) of this document can be made available.
Contact DEQ at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696.

Table of Contents

Tables

Figures

1. Executive Summary

The Oregon Department of Environmental Quality (DEQ) is updating Oregon's Nonpoint Source Management Program Plan (Oregon NPS Plan) because EPA now requires each state's NPS Plan to be updated every five years and submitted for EPA's review. DEQ's NPS Plan was last updated in 2000. The NPS Plan describes the federal and statutory basis of the Program.

The primary purpose of Oregon's NPS Management Program (Oregon NPS Program) and plan is to develop and implement strategies to protect, prevent, control, and eliminate water pollution from nonpoint sources in
"Waters of the state" to meet water quality standards and TMDL load allocations. Other purposes of the plan are to describe the goals, priorities, objectives and strategies to be used for protecting, preventing, controlling and eliminating pollution of Oregon's waters from NPS. The NPS Plan represents an approach for Oregon to continue to plan, implement and prioritize actions to address NPS problems on a statewide basis.

The Oregon NPS Plan is being updated to describe how the state's NPS Management Program includes measures needed to meet federal, tribal nations, and state surface and groundwater quality standards and TMDL load allocations.

In addition, the plan describes outcomes and key actions expected over the five-year Oregon NPS Plan period. Some actions occur every year, others have fixed target dates, and some occur every five years, such as updates to the DEQ memorandums of understandings. Some examples of annual milestones and success stories include developing an annual Section 319-grant work plan, implementing projects in various high-priority impaired watersheds, and describing a number of success stories in Oregon's NPS Annual Report submitted to EPA.

State programs to protect or improve Oregon's water quality date back to 1938. Oregon's point source permit program was the second approved state program in the Country (September 26, 1973). More recently, the state also adopted another landmark program: in 1996, the state adopted the Oregon Plan for Salmon and Watersheds to focus work on watershed restoration and recovery of endangered salmonid populations.

The water quality program's mission is to protect and improve Oregon's water quality. Protecting Oregon's rivers, streams, lakes, estuaries and groundwater quality keeps these waters safe for multiple beneficial uses such as drinking water, fish and aquatic wildlife habitat, recreation and irrigation.

This is accomplished by developing and implementing water quality standards and clean water plans, regulating wastewater treatment systems and industrial dischargers, collecting and evaluating water quality data, providing grants and technical assistance to reduce nonpoint pollution sources, and providing loans to communities to prevent or mitigate water pollution.

The availability of clean and healthy water is critical to Oregon's environment and economy. The Water Quality Program coordinates multiple approaches to achieve these results. The state water quality program can be divided into the ten interdependent program elements listed below:

1. Water quality standards that establish beneficial uses for the waterbody as well as maximum levels of pollutants that can be in the waterbody without adversely affecting the designated use.
2. Permits for point sources, including stormwater, discharging pollutants to waters of the state.

3. Water Quality 401-Certifications for hydroelectric projects, dredge, and fill activities.
4. Biennial assessment of State waters to identify those waters that are not meeting water quality standards.
5. Pretreatment, Sewage Sludge Management, and On-Site System programs to ensure that water quality is not compromised by other land-based activities.
6. Development of TMDLs, which are limits on pollution, intended to bring rivers, lakes, and streams into compliance with water quality standards and would include allocations too and strategies for point and nonpoint sources of pollution.
7. Cost-share grants and low interest loan programs to address municipal sewage treatment and disposal needs, and activities to reduce or eliminate nonpoint sources of pollution.
8. Information and education outreach activities to create awareness by the public about the importance of NPS pollution and its impact on groundwater and surface water quality.
9. Facility or activity-specific compliance assessment, a pilot NPS effectiveness monitoring effort, technical assistance, and enforcement as warranted ensuring State water quality requirements are met.

The water quality program has an increased emphasis on the "watershed approach" as a way to better identify and address high priority water quality issues in a basin or region. The watershed approach combines the expertise of DEQ's 17 water quality sub-programs to produce basin-based assessments that are data-driven and contain quantitative elements that describe water quality conditions and include recommendations for actions that DEQ and others can take to improve water quality.

DEQ uses these assessments to work with local stakeholders, such as communities, watershed councils and conservation districts, as well as local, state and federal agencies, to find smart solutions to local water quality issues. This effort aligns with EPA's national strategy to Improve Water Quality on a Watershed Basis in the 2012 National Program Manager's guidance.

Annual milestones proposed in the draft Oregon NPS Plan are meant to be general enough to accommodate the long-term Oregon NPS Management Program planning goals while being specific enough for the state to track progress and for EPA to determine satisfactory progress in accordance with Section 319 of the federal Clean Water Act.

The Oregon NPS Management Program represents a unified approach reflecting the fact that Oregon collaborates, implements and prioritize actions to address nonpoint pollution problems on a watershed basis. One of Oregon's primary goals is to strengthen its working partnerships and linkages with appropriate state, interstate, tribal, regional and local entities (including conservation districts), private sector groups, citizens groups, and federal agencies.

2. Introduction

The federal Clean Water Act (CWA) requires states to develop a program to protect the quality of water resources from the adverse effects of NPS water pollution. NPS pollution is water pollution that does not originate from regulated point sources and occurs when rainfall and snow melt flows off the land, roads, buildings, and other features of the landscape. This diffuse runoff carries pollutants into drainage ditches, lakes, rivers, streams, wetlands, bays, and aquifers and other waters of the state.

Common NPS pollutants include, but are not limited to:

- Temperature

- Fertilizers, herbicides, and insecticides
- Oil, grease, and toxic chemicals
- Sediment;
- Nutrients, and;
- Bacteria

2.1. Update Oregon's NPS Plan

EPA issued guidance, *Section 319 Program Guidance: Key Components of an Effective State Nonpoint Source Management Program November 2012* http://water.epa.gov/polwaste/nps/upload/key_components_2012.pdf directing all states to update their NPS program plans. This 2012 guidance is an update of previous EPA guidance and contains a description of the eight key components that characterize an effective state NPS management program.

This plan updates Oregon's *October 2000 Water Quality Nonpoint Source Control Management Program Plan* http://www.deq.state.or.us/wq/nonpoint/docs/plan/plan.pdf. EPA is requiring an update of Oregon's 2000 Plan since many EPA and state rules, regulations, and programs have changed over the past fifteen years. An update of Oregon NPS Plan reflects current and planned goals, priorities, actions and milestones for the next five years. This five-year plan then provides the basis for tracking annual progress under the program.

EPA expects all states to review and, as appropriate, revise and update their NPS Management Program Plan every five years. An updated, comprehensive program is critical to the states and EPA. It allows EPA and Oregon to ensure that section 319 funding, technical support and other resources are directed in an effective and efficient manner.

2.2. Oregon NPS Plan Goals, Priorities, Objectives and Strategies

The Oregon Nonpoint Source Management Plan describes the goals, priorities, objectives, and strategies of the Oregon Nonpoint Source Program (NPS Management Program) used to achieve the mission to protect, prevent, control, and eliminate water pollution from nonpoint sources in "waters of the state" to meet water quality standards and Total Maximum Daily Load (TMDL) allocations.

The Oregon NPS Plan includes measures needed to meet federal and state surface and groundwater water quality standards, and established Total Maximum Daily Load allocations for water bodies designated as water quality limited on the state's 303(d) list of impaired waters.

To help protect the quality of our nation's water resources, and to strengthen EPA's implementation of its responsibilities under the Clean Water Act's section 319 nonpoint source pollution control program, the Administrator of EPA should, in revising section 319 guidelines to states, and in addition to existing statutorily required reporting measures, emphasize measures that (1) more accurately reflect the overall health of targeted water bodies (e.g., the number, kind, and condition of living organisms) and (2) demonstrate states' focus on protecting high-quality water bodies, where appropriate.

2.3 Short Term Goal of Oregon NPS Plan

The short-term goal of the NPS Management Program is to reduce NPS pollutants in water bodies not meeting water quality standards and assure continued attainment for water bodies meeting water quality standards. The DEQ NPS Management Program integrates with other relevant programs to restore and protect water quality, aligning priority setting processes and resources to increase efficiency and environmental results.

2.4 Long Term Goals of Oregon NPS Plan

The state's long-term goals in the Oregon NPS Plan are strategically focused and designed to achieve and maintain water quality standards and to maximize water quality benefits of the Oregon's NPS Management Program. The shorter-term objectives consist of activities, with annual milestones, designed to demonstrate reasonable progress toward accomplishing long-term goals as expeditiously as possible.

Since the Oregon NPS Plan is a long-term planning document, the milestones may be more general than are expected in an Oregon Nonpoint Source Pollution Program Annual Report. The NPS Annual report will report any progress on meeting milestones agreed upon with EPA in the annual PPA work plans. Since this plan covers five years with annual milestones, commitments/milestones made in this Plan are specific enough for the state to track progress and for EPA to determine satisfactory progress in accordance with section 319(h)(8). Annual milestones in state agencies' NPS work plans describe key actions expected each year, e.g., delivering a certain number of WQ-10 success stories or implementing projects in a certain number of high priority impaired watersheds.

The DEQ's NPS Management Program supports and promotes collaborative efforts of state, federal, and local agencies as well as other entities to achieve NPS goals. The State of Oregon is committed to implementing a program that focuses on the attainment of water quality goals by using a balanced approach of education, research, technical assistance, financial incentives, and regulation. These programs include the management or regulation of forestry, agriculture, grazing, transportation, recreation, hydromodification, marinas, urban development, land use planning, fish and wildlife habitat, riparian and wetlands protection/restoration, public education, water resources, and other activities that affect the quality of the state's waters.

2.5 DEQ's Responsibilities

DEQ has the responsibility of overseeing and implementing the State's NPS Management Program. The NPS Management Program is implemented by coordinating with many local, states and federal agencies and organizations throughout the State of Oregon. The NPS Management Program uses a combination of federal and state authority for implementing statewide, programmatic, and geographic priorities, objectives, and strategies to achieve the short- and long-term goals of the NPS Management Program. The NPS Management Program tracks and reports on administrative outputs and water quality outcomes from these activities in Oregon's NPS Annual Report submitted to EPA annually as a requirement of section 319.

2.6 Who is Responsible for Implementing the Oregon NPS Plan?

Responsibility for managing water resources in Oregon is shared among state, interstate, tribal, regional and local entities (including conservation districts), private sector groups, citizens groups, individual citizens and federal agencies. The program relies on a combination of state and federal laws and local ordinances. Plan implementation relies on the collective effort of the agencies and partners listed below.

Both the Oregon Departments of Agriculture and Forestry have a significant role in addressing nonpoint source pollution from agriculture and private and state forestry land uses. For federal forestry lands, the U.S. Forest Service and Bureau of Land Management implement many restoration and protection management practices of the Oregon NPS plan. Implementation within urban areas involves the many cities, counties and applicable districts as noted in the Oregon NPS Plan.

2.7 Need for Action

DEQ as well as other agencies and entities conduct water quality monitoring and analysis, develop and use technical water quality/Geographic Information System (GIS) data with watershed partners. It uses a balanced approach of education, research, technical assistance, financial incentives and regulation.

DEQ and partners such as the Oregon Departments of Land Conservation and Development, Agriculture and Forestry, as well as federal agencies, also develop and implement pollution control and reduction strategies for a wide range of activities that affect the state's water quality.

2.8. Clean Water Act Section 319 Funding

Another key component of Oregon's NPS Management Program is the coordination of monies that funds DEQ's NPS Management Program staff and the NPS Grant Program. The 319-grant program funds cooperating entities for activities that address NPS emphasizing watershed protection and enhancement, watershed restoration, voluntary stewardship, and partnerships among watershed stakeholders.

The program also integrates with other relevant programs to restore and protect water quality. It aligns priority-setting processes and resources to increase efficiency and environmental results. This includes alignment with significant match funding provided through the Oregon Watershed Enhancement Board (OWEB)'s parallel granting programs.

One of Oregon's primary goals is to strengthen its working partnerships and linkages to federal, state, interstate, tribal, regional and local entities (including conservation districts), private sector groups, and citizens groups. The NPS Plan identifies the needed collaboration, coordination, and communication for its implementation to address NPS pollution. The NPS Plan annual milestones are tracked and reported in required annual reports to EPA.

2.9 Public Review of Draft Oregon NPS Plan

DEQ staff worked with applicable state and federal agencies in development of the NPS Plan. DEQ consulted with ODF and ODA on forest and agriculture stakeholder outreach. EPA requested DEQ to conduct a 30-day informal public review and comment period on the Oregon NPS Plan. The public notice was issued on Monday, August 4, 2014. Public comments were due at 5 p.m. Tuesday, September 2, 2014. A 30-day public comment and notice for Oregon Tribes was also conducted by DEQ and EPA.EPA approval of Oregon's NPS Plan will help ensure DEQ continues to receive annual 319 funding from EPA that funds DEQ staff and projects.

2.10 Oregon NPS Plan Update Requirements

The following EPA Section 319 Program Guidance reporting guidelines and the Oregon NPS Management Program Plan contains the following required elements:

Description of NPS Management Program

- Partnerships: Federal Agencies, State Agencies, and Local Partners
- DEQ Memorandum of Understandings and Memorandum of Agreements
- Baseline Regulatory Statutes
    - Water Quality Standards
    - Total Maximum Daily Loads (TMDLs) and Water Quality Management Plans (WQMP)
    - General Permits for Pesticides
- Other Management Programs that Address NPS
    - Watershed Approach Basin Reports
    - Water Quality Basin Status/Action Plans
    - Cross Program Efforts to Address Toxic Chemicals
    - Drinking Water Protection
    - Groundwater Protection and Groundwater Management Areas (GWMAs)
    - Coastal Zone Act Reauthorization Amendments (CZARA), Coastal Zone NPS Management Program
    - Incorporate EPA Watershed Plans Elements into TMDLs and Watershed Approach Basin Reports
- Management of NPS by Land Use
    - Agricultural Lands
    - State and Private Forest Lands
    - Federal Forest Lands
    - Federal Grazing Lands
    - Urban and Rural Residential
- Oregon 319 Grant Program
- Other NPS Funding Sources
    - Clean Water State Revolving Fund
    - Drinking Water State Revolving Loan Fund (DWSRLF)
    - OWEB
    - Pacific Coastal Salmon Recovery Fund (PCSRF)
- Assessment of water quality and landscape condition
- Success Stories/Environmental Improvement (WQ-10) and (SP-12) Projects and Other

Oregon's NPS Management Program includes all *"Water or Waters of the State"* as defined by ORS 468B.005 (10) **Definitions for water pollution control laws.** *As used in the laws relating to water pollution, unless the context requires otherwise: (10) "Water" or "the waters of the state" include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. [Formerly 449.075 and then 468.700; 2003 c.469 §1]*

The Oregon NPS Management Program strategy involves baseline water quality management programs and regulatory, voluntary, financial, and technical assistance approaches to achieve a balanced program. NPS pollution is managed through assessment, planning, implementation, and education. The DEQ has established goals and objectives for guiding and tracking the progress of NPS management in Oregon. These goals and objectives are located in this plan, PPG work plans, and MOAs with other agencies.

Success in achieving the goals and objectives are reported annually in the Oregon NPS Pollution Program Annual Report, which is submitted to the EPA in accordance with the federal CWA.

Implementation of the Oregon NPS Management Program involves many partnerships. With the extent and variety of NPS issues across the state, cooperation across political boundaries is essential. Many local, regional, state, and federal agencies and entities play an integral part in managing NPS pollution, especially at the watershed level. They provide information about local concerns and infrastructure and build support for the kind of pollution controls that are necessary to prevent and reduce NPS pollution.

In addition, the many local, regional, state, and federal agencies and entities are vital partners in working with landowners to implement best management practices (BMPs) that prevent and abate urban and rural residential, agricultural, and forestry NPS water pollution. By establishing coordinated frameworks to share information and resources, the state can more effectively focus its water quality protection efforts.

The Oregon NPS Plan meets the requirements of the federal Clean Water Act (federal CWA) (33 USC 1329) and the U.S. Environmental Protection Agency's (EPA) *Section 319 Program Guidance: Key Components of an Effective State Nonpoint Source Management Program November 2012* http://water.epa.gov/polwaste/nps/upload/key_components_2012.pdf.

2.11 EPA's NPS Management Plan Eight (8) Key Components

Below is a cross-reference between EPA's NPS Management Plan eight (8) key components that the state's NPS Plan should address and how and where they are addressed in Oregon's NPS Plan:

2.11.1 EPA KEY COMPONENT #1

The first Key Component is: The state program contains explicit short- and long-term goals, objectives and strategies to restore and protect surface water and ground water, as appropriate.

a. CWA 303(d) New Program Vision

The Clean Water Act Section 303(d) Program provides for effective integration of implementation efforts to restore and protect the nation's aquatic resources, where the nation's waters are assessed, restoration and protection objectives are systematically prioritized, and TMDLs and alternative approaches are adaptively implemented to achieve water quality goals with the collaboration of states, federal agencies, tribes, stakeholders, and the public.

Engagement Goal: States actively engage the public and other stakeholders to improve and protect water quality, as demonstrated by documented, inclusive, transparent, and consistent communication; requesting and sharing feedback on proposed approaches; and enhanced understanding of program objectives.

Integration Goal: States identify and coordinate implementation of key point source and nonpoint source control actions that foster effective integration across CWA programs, other statutory programs (e.g., CERCLA, RCRA, SDWA, CAA), and the water quality efforts of other Federal departments and agencies (e.g., Agriculture, Interior, Commerce) to achieve the water quality goals of each state.

Alternatives Goal: States use alternative approaches, in addition to TMDLs, that incorporate adaptive management and are tailored to specific circumstances where such approaches are better suited to implement priority watershed or water actions that achieve the water quality goals of each state, including identifying and reducing nonpoint sources of pollution.

Protection Goal: In addition to the traditional TMDL development priorities and schedules for waters in need of restoration, States identify protection planning priorities and approaches along with schedules to help prevent impairments in healthy waters, in a manner consistent with each State's systematic prioritization.

Assessment Goal: States identify the extent of healthy and CWA Section 303(d) impaired waters in each State's priority watersheds or waters through site-specific assessment.

Prioritization Goal: States review, systematically prioritize, and report priority watersheds or waters for restoration and protection to facilitate State strategic planning for achieving water quality goals.

Oregon's program contains explicit short- and long-term goals, objectives, and activities (including financial and technical assistance) to restore and protect Oregon's surface water and ground water.

b. Sections 3.1, 3 Table 1, 3.3.4, and 4

NPS Management Plan addresses EPA Key component #1 in Sections 3 through 7, particularly Sections 3.1 General Description of NPS Management Program, Section 3, Table 1 Oregon NPS Plan Outcomes And Key Actions, Section 3.3.4 DEQ Memorandum of Understandings and Memorandum of Agreements, and Section 4 Oregon's Management of NPS by Land Use all contain descriptions of the plan's short and long-term goals, objectives, and activities to restore and protect Oregon's waters of the state, both surface and ground water.

EPA KEY COMPONENT #2

The second Key Component is: The state strengthens its working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts), private sector groups, citizens groups, and federal agencies.

a. Sections 3.2, 3.4, and 5

The NPS Management Plan addresses EPA Key Component #2 in Sections 3 through 6, particularly Section 3.2 Partnerships which includes descriptions of the partners for the Oregon NPS Management Plan to be effective in meeting the Oregon NPS Plan priorities and objectives. Sections 3.4 Other Management Programs and Section 5 Oregon 319 Grant Program are important sections that describe the programs available from local, state, and federal, watershed councils and other funding partners, funding is a necessary part for implementing the NPS Plan.

EPA KEY COMPONENT #3

The third Key Component is: The state uses a combination of statewide programs and on-the-ground projects to achieve water quality benefits; efforts are well-integrated with other relevant state and federal programs. ***Sections 3.1, 3.3, and 4***

The NPS Management Plan addresses EPA Key Component #3 in Sections 3 through 6, particularly 3.1 General Description of NPS Management Program, 3.3 Baseline Regulatory Statutes, Table 2 Oregon NPS Plan Outcomes And Key Actions, 3.3 Baseline Regulatory Statutes, and Section 4 Oregon's Management of NPS by Land Use describe the legal authorities and requirements, both regulatory and non-regulatory programs, that are well integrated to protect, prevent, control, and eliminate NPS pollution. These section highlight how Oregon's NPS Management Program uses many state and federal regulatory and non-regulatory programs and existing baseline requirements that are well integrated to protect, prevent, control, and eliminate NPS pollution.

EPA KEY COMPONENT #4

The fourth EPA Key Component is: The state program describes how resources will be allocated between (a) abating known water quality impairments from NPS pollution and (b) protecting threatened and high quality waters from significant threats caused by present and future NPS impacts.
Sections 3.4, 4.1.1.2, and 5

The NPS Management Plan addresses EPA Key Component #4 in Sections 3 through 6, particularly Sections 3.4 Other Management Programs, Section 4.1.1.2 Water Quality Management Program Objectives and Strategies DEQ's describe ongoing efforts to provide protection of high quality waters that are prioritized locally through the Basin Planning process.

Oregon has in its water quality standards the Three Basin Rule (OAR340-41-0350) that was adopted to preserve or improve the existing high quality water. The DEQ Source Water Protection Program works to protect source water used for public water supplies (Section 3.4.3). In addition, protection is considered during the Oregon 319 Grant Program (Section 5) that describes how resources, both programmatic and project actions, are allocated between (a) abating known water quality impairments from NPS pollution and (b) protecting threatened and high quality waters from significant threats caused by present and future NPS impacts that are needed to complete and implement the State of Oregon NPS Plan.

EPA KEY COMPONENT #5

The fifth EPA Key Component is: The state program identifies waters and watersheds impaired by NPS pollution as well as priority unimpaired waters for protection. The state establishes a process to assign

priority and to progressively address identified watersheds by conducting more detailed watershed assessments, developing watershed-based plans and implementing the plans.

Sections 3.3.1, 3.3.3, 3.4, 3.4.1, 5.1, and 6

The NPS Management Plan addresses EPA Key Component #5 in Sections 3 through 6, particularly Section 3.3.1, Integrated Report [303(d) and 305(b)] requires DEQ to assess water quality and report to EPA on the condition of Oregon's waters and identifying waters that do not meet and those that do meet water quality standards every two years. DEQ uses the list of impaired waters to set priorities for TMDL development which is used for setting priorities for restoration activities. In addition, the Basin Reports were used for identifying priorities for unimpaired watersheds (Section 3.4.1).

Sections 3.3.3 Total Maximum Daily Loads (TMDLs) and Water Quality Management Plans and 3.4 Other Management Programs that address NPS identify the pollution management programs, strategies, and resources that are currently in place or that are needed to minimize or prevent current or future NPS pollution effects.

New EPA guidance requires the following new information to be included in the TMDL documents:

- ("…as a condition of using § 319 funds to develop TMDLs, the state will include the following supplemental information to support the load allocations specified in the TMDL:
- An identification of total NPS existing loads and total NPS load reductions necessary to meet water quality standards, by source type;
- A detailed identification of the causes and sources of NPS pollution by source type to be addressed in order to achieve the load reductions specified in the TMDL (e.g., acres of various row crops, number and size of animal feedlots, acres and density of residential areas); and
- An analysis of the NPS management measures by source type expected to be implemented to achieve the necessary load reductions, with the recognition that adaptive management may be necessary during implementation.).

Section 3.4.1 Watershed Approach Basin Reports are developed by DEQ so that the action plans are used to determine basin priorities and to allocate resources (http://www.deq.state.or.us/wq/watershed/watershed.htm).

Sections 5.1 Federal CWA Section 319(h) NPS Grant Funding and Section 6 Other NPS Funding Sources. The NPS Grant Program is administered by DEQ to provide funding as grants to cooperating entities for activities. DEQ Basin Coordinators work with other DEQ NPS staff and local partners for identifying NPS priorities for restoration and protection that are used for the 319 Grant RFP (Section 5) These 319 Grant RFP priorities address the goals, objectives, and overall strategy to further develop its own and other agencies' or individual's capabilities, emphasizing watershed protection and enhancement, voluntary stewardship, and partnerships between all watershed stakeholders. DEQ works with federal, state, tribal, local and private partners to assist in program development and implementation beyond DEQ's regulatory jurisdiction and financial abilities.

EPA KEY COMPONENT #6

The sixth EPA Key Component is: the state implements all program components required by section 319(b) of the Clean Water Act, and establishes strategic approaches and adaptive management to achieve and maintain water quality standards as expeditiously as practicable. The state reviews and upgrades

program components as appropriate. The state program includes a mix of regulatory, non-regulatory, financial and technical assistance, as needed.

Sections 3.1, 3.2, 3.3, 4, 3.4, and 5

The NPS Management Plan addresses EPA Key Component #6 in Sections 3 through 6, such as Section 3.1 General Description of NPS Management Program and Section 3.2 Partnerships which includes descriptions of the partners that are included in the process in order to carry out the Oregon NPS Plan objective of meeting state and federal water quality standards and TMDL load allocations. Sections 3.4 Other Management Programs, 3.3 Baseline Regulatory Statutes, Table 2 Oregon NPS Plan Outcomes and Key Actions, and Section 4 Oregon's Management of NPS by Land Use describe the legal authorities and requirements, both regulatory and non-regulatory programs, which are well integrated to protect, prevent, control, and eliminate NPS pollution. Section 4 and Section 5 Oregon 319 Grant Program are important sections that describe the other management programs available by local, state, and federal, watershed councils and other funding partners necessary to ensure the plan includes all the programmatic and project funding sources that are needed to complete and implement the NPS Plan.

EPA KEY COMPONENT #7

The seventh EPA Key Component is: the state manages and implements its NPS Management Program efficiently and effectively, including necessary financial management.

Sections 3.1, 5, 5.4

The NPS Plan addresses EPA Key Component #7 in Section 3.1 General Description of NPS Management Program describes the state process for managing and implementing its NPS Management Program efficiently and effectively, including necessary financial management. Section 5 Oregon 319 Grant Program manages the Section 319 funds so that they are primarily used for organizational capacity development and implementation activities, including monitoring used to support TMDL development, implementation and measuring progress towards achieving TMDL allocations. It is critical for the 319 Grant Program to be implemented strategically and efficiently. Oregon's priorities are to streamline grant administration and reporting, and to allocate funds strategically.

Section 5.4 EPA Grants Reporting and Tracking System – GRTS is the primary tool for management and oversight of the EPA's NPS pollution control program. DEQ reports annually to EPA on the progress in meeting milestones, including estimates of NPS pollutant load reductions and improvements to water quality achieved by implementing NPS pollution control practices.

EPA KEY COMPONENT #8

The eighth EPA Key Component is: the state reviews and evaluates its NPS Management Program using environmental and functional measures of success, and revises its NPS Management Program at least every five years.

Section 3.1 and 5.1

The NPS Plan addresses EPA Key Component #8 in Section 3.1 General Description of NPS Management Program describes how Oregon prepares annual reports that document the activities and accomplishments of the State of Oregon in general and the Oregon DEQ in particular regarding the

administration of Oregon's NPS Management Program and reviews and evaluates its program using environmental and functional measures of success, This information will be used to updates the NPS Management Program Plan every five years. Section 5.1 Federal CWA Section 319(h) NPS Grant Funding describes the use of the Annual NPS Report to track yearly progress of implementation of the approved NPS Management Program and prepare annual nitrogen, phosphorus, and sedimentation-siltation NPS pollutant load reduction estimates for NPS projects and include in Oregon's Annual NPS Program Update Report. In addition, the Integrated Report is used for identifying waters not meeting water quality standards (Category 5), TMDLs in need of development (Category 4 once TMDL issued), and with restoration implementation waters that improve and meet the water quality standards identified for restoration (Category 2).

3. Oregon's NPS Management Program

The primary purpose of Oregon's NPS Management Program and plan is to develop and implement strategies to protect, prevent, control, and eliminate water pollution from nonpoint sources in "Waters of the state" to meet federal, tribal nations, and state surface and groundwater quality standards and TMDL load allocations. The NPS Plan represents an approach for Oregon to continue to plan, implement and prioritize actions to address NPS problems on a statewide basis.

3.1 General Description of NPS Management Program

The primary purpose of Oregon's NPS program and plan is to develop and implement strategies to protect, prevent, control, and eliminate water pollution from nonpoint sources in waters of the state to meet water quality standards and TMDL load allocations. The plan represents an approach for Oregon to continue to plan, implement and prioritize actions to address NPS problems on a statewide basis.

The NPS Management Program uses a combination of federal and state authority and funding for implementing statewide, programmatic, and geographic priorities, objectives, and strategies to achieve the short- and long-term goals of the NPS Management Program. The state program includes objectives that address nonpoint sources of surface water and ground water pollution as appropriate (including sources of drinking water) in alignment with the goals of the federal CWA.

Oregon's NPS program conducts water quality monitoring and analysis, develops and uses technical water quality/GIS data, with watershed partners using a balanced approach of education, research, technical assistance, financial incentives, and regulation. DEQ also develops and implements pollution control and reduction strategies for the management or regulation of forestry, agriculture, grazing, transportation, recreation, hydromodification, marinas, urban development, land use planning, fish and wildlife habitat, riparian and wetlands protection and restoration, public education, water resources, and other activities that affect the quality of the state's waters.

Another key component of Oregon's NPS Program is the coordination of EPA Section 319 funds that fund DEQ's program staff and the NPS Grant Program. The 319-grant program also provides funding to cooperating entities for activities emphasizing watershed protection, restoration, enhancement, voluntary stewardship, and partnerships between all watershed stakeholders. The DEQ NPS Program integrates with other relevant programs to restore and protect water quality, aligning priority setting processes and

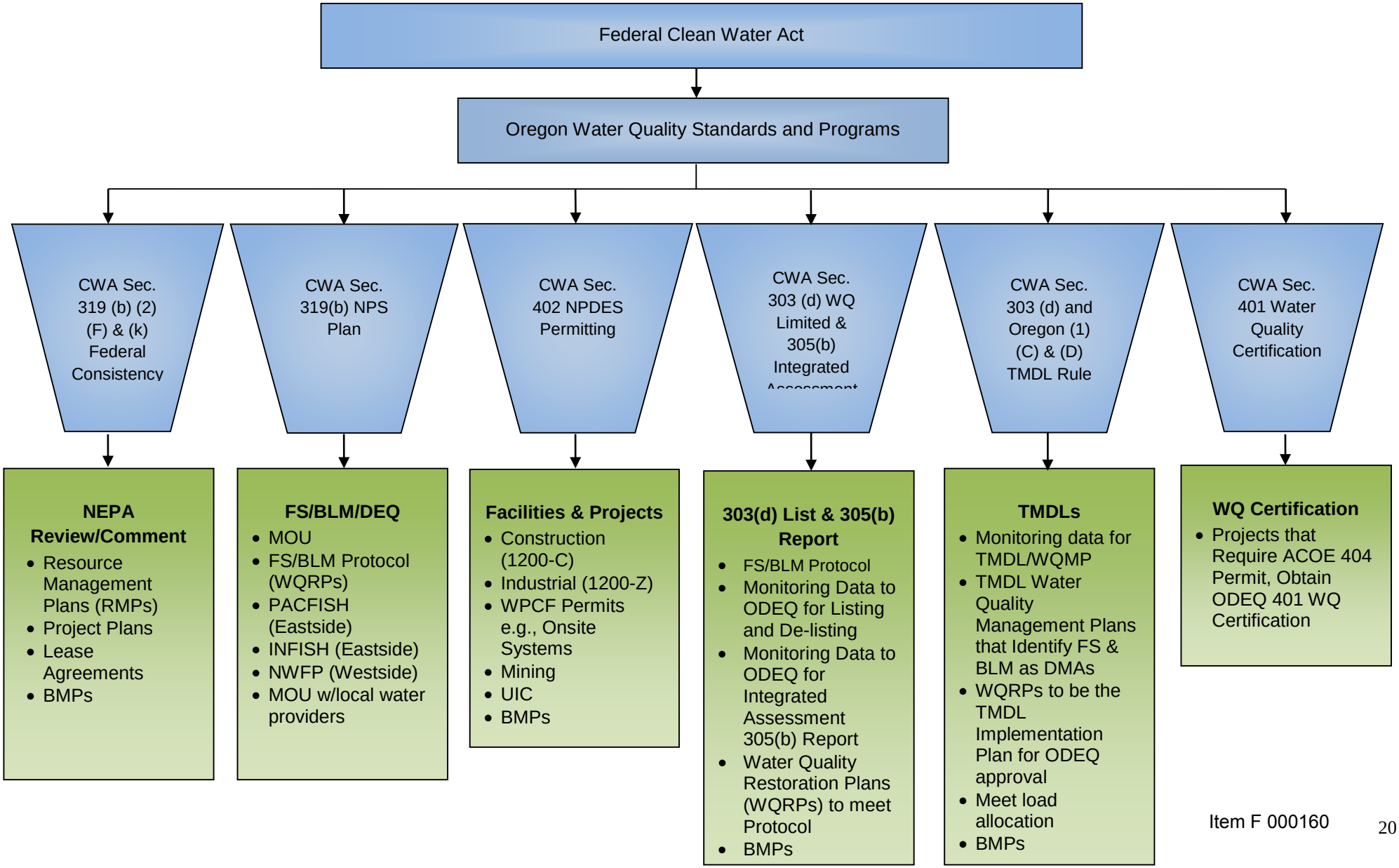
resources to increase efficiency and environmental results. This includes alignment with significant OWEB match funding provided through its parallel granting programs.

Oregon's NPS Management Program Plan describes outcomes and key actions expected over the 5-Year plan period. Some actions occur every year, others have fixed end target dates, and some occur every 5 years such as updates to Oregon's NPS Program Management Plan and a 5-Year Bureau of Land Management (BLM)/United States Forest Service (USFS)/DEQ MOU progress report http://www.deq.state.or.us/wq/nonpoint/docs/5YearProgRepFinal201003.pdf and recommendations for revisions/updates to the MOUs.

Some example annual milestones include developing annual section 319 grant work plans, implementing projects in a certain number of high priority impaired watersheds, and delivering a certain number of WQ-10 success stories. Progress on all of these milestones can be found in Oregon's NPS Annual Report (http://www.deq.state.or.us/wq/nonpoint/reports.htm) submitted to EPA annually as a requirement of Section 319(h) (8) & (11) of the federal Clean Water Act (33 USC 1329).
The NPS Management Program is based on a combination of the following state and federal laws, local ordinances and collaboration efforts as shown in the following figure:

OREGON DEQ WATER QUALITY

Figure 1: Decisions and Actions Related to Planning and Activities



Left Blank on Purpose

Section 319 of the federal Clean Water Act requires states to have NPS pollution management programs based on assessments of the amounts and origins of NPS pollution in the state. The State of Oregon's NPS Management Program relies on a combination of state and federal laws, tribal nations, local ordinances, and coordinates with several state agencies for its implementation. Key agencies for NPS sectors are Oregon's Departments of Forestry and Agriculture. ODA implements the Agriculture Water Quality Management Act and oversees agriculture and rural residential land uses.

ODF implements the State Forests Management Plan and Forest Practices Act and oversees forestry activity on nonfederal forest and rangelands. DEQ also works with counties and municipalities to promote integration of local NPS efforts. These agencies work in cooperation with DEQ to protect and restore waters of the state affected by NPS pollution.

Other agencies that also have rules and regulations that help in controlling, reducing, and treating NPS pollution are the Oregon Department of Land and Conservation Development (DLCD) and the Department of State Lands (DSL). The DLCD implements the State of Oregon land use planning laws that require each city and county to adopt comprehensive plans and land use regulations that are consistent with statewide goals.

Environmentally sensitive areas such as wetlands, riparian areas, and hazard areas such as steep slopes and floodplains are addressed by the statewide land use planning goals. Local communities are expected and in some cases required to adopt development ordinances such as riparian and wetland protection, and manage development in hazard prone areas to prevent loss of life and property (e.g., floodplains, steep slopes, earthquake prone areas ordinances, etc.). DLCD also administers the state's Coastal Zone Management Program and coordinates with DEQ and other state agencies to implement the state's Coastal Nonpoint Pollution Control Program.

The DSL implements the Oregon Removal-Fill Law (ORS 196.795-990). This law requires projects that would involve the removal or fill of material in waters of the state to obtain a permit from DSL. The purpose of the law is to protect public navigation, fishery, and recreational uses of the waters. "Waters of the State" are defined as "natural waterways including all tidal and non tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands and other bodies of water in this state, navigable and non-navigable, including that portion of the Pacific Ocean that is in the boundaries of this state". The law applies to all landowners, whether private individuals or public agencies.

DEQ has also been working with staff from the Oregon Water Enhancement Board (OWEB), Natural Resources Conservation Service (NRCS), and other funding entities to prioritize and coordinate the state's efforts to address nonpoint sources of pollution. DEQ coordinates the 319 NPS grant proposals with OWEB and Watershed Oregon Councils.

OWEB has the Oregon Watershed Restoration Inventory (OWRI) http://www.oregon.gov/OWEB/monitor/Pages/owri.aspx includes completed watershed restoration projects funded by OWEB grants, USFS and BLM, private landowners, and 319 Grant dollars at a subbasins scale. Some NRCS program funds are sometimes used as match for OWEB grants and are included in this database. NRCS data, available at the subbasins scale through Cooperative Agreements includes NRCS funded projects that have been implemented within a given year at a subbasins scale. NRCS and OWEB categorize practices differently, so there is a need to complete a practice crosswalk between these agencies. DEQ is beginning to use data in OWRI for tracking and reporting on restoration activities that are expected to reduce NPS pollution. This information will be reported in the Oregon NPS Pollution Program Annual Reports.

BLM and the USFS coordinate restoration and monitoring efforts with state, federal, and local groups. This includes fish and wildlife agencies, Oregon Watershed Councils, environmental groups, timber companies, Tribes, Soil and Water Conservation Districts, DEQ, EPA, and OWEB. Specifically, the agencies provide staff for technical review of Oregon Watershed Enhancement Board (OWEB) grant proposals that include the Oregon Watershed Councils and the Soil and Water Conservation District submissions. In addition, BLM and USFS are represented on the OWEB Board. The agencies support the Watershed Council Consortium that brings Oregon Watershed Council coordinators together on an annual basis.

The agencies also contribute through water quality planning, projects, and implementation of the Governor's Oregon Plan for Salmon and Watersheds, 1997, Coastal Salmon Restoration Initiative (http://egov.oregon.gov/OPSW/archives/archived.shtml#Anchor-Plan).

3.2 Oregon's NPS Plan Goals, Action/Requirements, Milestones and Timeframes for implementing Oregon's NPS Plan Elements.

DEQ is committed to continual improvement in coordination between the various DEQ Water Quality Programs and projects including NPS, TMDLs, Integrated Report, Source Water Protection, Groundwater, Clean Water State Revolving Fund, and 319 Project Grants. Coordination among agencies is evidenced by the successful implementation of on-the-ground restoration projects with funding through many opportunities including agency base funds, partnerships through OWEB, watershed councils, and 319 Grant funded projects.

The following Table 1 is Oregon's NPS Plan Goals, Action/Requirements, Milestones and Timeframes for implementing Oregon's NPS Plan elements. These key elements are used to track and report on administrative outputs, overall program goals, and planned actions over the next five years. The table is organized by the program plan contents.

DEQ will report on progress made on each of these actions through the Oregon DEQ NPS Annual Report submitted to EPA Region 10. This is one of the key documents used by EPA to determine whether Oregon has made satisfactory progress in its NPS program. EPA's determination of satisfactory progress is required for Oregon to receive annual 319 grant funding from EPA. The actions and priorities to achieve the goals and objectives described in the NPS MP are summarized in Table 1.

Table 1: **Oregon NPS Management Plan Actions/Requirements, Priorities, and Output/Action.**

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
NPS PLANS			
Update NPS MP every 5 years	Update Oregon's NPS Plan that describes how the state's NPS management program achieves water quality standards and TMDL load allocations through restoration and protection.	DEQ issues and submits updated (2014) Oregon NPS Plan to EPA Region 10 for review	2014 to 2019

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
Implement NPS MP	Implement the NPS MP to achieve the NPS Program goals and priorities.	Various milestones as listed in this Table	2014 to 2018
Issue NPS Annual Report	The NPS Annual Report describes the progress in implementing the NPS MP and achieving the NPS Program goals and objectives.	DEQ issues and submits annually to EPA.	2014 to 2018
Complete the Coastal Nonpoint Pollution Control Program	*Submit to EPA and NOAA a plan for achieving:* • *Additional Management Measures for Forestry, as needed, in response to federal comments on the state's strategy*	DEQ/DLCD works with the other State of Oregon agencies for submittal to EPA and NOAA	2015-16
319 GRANT PROGRAM			
319 Grant Funding DEQ NPS Program	DEQ uses 319 Grant funds to implement DEQ activities that achieve the NPS Program goals and priorities.	DEQ NPS Program Funding	2014-2018
319 Grant Funding for pass through Grants	319 Grant funding of projects that address Oregon's NPS Program priorities.	Continue funding NPS Program high priority projects with 319 Grants	2014-2018
Priority projects to receive 319 Grant Funding for pass through Grants	Region and HQ staff identifies and rank projects to receive pass through 319 grant funds for addressing NPS Program priorities.	List of priority projects in the 319 Grant request for proposals	2014-2018
319 Grant RFPs	Continue process improvement of 319 Grant RFPs for timely and efficient issuance. Provide training to DEQ NPS and TMDL staff to increase efficiency and timeliness.	DEQ Provides Timely And Efficient Issuance of 319 Grant RFPs.	2014-2018
319 Grant Administration	Provide guidance to DEQ staff and grant recipients for grant administration. Guidance includes, planning, contracting, invoicing and reporting.	DEQ Develops, Receives EPA Review and Issues 319 Grant Administration Guidance	2015
GRTS	Continue to report 319 Grant Data into GRTS; Meet annual reporting deadlines.	Meet EPA timeline for GRTS Reporting	2014-2018
NPS Implementation	Collect information from NRCS, USFS, BLM and OWEB on annual NPS project	Include information in the DEQ NPS Annual Report	2014-2018

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
	implementation activities including 319 Grant projects.		
DEQ's NPS Program Website	DEQ's NPS Program Website updated as needed	DEQ NPS Program website updates at least annually to reflect current RFP and NPS Annual Report and other documents as needed.	2014-2018
WATERSHED APPROACH BASIN REPORTS			
Watershed Basin Status and Action Plans	Develop a template for Watershed Basin Status and Action Plans. DEQ provides training to DEQ NPS and TMDL staff on its use.	Make Watershed Basin Status and Action Plans Template available to DEQ staff	2015
Watershed Basin Status and Action Plans	Develop Watershed Basin Status and Action Plans within identified priority watersheds that identify priority problems and waters.	DEQ issues Watershed Basin Status and Action Plans	2014-2018
EPA's Nine Key Elements	Report on how TMDL Implementation Plans and Watershed Basin Status and Action Plans meet EPA's Nine Key Elements.	Include information in the DEQ NPS Annual Report	2014-2018
Volunteer Monitoring	Volunteer Monitoring Watersheds Sample Plans Are Developed.	QAPPs and SAPs reviewed by DEQ	2014-2018
BASIN SPECIFIC PROJECTS			
Basin Specific Activities	Basin specific activities and projects will be prioritized through the various TMDL/NPS Program processes.	Basin specific activities reported in DEQ's NPS Annual Report	2014-2018
TMDLS AND OTHER WQ PROGRAMS			
TMDL Guidance or IMD	Develop TMDL Guidance or IMD on how to produce work plans that identify data needs and how to design a monitoring study.	TMDL Data Needs and Monitoring Study Produces Implementation Ready TMDLs and WQMPs	2015
Technical Assistance	DEQ headquarters and region staff will provide technical assistance to DMAs, DEQ staff, other local, state, and federal staff on TMDL development and TMDL implementation efforts.	DEQ Staff Provide TMDL Technical Assistance to Ensure TMDL Load Allocations and Water Quality Standards Are Met	2014-2018

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
TMDL IMPLEMENTATION			
TMDL Implementation Plans	Work with DMAs to develop and implement TMDL Implementation Plans (including annual reports) as described in the TMDL/WQMP.	DMAs Meet TMDL/WQMP responsibilities	2014-2018
TMDL Implementation Plans	DEQ reviews TMDL Implementation Plan annual reports.	DMAs Meet TMDL/WQMP responsibilities	2014-2018
TMDL Implementation Plan Guidance	Develop a process for DEQ staff to review TMDLs and TMDL Implementation Plans every 5 Years.	DMAs Meet TMDL/WQMP responsibilities as identified in the document describing the TMDL Implementation Plan Guidance.	2015
TMDL & NPS Implementation	Develop a spreadsheet and process for DEQ to track and report on landscape condition for achieving TMDL implementation timelines and milestones including water quality status and trends.	Information included in the DEQ NPS Annual Report	2014
Reasonable Assurance	Conduct analysis during TMDL/WQMP development to provide reasonable assurance and guide implementation for TMDLs.	Information included in the DEQ TMDL Implementation Plan Guidance and/or DEQ NPS Annual Report	2014-2018
TOXICS			
Water Quality Pesticide Management Team and Pesticide Stewardship Partnerships (PSPs)	Continue to work with the WQ-PMT and implement programs to address water quality pesticide issues including the PSP projects.	Reduce, where needed, instream pesticide concentrations	2014-2018
Public Water System (PWS)	Continue developing contaminant-specific reduction strategies for public water system use, such as for nitrates and pesticides from urban and rural residential lands.	Reduce or protect PWSs from NPSs of pollution	2014-2018
AGRICULTURE			

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
Landscape Condition for TMDLs and WQS	Document definition of system potential and site capable vegetation.	Coordination between, and effective implementation of the TMDL/NPS Programs and Agricultural Water Quality Management Program	2014
Landscape Condition for TMDLs and WQS	Conduct effective shade assessments for evaluating implementation to achieve TMDL/WQS goals under area rules and plan.	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agricultural Water Quality Management Program	2014
Biennial Review of Area Rule and Plan	Participate in ODA's biennial review process by providing water quality status and trends and landscape condition in priority areas.	DEQ provides input during the Area Rule and Plan revision	2014-2018
Update DEQ Guidance for Biennial Reviews	Collaborate with ODA for updating DEQ guidance for providing comment during ODA's Biennial review Process.	Complete updating DEQ guidance by end of 2015.	2015
Grant Funding	Participate in local grant funding process to direct resources to high priority agricultural issues.	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agricultural Management Water Quality Program	2014-2018
ODA Area Rule Compliance	Work with ODA to prioritize and help develop assessment methodologies for addressing temperature, sediment and sedimentation, bacteria, nutrients, and pesticides.	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agricultural Management Water Quality Program	2014-2018
FORESTRY			
FPA Evaluation	Participate with ODF to jointly develop evaluation methods and study designs (with funding sources) to address unanswered monitoring questions from the Private Forests Monitoring Program Strategic Plan http://www.oregon.gov/odf/privateforests/docs/monitoringstrategicplan.pdf	Private and State Forestlands Meet TMDL Load Allocations and Water Quality Standards	2015

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
Forest Practices Act Rules	Participate in Forest Practices Act rule analysis and concept development for water quality issues and revisions to management plans for state forests.	Private and State Forestlands Meet TMDL Load Allocations and Water Quality Standards	2014
ODF/DEQ MOA	Participate with ODF on revising the current MOA between ODF and DEQ.	Revision to the 1998 DEQ/ODF MOA	2015
URBAN/ RURAL RESIDENTIAL LANDS			
TMDL and Stormwater	Development of DEQ guidance to improve and establish consistent coordination between TMDL and stormwater programs.	Finalize guidance and provide training to DEQ staff and urban DMAs	2014 - 2018
FEDERAL LANDS			
USFS Annual Status Report	The USFS will submit to DEQ a Statewide Annual Status Report to meet the MOU and any DEQ TMDL reporting requirements.	USFS submittal of the document to DEQ	2014 - 2018
USFS/DEQ 5-Year Progress Report	The 2013 USFS/DEQ MOU requires the preparation of a USFS/ DEQ 5-Year MOU Progress Report.	Document Progress In Implementing MOU Actions and Update MOUs	2018
BLM Annual Status Report	The BLM will submit to DEQ a Statewide Annual Status Report to meet the MOU and any DEQ TMDL reporting requirements.	BLM submittal of the document to DEQ	2014 - 2018
BLM 5-Year Progress Report	The 2011 BLM/DEQ MOU requires the preparation of a BLM/ DEQ 5-Year MOU Progress Report.	Document Progress In Implementing MOU Actions and Update MOUs	2016
Coordination of USFS and BLM with DEQ	The USFS and BLM will coordinate with DEQ for establishing priorities, strategies, and funding using a watershed approach to protect and restore water quality on BLM and USFS administered lands, this will include WQRPs.	Annual check in on BLM and USFS progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018
USFS BMPs	As needed, USFS will develop Oregon specific land use activities BMPs and monitor implementation and effectiveness of BMPs following the USDA National Best Management Practices for Water Quality national protocols. http://www.fs.fed.us/biology/resources/pubs/watershed/index.html.	Annual check in on USFS progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018

GOALS	ACTION/REQUIREMENT	OUTPUT/ACTION	TIME FRAME
BLM BMPs	BLM develops Oregon specific land use activities BMPs, monitor implementation and effectiveness of BMPs, and submits to DEQ for review and comment.	Annual check in on BLM progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018
Pre-TMDLs and Post-TMDL	The USFS and BLM will use the Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters, May 1999, Version 2.0.	Annual check in on USFS and BLM progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018
Agricultural Activities	The USFS and BLM will develop and implement a programmatic strategy to address agricultural activities on federal lands, such as grazing.	Annual check in on USFS and BLM progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018

3.3 Partnerships

Responsibility for managing water resources in Oregon is shared among several partners that work together in an active and effective partnership to protect state waters. One of Oregon's primary goals is to strengthen its working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts), private sector groups, and citizens groups,.

3.2.1 Local Partners

- Cities (League of Oregon Cities) http://www.orcities.org/
- Counties (Association of Oregon Counties) http://www.aocweb.org/aoc/default.aspx
- Watershed Councils (Network of Oregon Watershed Councils) http://oregonwatersheds.org/
- Soil and Water Conservation Districts (Oregon Association of Conservation Districts) http://oacd.org/
- Environmental Groups (such as Oregon Environmental Council, Audubon Society, Sierra Club, NW Environmental Advocates, Friends of Rivers, Streams, Watersheds, and Wetlands, etc.)
- Citizens Groups such neighborhood associations, and others, and
- Private Sector Groups, such as Association of Loggers, Agricultural Groups, Association of Pulp and Paper Industries, Association of Industries (AOI), etc.

3.2.2 State Agencies

- Oregon Department of Agriculture (ODA) www.oda.state.or.us
- Oregon Department of Forestry (ODF) www.odf.state.or.us
- Oregon Health Authority (OHA) http://www.oregon.gov/oha/Pages/index.aspx
- Oregon Parks and Recreation Department (OPRD) http://egov.oregon.gov/OPRD/index.shtml
- Oregon Department of State Lands (DSL) http://www.oregon.gov/DSL/index.shtml

- Oregon Department of Geology and Mineral Industries (DOGAMI) http://egov.oregon.gov/DOGAMI/index.shtml
- Oregon State Marine Board (OSMB) (Boat Ramps and Other Access Points) (Marine Board) http://www.boatoregon.com/
- Oregon Watershed Enhancement Board (OWEB) www.oweb.state.or.us
- Department of Fish and Wildlife (ODFW) www.dfw.state.or.us
- Department of Land, Conservation and Development (DLCD) www.lcd.state.or.us
- Department of Oregon Business Development (OBD) http://www.oregon4biz.com/
- Department of Transportation (ODOT) http://egov.oregon.gov/ODOT/index.shtml
- Oregon Water Resources Department (OWRD) http://www.oregon.gov/owrd/Pages/index.aspx
- Districts can do a better job fulfilling their mission when they partner with a variety of different groups, such as county governments, watershed councils, and state and federal agencies.
- Oregon Department of Agriculture – Natural Resource Division (ODA – NRD)
  Management of natural resource programs in the state and administrative oversight of Soil and Water Conservation Districts
- Soil and Water Conservation Commission (SWCC)
  Provides coordination between Oregon's Soil & Water Conservation Districts (SWCD) and the Department of Agriculture
- Oregon Conservation Education and Assistance Network (OCEAN)
  Delivers programming for all SWCD employees through training, education, and assistance
- National Association of Conservation Districts (NACD)
  National voice for nearly 3000 SWCD's and State Associations
- Natural Resources Conservation Service (NRCS)
  Primary federal agency providing technical assistance to SWCD's and private landowners
- Resource Conservation and Development (RC&D)
  Partners with SWCD's to identify and solve community, human, economic and environmental problems
- Farm Service Agency (FSA)
  Provides financial and other assistance to agricultural producers served by SWCD's
- Oregon Watershed Enhancement Board (OWEB)
  Restores, maintains and enhances Oregon watersheds in order to protect the economic and social well being of the state.

3.2.3 Federal Agencies

- U.S. Environmental Protection Agency (EPA) http://www2.epa.gov/aboutepa/epa-oregon or http://www.epa.gov/
- U.S. Forest Service (USFS) http://www.fs.fed.us/r6/water/
- U.S. Bureau of Land Management (BLM) http://www.blm.gov/or/st/en.html
- U.S. Fish and Wildlife Service (USFWS) http://www.fws.gov/oregonfwo/
- U.S. National Marine Fisheries Service (NMFS) http://www.westcoast.fisheries.noaa.gov/index.html
- US Army Corps of Engineers (USACE) http://www.nwp.usace.army.mil/
- U.S. Bureau of Reclamation (USBR) http://www.usbr.gov/pn/
- U.S. National Resource Conservation Services (NRCS) http://www.nrcs.usda.gov/wps/portal/nrcs/site/or/home/
- U.S. Farm Service Agency (FSA) http://www.fsa.usda.gov/FSA/stateoffapp?mystate=or&area=home&subject=landing&topic=landing

3.2.4 Federally Recognized Tribes of Oregon

- Burns Paiute Tribe http://www.burnspaiute-nsn.gov/
- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw http://ctclusi.org/
- Confederated Tribes of the Grand Ronde Community of Oregon http://www.grandronde.org/ /
- Confederated Tribes of Siletz Indians of Oregon http://ctsi.nsn.us/
- Confederated Tribes of the Umatilla Indian Reservation http://ctuir.org/
- Confederated Tribes of Warm Springs Reservation of Oregon http://www.warmsprings.com/
- Coquille Indian Tribe http://www.coquilletribe.org/
- Cow Creek Band of the Umpqua Tribe http://www.cowcreek.com/
- Klamath Tribes http://www.klamathtribes.org/

3.3 Tribal Agency Coordination

Congress amended the Clean Water Act (CWA) in 1987 to establish the section 319 Nonpoint Source Management Program in recognition of the need for greater federal leadership to help focus state, tribal, and local nonpoint source efforts. Under section 319, states, territories, and Indian tribes receive grant money that supports a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of implementing management practices that address pollution from nonpoint sources.

Nine tribes have approved nonpoint source programs. DEQ has government-to-government relationships with the nine federally-recognized tribal governments Oregon DEQ is committed to the principles of environmental justice (EJ) and ensuring that the agency's actions address the interests of Oregon communities, including minority, low-income and other traditionally underrepresented communities, as much as state and federal laws allow. EJ Screen is a screening and mapping tool that provides EPA with a nationally consistent dataset and methodology for calculating environmental justices which can be used for highlighting places that may be candidates for further review, analysis, or outreach as the agency develops programs, policies and other activities.

Once EPA's EJ Screen is available publically, DEQ will develop and implement a plan to ensure appropriate outreach is conducted associated with DEQ decisions in communities that are identified as having potential environmental justice issues. This plan will outline enhanced public participation actions, consider limited English proficiency, traditional or cultural needs, and ensure early engagement, and information exchanges. The EJ Screen will be incorporated into the NPS Management Plan once DEQ has completed this work and the NPS Management Plan is updated.

Ultimately, the plan will be implemented by and tailored to all of DEQ's environmental programs (including the Nonpoint Source Program) related to adopting rules, making permit decisions, awarding grants and loans, overseeing cleanup activities, and conducting enforcement actions. DEQ will also use EJ Screen to determine how best to incorporate decisions and priorities regarding nonpoint source water pollution impacts to underserved communities in Oregon.

3.4 DEQ Memorandum of Understandings and Memorandum of Agreements

DEQ has memorandum of understandings or memorandum of agreements with many partners that identify the specific roles and responsibilities to either develop and/or implement water quality programs to jointly meet water quality standards or TMDL load allocations. These include but are not limited to the following:

State Agencies

DEQ/ODA – *2012 Memorandum of Understanding Between Oregon Department of Agriculture and Oregon Department of Environmental Quality Relating to Agricultural Nonpoint Source Pollution*. http://www.deq.state.or.us/wq/nonpoint/docs/ODADEQMOA2012.pdf. The MOA is intended to assist DEQ and ODA in collaborative efforts to meet their legal responsibilities related to agricultural NPS pollution, and to help ensure, to the maximum extent practicable, that agricultural activities in compliance with Area Rules do not cause or contribute to exceedance of water quality standards and that with implementation of Area Plans TMDL allocations are achieved in agricultural areas.

DEQ/ODOT – *2011 Memorandum of Understanding between Oregon Department of Transportation (ODOT) and Oregon Department of Environmental Quality (DEQ)* http://www.deq.state.or.us/wq/pubs/igas/ODOTMOU2011.pdf**.** The MOU is entered into to protect water quality while efficently implementing ODOT and DEQ missions.

DEQ/EPA – *2010 Clean Water State Revolving Loan Fund Operating Agreement between the Oregon Department of Environmental Quality and U.S. Environmental Protection Agency Region 10.* http://www.deq.state.or.us/wq/pubs/igas/CWSRFopAgrmt20100909.pdf . The purpose of the Clean Water State Revolving Loan Fund (CWSRF) is to provide financial assistance for the construction, replacement or improvement of wastewater treatment works that are publically owned, for the implementation of a management program for nonpoint sources of water pollution, and for the development and implementation of a comprehensive conservation and management plan for estuaries designated under the national estuary program.

DEQ/ODF/ODA/DLCD/ODFW/OPRD – *2006 Memorandum Of Understanding Among Oregon Department of Forestry (ODF),Oregon Department of Agriculture (ODA), Oregon Division of State Lands (DSL), Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Fish and Wildlife (ODFW), Oregon Parks and Recreation Department (OPRD), and Oregon Department of Environmental Quality (DEQ). E:\WINWORD\Forestry and Forestland Conversion\Conversions MOA Final 2006.doc* The agencies have common interests and responsibilities in protecting waters of the state and other natural resources during the conversion of forestland to non-forest uses.

DEQ/ODF — *1998 Memorandum of Understanding between Oregon Department of Environmental Quality and the Oregon State Department of Forestry* http://www.deq.state.or.us/wq/nonpoint/docs/MOUdeqODF.pdf
The MOA is intended to assist DEQ and ODF in collaborative efforts to meet their legal responsibilities related to NPS pollution from non-federal forestlands, and to help ensure to the maximum extent practicable, that forestry activities in compliance with the Forest Practices Act do not cause or contribute to exceedances of water quality standards and that with implementation of the Forest Practices Act TMDL allocations are achieved on non-federal forestlands.

Federal Agencies

DEQ/NRCS/OWEB/ODA – *2010 Memorandum Of Understanding Among U.S. Department Of Agriculture- Natural Resource Conservation Service And Oregon Watershed Enhancement Board And Oregon Department Of Environmental Quality* http://www.oregon.gov/OWEB/docs/board/2010-09/itemk_att_a.pdf USDA-NRCS, OWEB and DEQ will work together to share information and technical expertise to monitor, evaluate and report the effectiveness of cumulative conservation and restoration actions in achieving natural resource outcomes focused on water quality and water quantity.

DEQ/USFS – *20132 Memorandum of Understanding between U.S. Department of Agriculture-Forest Service's Pacific Northwest Region and State of Oregon Department of Environmental Quality to meet state and federal water quality rules and regulations was completed.* http://www.deq.state.or.us/wq/nonpoint/docs/USFSDEQWQMU02.pdf. This MOU documents the USFS and DEQ strategy for managing and controlling point and NPS water pollution from USFS-managed lands in the State of Oregon. This MOU sets out the procedures for the USFS and DEQ to cooperatively implement State and Federal water quality rules and regulations. The physical, chemical, and biological conditions of "Waters of the State" that support beneficial uses (defined in Oregon Revised Statute (ORS), Chapter 468B — Water Quality and Oregon Administrative Rules (OAR), Division 41) will be protected, restored, and maintained by working in a proactive, collaborative, and adaptive manner through this MOU.

DEQ/BLM – *2011 Memorandum of Understanding between United States Department of The Interior Bureau of Land Management and State of Oregon Department of Environmental Quality To Meet State and Federal Water Quality Rules and Regulations was completed.* http://www.deq.state.or.us/wq/nonpoint/docs/DEQBLMMOU20110401.pdf.
This MOU documents the BLM and DEQ strategy for managing and controlling point and NPS water pollution from USFS-managed lands in the State of Oregon. This MOU sets out the procedures for the BLM and DEQ to cooperatively implement State and Federal water quality rules and regulations. The physical, chemical, and biological conditions of "Waters of the State" that support beneficial uses (defined in Oregon Revised Statute (ORS), Chapter 468B — Water Quality and Oregon Administrative Rules (OAR), Division 41) will be protected, restored, and maintained by working in a proactive, collaborative, and adaptive manner through this MOU.

Idaho DEQ, Washington DOE, Oregon DEQ, EPA Region X, and the Columbia Basin Tribes – *2000 Memorandum of Agreement Columbia/Snake Rivers Total Maximum Daily Load for Total Dissolved Gas and Temperature.* http://www.deq.state.or.us/wq/tmdls/docs/columbiariver/tdg/tmdlmoa.pdf. The purpose of this MOA is to document a mutual understanding on the approach and roles among Idaho DEQ, Washington DOE, Oregon DEQ, EPA Region X, and the Columbia Basin Tribes to complete a total dissolved gas and temperature TMDL for the mainstem Columbia and Snake Rivers to River Mile 188. Expected roles of non-signatory agencies are also included. The environmental purpose of this effort is to understand the sources of total dissolved gas and temperature loadings and to allocate those loadings based on numeric water quality criteria in order to meet water quality standards. The Total Dissolved Gas TMDL was completed and issued by the states of Oregon and Washington and approved by EPA in 2002. EPA has not yet completed the Columbia River temperature TMDL.

3.5 Baseline Regulatory Statutes

The NPS Management Program relies on the following State of Oregon and federal rules and regulations:

- Federal Clean Water Act http://www.epw.senate.gov/water.pdf

- Federal Safe Drinking Water Act https://webinsight.arielresearch.com/ArielFT/NAdoc/law/L00072.htm
- EPA National Estuary Program http://water.epa.gov/type/oceb/nep/index.cfm#tabs-2
- CZARA Section 6217 Coastal NPS Control Program http://coastalmanagement.noaa.gov/about/czma.html#section6217
- Oregon Revised Statute 468B http://www.deq.state.or.us/wq/sb737/docs/LegRpAtt120100601.pdf
- Oregon Water Quality Standards http://www.deq.state.or.us/wq/standards/standards.htm
- Oregon TMDL Rule http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_042.html
- Oregon Forest Practices Act http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_629/629_670.html
- Oregon Agricultural Water Quality Management Act http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_603/603_095.html
- Oregon State Land Use Planning Program, specifically Goal 5 (protection of riparian and wetlands) and Goal 6 (protection of air, water and land resources), Goal 16 (protection of estuaries classified as "natural" or "conservation", Goal 17 (protection and management of coastal shore lands), (Goal 19, Ocean Resources). http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_023.html
- Oregon Groundwater Quality Protection rules http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_040.html

3.5.1 Water Quality Standards

Establishing water quality standards for the state of Oregon is at the core of DEQ's water quality activities. Standards include beneficial uses of water, such as drinking water, aquatic life, recreation, etc., http://www.deq.state.or.us/wq/standards/uses.htm and the water quality criteria designed to protect those uses. The Water Quality Program is implemented to protect and restore water quality to meet those standards, including evaluating whether Oregon's water quality standards http://www.deq.state.or.us/wq/standards/standards.htm are being met through the development of the biennial Integrated Report http://www.deq.state.or.us/wq/assessment/2010Report.htm , which includes the section 303(d) list of impaired waters and the section 305(b) report describing the status of Oregon's surface water quality.

The activities include:

- Conduct triennial standards reviews to establish and update scientifically based water quality standards and related policies.
- Develop and maintain internal directives for and provide guidance to regional and headquarters staff on implementation of water quality standards in various water programs.
- Identify water bodies not meeting water quality standards and develop Integrated Reports that are linked to the Watershed Approach Basin Reports.
- Create a process to develop Integrated Report that complements and supports basin planning efforts: Develop guidance for Antidegradation for nonpoint sources.
- Revise turbidity standard to clarify implementation of the standard and better protection of beneficial uses
- Explore options for protecting water bodies from impairment due to nutrients. If needed, develop nutrient standard. Ensure that water quality assessment and basin planning efforts provide a comprehensive evaluation of water quality and other environmental information resulting in basin-based water quality status and action plans. This includes developing high priority waters to be protected. DEQ is committed to continue taking this basin planning approach.

- Work with our stakeholders to promote development of integrated plans based upon EPA's integrated planning framework. Guided by DEQ's basin assessments and local community needs and priorities, implementation will allow communities to address Clean Water and Safe Drinking Water Act program requirements that yield the highest environmental and public health benefits with a commitment to meet all regulatory obligations.

At least once every three years, Oregon is required to review its water quality standards and submit any new or revised standard to EPA for review and approval. The Oregon water quality standards, including the narrative and numeric criteria, are contained in Chapter 340, Division 41 of the Oregon Administrative Rules, http://arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_041.html. The associated tables and figures and additional information may be found on DEQ's water quality standards web page at: http://www.deq.state.or.us/wq/standards/standards.htm.

3.5.2 Integrated Report [303(d) and 305(b)]

Every two years, DEQ is required to assess water quality and report to EPA on the condition of Oregon's waters. DEQ prepares an Integrated Report http://www.deq.state.or.us/wq/assessment/assessment.htm that meets the requirements of the federal CWA for Section 305(b) and Section 303(d).

- Federal CWA Section 305(b) requires a report on the overall condition of Oregon's waters.
- Federal CWA Section 303(d) requires identifying waters that do not meet water quality standards and where a TMDL pollutant load limit needs to be developed.

The Integrated Report includes an assessment of each water body where data are available, a comparison of water quality information to Oregon's water quality standards, and identification of the Section 303(d) list of water quality limited waters needing a TMDL. DEQ uses the list of impaired waters to set priorities for TMDL development. DEQ's monitoring provides data that is collected to support decisions and for implementing the NPS Management Program.

The Integrated Report provides a comprehensive evaluation of water quality throughout the state. The NPS Management Program uses information from the Integrated Report and the 303(d) list of impaired waters to identify the waters and watersheds where pollutants are likely related to nonpoint sources in the watersheds. DEQ then can focus and prioritize 319 program activities to protect, prevent, control, and eliminate NPS pollution.

The Integrated Report information can also complement and support basin-planning efforts, development of basin-based water quality status and action plans, and assist in allocating resources between impaired and unimpaired waters.

3.5.3 Total Maximum Daily Loads (TMDLs) and Water Quality Management Plans

The federal Clean Water Act requires that water pollutant reduction plans, called TMDLs, be developed for water bodies that are listed in Category 5 of the Integrated Report (303(d) List). TMDLs describe the maximum amount of pollutants that can enter the river or stream and still meet water quality standards.

TMDLs take into account the pollution from all sources, including discharges from industry and sewage treatment facilities; runoff from farms, forests and urban areas; and natural sources. TMDLs include a margin of safety to account for uncertainty. TMDLs may include a reserve capacity that allows for future discharges to a river or stream. DEQ typically develops TMDLs on a watershed, subbasins, or basin level and occasionally at the reach level depending on the type and extent of impairments.

The Water Quality Management Plan (WQMP) is the framework for TMDL implementation that is issued by Oregon along with the TMDL (OAR 340-042-0040(l)). The WQMP lays out the strategies for TMDL implementation and serves as a multi-sector plan and provides the reasonable assurance that the TMDL will be implemented and allocations achieved.

Process for TMDL and WQMP Development:

Review existing data and monitor to determine the type and amount of pollutants that are causing water quality impairments. The review and monitoring program attempts to determine how much of the pollutants:

- Comes from point sources and nonpoint sources, and include natural sources such as wildlife.
- Use techniques such as water quality or watershed modeling to determine what effect the pollution is having on the stream or river and how much of the pollutant can be discharged and still meet water quality standards.
- Use this information to establish waste load allocations for point sources (the amount of pollutant the permitted source is allowed to discharge which is incorporated into NPDES permits) and load allocations for nonpoint sources, which are, implemented through the WQMP and TMDL Implementation Plans, Agricultural Area Rules and Plans, Forest Practices Act, Water Quality Restoration Plans, and other planning documents.
- Typically, DEQ develops TMDLs on a basin, subbasins, or watershed scale (generally on a third field US Geological Survey Hydrologic Unit Code or smaller).
- Typically, program staff conducts all facets of work in collecting, analyzing, and presenting results. Staff will also perform public and stakeholder outreach to ensure input when decisions are being made. The combination of outreach and development provides for the transition from development of loading capacity and allocations to implementation in permits and planning documents, such as TMDL Implementation Plans.

TMDL Wasteload Allocations are implemented through effluent limits in permits for point source discharges, and NPS Load Allocations are implemented by DMAs and other designated sources.

DEQ staff actively implements TMDLs by:

- Revising industrial and municipal wastewater permits to incorporate WLAs into revised permit limits.
- Working with ODA staff to implement the Agricultural Water Quality Management Act to implement the TMDLs effectively on agricultural lands.
- Working with the ODF staff for implementation on state and private forestlands, through the Oregon Forest Practices Act and long-range management plans.
- Working with ODA and ODF to implement their programs to meet TMDL allocations.
- Assisting local governments identified as DMAs in developing TMDL Implementation Plans for urban and rural residential areas.
- Working with the USFS, BLM and other federal agencies on developing their implementation planning documents and implementing their programs for lands under their jurisdiction.

Under most circumstances, TMDL Implementation Plans for improved water quality rely on cooperation among landowners and land managers within a river basin. Local watershed councils, Soil and Water Conservation Districts, or other organizations will serve as community-based coordination points for these united efforts. Agencies and municipalities with jurisdiction over sources of NPS pollution and sources not covered by permit are required to submit TMDL Implementation Plans to DEQ. These plans describe actions that will be taken to reduce their contribution of the TMDL pollutant load.

In order for DEQ to better develop and implement TMDLs/WQMPs for nonpoint and point sources, DEQ will need to use these TMDL Program priorities:

- **Development**: Draft a guidance document for TMDL and WQMP development.
- **Development**: TMDLs will be developed to address the nonpoint source(s) in areas where land uses and land management are a source or potential source of the pollutant.
- **Development**: Provide better reasonable assurance during TMDL development process.
- **Implementation**: Work with DMAs to assure they are meeting TMDL priorities that address their responsibilities identified in the TMDL or WQMP.
- **Implementation**: Identify lead staff to work with sister agency DMAs to achieve consistency and efficiency.
- **Implementation**: Conduct additional analysis to provide better reasonable assurance and guide implementation for existing TMDLs that are identified as priorities.
- **Implementation**: Continue to build relationships with funding agencies and entities to direct funding toward high priority projects.
- **Implementation**: Align TMDL development source assessment, linkage analysis, and allocation methods with WQMP development and TMDL implementation methods and priorities so that administrative outputs and landscape and water quality outcomes can be measured and tracked for reporting of program effectiveness.
- **Outreach and training**: Conduct outreach and training on the "Urban and Rural Residential DMAs Guidance for Including Post-Construction Elements in TMDL Implementation Plans."

DEQ may include, as resources allow, the following information to support the load allocations specified in the TMDL: (1) an identification of total NPS existing loads and total NPS load reductions necessary to meet water quality standards, by source, sector, or category as data allows; (2) a detailed identification of the causes and sources of NPS pollution by source, sector, or category as data allows to be addressed in order to achieve the load reductions specified in the TMDL; and (3) an analysis of the NPS management measures by source, sector, or category as data allows expected to be implemented to achieve the necessary load reductions, with the recognition that adaptive management may be necessary during implementation.

3.6 Other Management Programs that Address NPS

Oregon's NPS Plan identifies the pollution management programs, strategies, and resources that are currently in place or that are needed to minimize or prevent NPS pollution effects. DEQ has the responsibility of overseeing and implementing the state's NPS Management Program by coordinating with many local, state, and federal agencies, tribes and other organizations throughout the State of Oregon. The NPS Management Plan describes the unified effort of many agencies and individuals and their various pollution control strategies that are currently taking place or are proposed for future implementation. There are several cross program and cross agency approaches used in Oregon for addressing NPSs, such as: Watershed Approach basin Reports; Pesticide Stewardship Partnerships; Water Quality Pesticide Management Team; Drinking Water Protection, Ground Water Management Areas; and Coastal Zone NPS Management Program.

3.6.1 Watershed Approach Basin Reports

DEQ coordinates its work to protect and improve Oregon's water by following the watershed approach. DEQ uses the term "watershed" to describe an area of land that contains related waterways. These watersheds may be traditional basins, areas that drain into a single waterway or an area that contains similar waterways, such as a group of coastal rivers.

Watershed Approach Basin Reports are in-depth assessments conducted by DEQ of the state's basins. These assessments take the form of local Water Quality Status and Action Plans, which describe water quality conditions and include recommendations for actions that DEQ and others who are interested in these basins can take to improve water quality. Where reports have been developed, DEQ has been able to use the action plans and basin priorities to determine how resources will be allocated.

The DEQ water quality program has increased its emphasis on the "watershed approach" as a way to better identify and address water quality issues in a basin or region. The watershed approach combines the expertise of DEQ's 17 water quality sub-programs to produce basin-based assessments that are data-driven and contain quantitative elements that describe all water quality conditions. This means that in some basins the pollutants identified as causing water quality issues includes additional (different) pollutants than that included on DEQ's 303(d) list or in a TMDL Water Quality Management Plan. This is one of the values of conducting a watershed approach.

DEQ develops the Watershed Approach Basin Reports that includes Water Quality Status and Action Plans with the help of local stakeholders, such as communities, watershed councils, Tribes, and conservation districts, as well as local, state and federal agencies, to provide data and smart solutions to local water quality issues. The watershed approach allows opportunities for direct, interactive feedback between DEQ and its many stakeholders. LiDAR data is very useful for the NPS and TMDL programs because it provides high resolution surface and land cover elevations that can be used to improve our understanding and mapping of watershed characteristics and pollutant sources

The watershed approach framework is being used by DEQ to improve water quality throughout Oregon, protect drinking water, fish habitat, and water quality in general, which can also boost Oregon's economy. A clean and more dependable water supply is good for industry, promotes healthier commercial and recreational fisheries, and encourages tourism. Clean waterways also help ensure that Oregonians of all ages have safe places to swim and play.

Watershed Approach Basin Reports identify strategies for improving state waters on a geographic basis with the state's National Pollutant Discharge Elimination System (NPDES) permitting, assessment, Groundwater Management Area, and TMDL work aligned and prioritized according to the watersheds.

The watershed approach uses available information to identify water quality priorities and actions to protect or restore water quality. This Watershed Approach Basin Reports are used by DEQ to:

- Identify and address all water quality issues in a basin or region.
- Share its findings with affected stakeholders and residents, so all parties learn how to better manage our watersheds.
- Prioritize immediate and long-term actions that can be taken in a particular basin or watershed that have been identified through DEQ's Watershed Approach Basin Reports and Water Quality Status and Acton Plans.
- Encourage all involved to be flexible and open to new ways of solving problems (including voluntary collaboration where possible) to avoid duplication of efforts.

- Regularly assess the situation in each basin to determine in an outcome-based approach what is working and what is not.

DEQ plans to cover the state's major basins in the next few years and then re-visit each to mark progress and reassess how to deal with lingering water quality problems.

The DEQ Watershed Approach Basin Reports Water Quality Status and Acton Plans can be found at http://www.deq.state.or.us/wq/watershed/watershed.htm

3.6.2 Cross Program Efforts to Address Toxic Chemicals

DEQ developed a comprehensive, integrated approach to address toxic pollutants in the environment. An integrated approach is essential because these pollutants readily transfer from one environmental media to another (e.g., mercury can be released to the air, deposit on the land, and run off to the water). DEQ's cross-media toxics reduction strategy is meant to ensure that DEQ is addressing the problem of toxics in the environment in the most effective and efficient way.

A short summary of the Draft Toxics Reduction and Assessment Actions, and a document providing more detailed (1-2 page) descriptions of each of the draft actions can be found on DEQ's Toxics Reduction web page. The summary of Strategy actions, some of which directly involve NPS staff, can be found at: http://www.deq.state.or.us/toxics/docs/ToxicsStrategyNov28.pdf.

The objectives of the DEQ cross program efforts to address toxic chemicals:

- Optimize agency resources by focusing on the highest priority pollutants in a coordinated way.
- Implement actions that reduce toxic pollutants at the source.
- Establish partnerships with other agencies and organizations to increase the effective use of public and private resources.
- Use environmental outcome metrics to measure the effectiveness of strategy implementation where feasible.

DEQ is currently focused on implementing five short-term priority actions identified in the Toxics Reduction Strategy: (a) expanding and enhancing the Pesticide Stewardship Partnership Program (see below), (b) developing and implementing a pesticide waste collection strategy, (c) working with consumer product retailers to reduce toxics in products, (d) integrating business technical assistance across programs to advance green chemistry, and (e) developing and implementing low toxicity state purchasing guidelines.

The technical assistance and state purchasing initiatives are also directly linked to an executive order (#12-05) signed by Oregon's Governor in April 2012. Most recently, DEQ supported the Oregon Department of Administrative Services (DAS) in developing a new janitorial supplies contract with comprehensive and detailed guidelines and specifications that ensure the janitorial and cleaning products purchased by the state contain low toxicity ingredients. The State of Washington also is participating in this contract, which is estimated to represent approximately $20 million in total purchasing power.

3.6.3 Pesticides Stewardship Partnerships (PSPs)

The Pesticide Stewardship Partnership (PSP) approach uses local expertise in combination with water quality sampling to obtain monitoring data to encourage and support voluntary management measures that lead to measurable reduction of pesticides in Oregon waters. Since 1999, DEQ has been using a voluntary, collaborative

approach called PSPs to identify problems and improve water quality associated with pesticide use. This program has been supported by grants and other small sources of funding for over a decade.

In 2013, DEQ and the Oregon Department of Agriculture obtained funding from the state legislature to implement and expand PSPs. This funding allows DEQ, ODA, and other WQPMT member agencies to add new PSP projects in more watersheds around the state, conduct several pesticide waste collection events, and enlist Oregon State University (OSU) and local expertise in providing pesticide risk reduction technical assistance.

The following PSP objectives are:

- Identify additional watersheds for PSP projects,
- Provide timely water quality information to local partners,
- Use stream monitoring to identify local, pesticide-related water quality concerns,
- Share results early and often with partners in the watershed,
- Explain data in terms of the effects of pesticides on the health of streams,
- Engage the agricultural community and other pesticide user groups in identifying and implementing solutions, and
- Use ongoing effectiveness monitoring to measure success and provide feedback to support water quality management.

The PSP approach of using water-monitoring data to inform voluntary actions continues to show success in selected watersheds. Since 2010, significant decreases (up to 90%) in average and median stream concentrations of pesticides of concern (Malathion and Diuron) have been observed in the Mill Creek (The Dalles) and Walla Walla (Milton-Freewater) watersheds. DEQ, ODA and other partners are currently working on refining PSP efforts in Western Oregon watersheds to produce similar demonstrable water quality improvements as have been observed in Eastern Oregon watersheds.

PSP work continues in Eastern Oregon with partners in Hood River and Walla Walla River Watersheds, as well as watersheds in Wasco County. Outreach efforts continued to be focused on communicating PSP monitoring results and providing technical assistance to orchards. The monitoring data shows continued significant reductions in concentrations of diuron (herbicide) in the Walla Walla watershed and Malathion (insecticide) in Wasco County watersheds. In addition, levels of almost all pesticides in the Hood River watershed remain well below relevant criteria or benchmarks.

DEQ continues PSP work with partners in four watersheds in the Willamette Valley: Clackamas, Pudding, and Yamhill River, and Amazon watersheds. The monitoring locations in these watersheds are located in a range of agricultural, urban and forested areas. DEQ and ODA worked with other partners to identify sub-watersheds and streams in these Willamette Valley watersheds where pesticide water quality concerns are the greatest, and focus outreach and technical assistance efforts more intensively in those areas.

More information on the PSP program can be found here: http://www.deq.state.or.us/wq/pesticide/pesticide.htm

3.6.4 Water Quality Pesticide Management Team (WQPMT)

The Water Quality Pesticide Management Team (WQPMT) is an inter-agency team composed of representatives from DEQ, ODA, OHA, ODF, OWEB and OSU. The WQPMT was formed to coordinate, communicate, support, and facilitate water quality protection programs, within the four agencies, related to pesticides in the State of Oregon. The WQPMT operates under a Memorandum of Understanding (MOU) established in 2009. ODA is the lead coordinating agency under the Environmental Protection Agency (EPA) - ODA Consolidated Pesticide Cooperative Agreement.

The priorities for the WQPMT are:

- Expansion of and coordination of PSP-type monitoring programs. Expansion should include urban pesticide use along with groundwater and sediment monitoring efforts.
- Integration into each WQPMT member agency activities
- Determine ways of prioritizing allocation of limited pesticide monitoring and outreach resources at a smaller scale in watersheds.
- Possibly expand scope of WQPMT to include fertilizers.
- Conduct watershed vulnerability assessments and prioritization.
- Coordination of state agencies in prioritizing and implementing management tasks described in the PSP based on the assessment of monitoring data using the established Response Matrix.
- Standardize reporting of monitoring data and WQPMT assessments and recommendations.
- Develop consensus on how to assess the presence of mixtures in monitoring samples.
- Actively engage in policy discussions/decisions regarding the coordination and overlap of federal CWA-FIFRA issues.
- Minimize duplicate work by coordinating with TMDL, PSP and other management and monitoring efforts.
- Continue coordination with various DEQ toxics programs through the DEQ Toxics Reduction Strategy.
- Maintain and build communication between each agency's water quality programs and key stakeholders.
- Continue outreach, communication, and maintenance of interest/resources on pesticide impact on water quality.
- Pursue additional partnership opportunities with other state agencies, universities, and colleges.

3.6.5 Drinking Water Protection

The State of Oregon Drinking Water Protection Program works to implement strategies ensuring the highest quality water is provided to public intakes and wells. Mandated by the 1996 Federal Safe Drinking Water Act (SDWA), Source Water Assessments including identification of risk associated with the land management activities in drinking water source areas have been completed for all public water systems that have at least 15 hookups, or serve more than 25 people year-round.

Technical assistance is available to all public water systems and their communities to implement protection and restoration activities that address point and nonpoint sources of pollution that were identified in the Source Water Assessments (completed from 2000 through 2005) and more recent risk identification based on more advanced data and improved GIS capabilities.

DEQ's drinking water protection program and the NPS Management Program collaborate to help identify, prioritize and implement best management practices for water quality improvements addressing harmful algae blooms, nutrients, turbidity, microbes and toxics. The objectives of the collaboration include optimizing agency resources by focusing on the highest priority pollutants in a coordinated way, implementing actions that reduce toxic pollutants at the source, and establishing partnerships with other agencies and organizations to increase the effective use of public and private resources.

Examples in 2014-15 include addressing coastal community concerns about pesticide application on forested and agricultural lands, minimizing sources of turbidity to drinking water intakes, assisting with waste pesticide collection events, partnering with drinking water providers to provide outreach and funding to address failing septic systems, providing input to encourage incorporation of drinking water concerns in agricultural management plans, and providing technical assistance to prioritize areas for riparian restoration. The Source water data is also is readily accessible and used by others. It is utilized to assist other DEQ programs to identify priority areas for permit modifications, inspections, technical

assistance and cleanup. It has been provided to several other state and federal agencies including Oregon Emergency Response System, Oregon Department of Transportation, ODF, ODA, DLCD, Oregon State Marine Board (OSMB), Oregon Water Resources Department (OWRD), United States Forest Service (USFS), USDA, and the BLM to facilitate incorporation of protection strategies into their respective programs. Refer to DEQ's drinking water website for more information: http://www.deq.state.or.us/wq/dwp/dwp.htm.

3.6.6 Groundwater Protection and Groundwater Management Areas (GWMAs)

Groundwater makes up approximately 95 percent of available freshwater resources in Oregon. Approximately 70 percent of all Oregon residents rely solely or in part on groundwater for drinking water. Over 90 percent of rural Oregonians rely on groundwater for drinking water. The goals of the Oregon Groundwater Quality Protection Act of 1989 (ORS 468B.150 – 468B.190) are to prevent contamination of groundwater resources, conserve and restore groundwater, and maintain the high quality of Oregon's groundwater resource for present and future uses.

Groundwater is present beneath almost every land surface and is sometimes at very shallow depths. It is vulnerable to contamination from NPS and activities that take place on the land as well as from discharges of wastes and pollutants at or below the ground surface. DEQ uses a combination of water quality and land quality programs to help prevent groundwater contamination from point and nonpoint sources of pollution, clean up pollution sources, and monitor and assess groundwater and drinking water quality. Once groundwater becomes contaminated, it is very difficult to clean up. This contamination may impair groundwater for use as drinking water and may affect the quality of the surface waters where it comes to the surface.
Groundwater protection authority under Oregon state law is primarily vested in DEQ, although other agencies and counties have important roles, particularly with regard to controlling NPS that could pollute groundwater. This can include DEQ designating Groundwater Management Areas (GWMAs) when groundwater in an area has elevated contaminant concentrations resulting, at least in part, from nonpoint sources. A contaminant is considered elevated when its concentration in an area is greater than or equal to 70% if the Maximum Contaminant Level set by EPA under the Safe Drinking Water Act.

Once the GWMA is declared, a local Groundwater Management Committee comprised of affected and interested parties is formed. The Committee then works with and advises the state agencies that are required to develop a GWMA Action Plan that will reduce groundwater contamination in the area. This plan contains a description of the voluntary actions that, when implemented by the various agencies and organizations involved, could reduce the amount of NPS and/or point source pollution leaching into the groundwater. The action plan identifies sources such as irrigated agriculture, land application of food processing water, septic systems (rural residential areas), and confined animal feeding operations.

Priorities for groundwater protection are:

- Identify areas outside of GWMAs that may need additional groundwater protection actions.
- Coordinate DEQ programs with roles in groundwater protection to reach GWMA program objectives more efficiently.
- Continue DEQ and ODA funding of groundwater projects through various grants and loans including a groundwater research grant, federal Clean Water Act 319 grants, and Clean Water State Revolving Fund loans.

Objectives for groundwater protection are:

- Prevent pollution of groundwater by implementing water quality programs related to agriculture, underground storage tanks, underground injection control, on-site septic systems, development, and other activities that have the potential to pollute groundwater.
- Continue to implement GWMA Action Plans in Oregon's three GWMAs.
- Monitor groundwater quality and trends throughout the state.

Strategies in non-GWMAs include:

- Continue to work cooperatively with Deschutes County to implement groundwater protection programs in the La Pine area.
- Disseminate information about soil and aquifer characteristics that increase vulnerability of groundwater.
- Continue funding and support of research, education, and implementation of BMPs for groundwater protection, as funding allows.

Oregon has designated three GWMAs because of elevated nitrate concentrations in groundwater. These include the Lower Umatilla Basin GWMA, the Northern Malheur County GWMA, and the Southern Willamette Valley GWMA. Each one has developed a voluntary action plan to reduce nitrate concentrations in groundwater.

Northern Malheur County GWMA:
The Northern Malheur County (NMC) GWMA was declared in 1989. An Action Plan was adopted in 1991 that identifies the source of contamination and measures to be taken to reduce the contamination. The nitrate trend in the Northern Malheur County GWMA is slightly declining. Some of the activities in the NMC GWMA are:

- Continue to implement the North Malheur County GWMA Action Plan and evaluate the performance or success of the management plan in reducing groundwater contamination.
- Continued sampling of Northern Malheur County GWMA well network consisting of 36 wells sampled quarterly. The fourth trend analysis is currently being finalized. It shows a continuation of the gradual decline in groundwater nitrate concentrations in the GWMA. The next regional trend analysis should be completed in Spring 2014.

Lower Umatilla Basin GWMA:
The Lower Umatilla Basin (LUB) GWMA was declared in 1990. An Action Plan was adopted in 1997 that details the sources of nitrate and measures to be taken to reduce the nitrate contamination. The nitrate trend in the LUB GWMA continues to increase, although at a slower and slower rate. Some of the activities in the LUB GWMA are:

- Continue to implement the Lower Umatilla Basin Action Plan and evaluate the performance or success of the management plan in reducing groundwater contamination.
- Continue sampling of Lower Umatilla Basin GWMA well network consisting of 31 wells sampled quarterly.

Revise the LUB GWMA action plan by the LUB GWMA Committee after the *Third Four-Year Evaluation of Action Plan Success in the Lower Umatilla Basin GWMA is finalized.* Completed in January 2013, the document *Third Four-Year Evaluation of Action Plan Success in the Lower Umatilla Basin GWMA* is currently being prepared for publication.

- The Third Four-Year Evaluation of Action Plan Success in the Lower Umatilla Basin GWMA was finalized in January 2013. The LUBGWMA Committee is currently drafting the second LUBGWMA Action Plan.
- The Communications and Outreach Plan was completed by the Lower Umatilla Basin GWMA Committee in the first half of 2014. The LUBGWMA Committee decided to postpone drafting a Communications and Outreach Plan until after completion of the second action plan had been completed.
- Work with the City of Irrigon to develop their voluntary Source Water Protection Plan.

Southern Willamette Valley GWMA:
The Southern Willamette Valley (SWV) GWMA has been the focus of studies for 20 years because of concerns about elevated levels of nitrate in the shallow groundwater. The nitrate contamination originates from many everyday sources, such as fertilizer application, septic systems, and animal waste. In 2004, DEQ designated the Southern Willamette Valley as a GWMA to help ensure that Willamette Valley groundwater could continue to provide a high quality resource for present and future use. Since then, local stakeholders have been engaged in planning to protect and improve the groundwater resource in the Southern Willamette Valley. To view the website for this project, go to http://gwma.oregonstate.edu/.

DEQ continues to monitor the 24 monitoring wells DEQ installed in the Southern Willamette Valley, as well as the 17 domestic wells that make up the long-term monitoring program. The 2009 "Synoptic Event' included one-time sampling of a little over 100 additional wells that brought new understanding to the depth of nitrate impacts in some areas of the SWV GWMA. DEQ has added several additional monitoring wells and six surface water locations to the long-term monitoring program in order to better assess this concern. In addition, EPA has volunteered to run stable isotopic analyses on surface and groundwater samples collected by the DEQ Lab.
Some of the other activities in the SWV GWMA are:

- Coordinate the Southern Willamette Valley GWMA Committee and implementation activities to reduce area-wide groundwater contamination.
- Continue monitoring 41 wells in the Southern Willamette Valley GWMA to determine groundwater trends. Provide EPA samples for stable isotopes analyses.
- Collaborate with EPA and Benton Soil and Water Conservation District on two grants that will focus on evaluating the effectiveness of conservation enhancement practices in reducing nitrate pollution to the groundwater in the Southern Willamette Valley GWMA.
- Conduct a focus group with randomly selected neighbors of two small schools in the GWMA, which have Public Water Systems with nitrate at or near 10 mg/L nitrate-N, to determine how to best incorporate groundwater protection into the daily life of those GWMA residents.
- Plan for a similar focus group targeting those growers managing large acreages.
- Use a social marketing approach to facilitate behavior change regarding groundwater protection.
- Update the Southern Willamette Valley Action Plan, to reflect activities that have been completed, and include additional voluntary strategies that were not part of the original Action Plan.
- Use the analyses to direct future work and GWMA Committee meeting topics.
- Evaluate funding sources for the Southern Willamette Valley GWMA, which may become a non-profit entity.
- Evaluate the potential nitrate impact to a 'deeper' aquifer in the Linn County area of the Southern Willamette Valley GWMA.

3.6.7 Coastal Zone NPS Management Program

Section 6217 of the Coastal NPS Control Program,
CZARA http://coastalmanagement.noaa.gov/about/czma.html#section6217
requires all applicable states and territories to develop Coastal Nonpoint Pollution Control Programs (CNPCP) to reduce impact from polluted runoff on coastal waters. CZARA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) and the EPA. EPA and NOAA must approve a state's nonpoint pollution control program. If the federal agencies do not approve a state's CNPCP program, federal funding for DLCD's coastal management program and DEQ's NPS pollution control programs are reduced. Oregon's CNPCP program has not yet received full approval by NOAA and EPA. If EPA 319 funding reductions occur, it will make it difficult to implement Oregon's NPS Management Plan measures.

CZARA requires states with approved coastal management programs to implement a set of 56 management measures that reduce NPS pollution. The measures are designed to control runoff from six main sources: forestry, agriculture, urban areas, marinas, hydromodification (such as dams or shoreline and stream channel modification), and wetlands and vegetated shorelines, or riparian areas. Where there is information to indicate that these 56 management measures are not sufficient to attain water quality standards, or protect critical coastal waters, additional management measures should be included in the state's CNPCP.

According to NOAA and EPA, a state's program is expected to build on existing coastal zone management and water quality programs by applying a consistent set of economically achievable management measures to prevent and mitigate polluted runoff. To obtain approval, a state must describe how it will implement 56 NPS pollution controls management measures that conform to those described in Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters ((g) Guidance) http://water.epa.gov/polwaste/nps/czara/index.cfm.

Oregon's CNPCP was developed by DEQ and the Department of Land and Conservation (DLCD) in partnership with several other state agencies. Oregon's CNPCP boundary includes roughly all lands west of the crest of the Coast Range and the entire Rogue and Umpqua River watersheds. At the north end, the area extends up the Columbia River to Puget Island, near the Clatsop-Columbia County line.

CZARA requires Oregon's program to describe the programs and enforceable policies and mechanisms the state will use to implement management measures. Oregon DEQ, in conjunction with the ODF and ODA, has broad authority to prevent and control water pollution from nonpoint sources within the state. Together, these agencies have the statutory authority to prevent NPS pollution, to adopt additional rules to require implementation of measures as necessary to control discharges from nonpoint sources, to enforce prohibitions on NPS discharges, and to require restoration, as necessary.

Oregon submitted elements of its plan for approval to NOAA and EPA in 1995. On January 13, 1998, the federal agencies approved the Oregon Coastal Nonpoint Program subject to specific conditions that the state still needed to address (see "Oregon Conditional Approval Findings")
at http://coastalmanagement.noaa.gov/nonpoint/docs/findor.txt

EPA and NOAA identified the following unresolved issue in need of resolution prior to full program approval.

- Additional Management Measure, Forestry
  - Protect medium, small, and non-fish bearing streams;
  - Protect high-risk landslide areas;

- Effectively address the impacts of road operation and maintenance, particularly legacy roads; and
- Ensure the adequacy of stream buffers for the application of certain chemicals.

Oregon is working with EPA and NOAA to resolve this additional management measure.

3.6.8. Incorporate EPA Watershed Plans Elements into TMDLs and Watershed Approach Basin Reports

EPA recommends that the EPA Watershed Plans Nine Key Elements identified in EPA's *Handbook for Developing Watershed Plans to Restore and Protect our Waters* (water.epa.gov/polwaste/nps/handbook_index.cfm) and in Appendix C of these guidelines, provide an effective, integrated approach to address the diverse realities and needs of each watershed. These 9 elements can be used by the States for water quality planning purposes when addressing nonpoint sources in a watershed. In Oregon, TMDLs, WQMPs, and TMDL implementation plans in combination with watershed council plans could be used to address the EPA Watershed Nine Key Elements (Table 2).

State and local groups provide most, if not all, of the nine key elements in watershed plans through the development of TMDLs, WQMPs, TMDL implementation plans, Watershed Council watershed plans, and other local planning documents.

If the existing plans/strategies do not formally address the nine elements, they can still provide a valuable framework for producing updated plans. For example, some TMDL Water Quality Management Plans and TMDL Implementation Plans developed by DMAs contain information on hydrology, topography, soils, climate, land uses, water quality problems, and management practices needed to address water quality problems but have no quantitative analysis of current pollutant loads or load reductions that could be achieved by implementing targeted management practices.

TMDL Implementation Plan Development

A TMDL IP describes the actions that are needed to improve water quality once a TMDL has been established. Generally, a TMDL IP includes a list of pollutants of concern and the sources (if known), proposed treatment strategies, a timeline for implementation activities, and proposed methods for monitoring the effectiveness of implementation activities. These TMDL IPs are necessary because a TMDL typically describes only what needs to happen and does not set out a schedule for implementing the specific improvements (see applicable TMDL/WQMP for specific requirements).

The required components of a TMDL IP are described in OAR 340-042-0080(4) excerpted below. See DEQ's May 2007 TMDL Implementation Plan Guidance for additional information. **OAR 340-042-0080(4):** *Persons, including DMAs other than the Oregon Department of Forestry or the Oregon Department of Agriculture, identified in a WQMP as responsible for developing and revising sector-specific or source-specific implementation plans must:*

The Nine Key Elements describe broad expectations for nonpoint source management:

1. Explicit short- and long-term goals, objectives and strategies to protect surface waters and groundwater.

2. Have strong working partnerships and collaboration with appropriate State, interstate, Tribal, regional, and local entities (including conservation districts), private sector groups, citizens groups, and Federal agencies.
3. A balanced approach that emphasizes both Statewide nonpoint source programs and on-the-ground management of individual watersheds where waters are impaired or threatened.
4. The State program (a) abates known water quality impairments resulting from nonpoint source pollution and (b) prevents significant threats to water quality from present and future activities.
5. An identification of waters and watersheds impaired or threatened by nonpoint source pollution and a process to progressively address these waters.
6. The State reviews, upgrades and implements all program components required by section 319 of the Clean

Water Act, and establishes flexible, targeted, iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable.

7. Ensure that all activities and uses on Federal lands are managed consistently with State program objectives.
8. Efficient and effective management and implementation of the State's nonpoint source program, including necessary financial management.
9. A feedback loop whereby the State reviews, evaluates, and revises its nonpoint source assessment and its management program at least every five years.

Table 2: EPA Watershed Plans Nine Key Elements

EPA WATERSHED PLANS NINE KEY ELEMENTS [1]
ELEMENT 1
Identification of causes of impairment and pollutant sources or groups of similar sources that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan.
a. Include the geographic extent of the watershed covered by the plan.
b. Identify the measurable water quality goals, including the appropriate water quality standards and designated uses.
c. Identify the causes & sources or groups of similar sources that need to be controlled to achieve the water quality standards.
d. Break down the sources to the subcategory level.
e. Estimate the pollutant loads entering the waterbody.
ELEMENT 2
An estimate of the load reductions expected from management measures needed to meet the water quality goals. (DEQ does not do this in the Watershed Approach Basin Reports. However, DEQ estimates the load reduction by pollutant for 319 funded projects and reports the load reductions in the NPS Annual Reports.)
ELEMENT 3
A description of the nonpoint source management measures that need to be implemented to achieve load reductions, and a description of the critical areas in which those measures will be needed to implement this plan.
a. Identify the management measures that need to be implemented to achieve the load reductions.

[1] From: EPA's Handbook for Developing Watershed Plans to Restore and Protect Our Waters, March 2008, EPA 841-B-08-002. **http://water.epa.gov/polwaste/nps/upload/2008_04_18_NPS_watershed_handbook_app_c.pdf**

EPA WATERSHED PLANS NINE KEY ELEMENTS [1]
b. Identify critical areas in which management measures are needed.
ELEMENT 4
Estimate of the amounts of technical and financial assistance needed associated costs, and/or the sources and authorities that will be relied upon to implement this plan.
a. Estimate the costs to implement the plan, including management measures, administration, information/education activities, and monitoring.
b. Identify the sources and amounts of financial and technical assistance and associated authorities available to implement the management measures.
ELEMENT 5
Prepare an information and education component used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measures that will be implemented.

EPA WATERSHED PLANS NINE KEY ELEMENTS [2]
ELEMENT 6
Develop a schedule for implementing the nonpoint source management measures identified in this plan that is reasonably expeditious.
ELEMENT 7
Prepare a description of interim measurable milestones for determining whether nonpoint source management measures or other control actions are being implemented.
ELEMENT 8
Develop a set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining (or maintaining) water quality standards, and specify what measures will be taken if progress has not been demonstrated.
ELEMENT 9
Develop a monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under Element 8 immediately above.
a. Develop a monitoring component to determine whether the plan is being implemented appropriately and whether progress toward attainment or maintenance of water quality goals is being achieved.
b. Develop an evaluation framework.

The developed guidance for these elements will include example TMDL Implementation Plans and Watershed Approach Basin Reports that meet the nine key elements.

The following **Table 3** will be included in the guidance for each example plan and report. This chart will indicate how the nine key elements are being met (noted as Yes or No) on a watershed basis. The filled – out chart will also indicate how the Oregon NPS Program Plan's goals, actions, milestones and planned actions with associated timelines (i.e. the nine key elements) are or are not included in the TMDL Implementation Plans and Watershed Approach Basin Reports.

[2] From: EPA's Handbook for Developing Watershed Plans to Restore and Protect Our Waters, March 2008, EPA 841-B-08-002. **http://water.epa.gov/polwaste/nps/upload/2008_04_18_NPS_watershed_handbook_app_c.pdf**

Table 3: Analysis of TMDL Implementation Plans and Watershed Basin Approach Reports' Inclusion Of EPA's Watershed Plans Nine Key Elements

ANALYSIS OF TMDL IMPLEMENTATION PLANS AND WATERSHED BASIN APPROACH REPORTS' INCLUSION OF EPA'S WATERSHED PLANS NINE KEY ELEMENTS		NAME AND DATE OF TMDL IMPLEMENTATION PLAN OR WATERSHED APPROACH BASIN REPORT (INCLUDE WATERSHED NAME)
Watershed Plans Nine Key Element	**Included Y/N**	**Where To Be Found/Comments**
1. Identification of causes of impairment and pollutant sources or groups of similar sources that need to be controlled to achieve needed load reductions, present in the watershed.		
2. An estimate of the load reductions expected from management measures.		
3. A description of the NPS management measures that will need to be implemented to achieve load reductions, and a description of the critical areas in which those measures will be needed to implement this plan.		
4. Estimation of the amounts of technical and financial assistance needed associated costs, and/or the sources and authorities that will be relied upon to implement this plan.		
5. An information and education component is used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.		
6. Schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious.		
7. A description of interim measurable milestones for determining whether NPS management measures or other control actions are being implemented.		
8. A set of criteria that can be used to determine whether loading reductions are being achieved overtime and substantial progress is being made toward attaining water quality standards.		

ANALYSIS OF TMDL IMPLEMENTATION PLANS AND WATERSHED BASIN APPROACH REPORTS' INCLUSION OF EPA'S WATERSHED PLANS NINE KEY ELEMENTS		NAME AND DATE OF TMDL IMPLEMENTATION PLAN OR WATERSHED APPROACH BASIN REPORT (INCLUDE WATERSHED NAME)
Watershed Plans Nine Key Element	**Included Y/N**	**Where To Be Found/Comments**
9. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established.		

4. Management of NPS by Land Use

Land management activities on agricultural, forested, and urban lands can affect water quality. The types and extent of water quality impairments, as well as available resources and impediments, vary geographically. It therefore is critical to consider GWMA/basin specific conditions and develop local priorities and solutions for the prevention, control, and reduction of pollution sources to achieve water quality improvements. Oregon programs have been developed and adapted to address NPSs. These programs include the management or regulation of forestry, agriculture, grazing, transportation, recreation, hydromodification, marinas, urban development, land use planning, fish and wildlife habitat, riparian and wetlands protection/restoration, public education, water resources, and other activities that affect the quality of the state's waters.

In Oregon, the legislature has adopted statutes directing the roles and responsibilities of the state agencies for managing water quality affected by agriculture activities, forest activities, and urban landscapes. Oregon's NPS Management Program is intended to control or prevent nonpoint source pollution from causing impairments and allow water bodies to attain or maintain water quality standards and thereby protect the beneficial uses of all state waters. Oregon will promote and support programs and activities that are guided by best available science and implemented through an adaptive management approach. In addition, Oregon will realize these goals by striving for broad community acceptance and involvement.

4.1. Agricultural Lands

One of the goals of the NPS Management Program is to assure agricultural land management does not cause water quality impairments through implementation of the Agricultural Water Quality Management Act, the federal CWA, state water quality standards, and TMDL load allocations. This goal has been memorialized in the MOA between DEQ and ODA. Accomplishing this goal requires coordination with other state, federal, and local partners including tribes where appropriate.

DEQ's NPS Management Program works with ODA's Natural Resource Program to prevent pollution and improve water quality on agricultural lands as required under the Agricultural Water Quality

Management Act. DEQ and ODA's program staff and management work collaboratively on various water quality related projects to address agricultural nonpoint sources. DEQ's NPS Management Program also coordinates with DEQ programs as well as agency partners such as USDA Natural Resources Conservation Service, Soil and Water Conservation Districts, USGS, Oregon State University, watershed council, and Tribes.

4.2. Agricultural Water Quality Management Program

The Agricultural Water Quality Management Act (ORS 568.900 to 568.933) authorizes ODA to develop Agricultural Water Quality Management (AGWQMP) Area Plans (area plans) and rules throughout the state.

The statute authorizes the development of Agricultural Water Quality Management Area Rules (area rules) to serve as a regulatory backstop to the voluntary efforts described in the area plans. ORS 561.191 states that ODA shall develop and implement any program or rules that directly regulate farming practices to protect water quality.
The Agricultural Water Quality Management Program is the main regulatory tool to prevent and control nonpoint source pollution from agricultural lands. Water quality standards and TMDL load allocations for agricultural lands should be met through implementation of area plans and enforcement of area rules. The program staff members are also involved with the development of Ground Water Management Act action plans, and lead implementation of action plans to improve groundwater quality.

4.3. ODA is a Designated Management Agency (DMA) for TMDL Implementation

ODA has been a partner for TMDL development and implementation and ODA is the DMA for agricultural lands. DEQ's basin coordinators and ODA staff have ongoing working relationships with the review and implementation of Agriculture Area Plans, as well as local water quality issues related to drinking water. Area rules and plans are the mechanisms for TMDL implementation on agricultural lands.

Soil and Water Conservation Districts (SWCDs) have contractual relationships with ODA to act as a Local Management Agencies (LMAs) to meet water quality goals on agricultural lands. Area plans must describe a program to achieve the water quality goals and standards necessary to protect designated beneficial uses related to water quality, as required by state law (OAR 603-090-0030(1) and the federal CWA.At a minimum, an area plan must:

- Describe the geographical area and physical setting of the Management Area
- List water quality issues of concern
- List impaired beneficial uses
- State that the goal of the area plan is to prevent and control water pollution from agricultural activities and soil erosion in order to achieve applicable water quality standards
- Include water quality objectives
- Describe pollution prevention and control measures deemed necessary by the Oregon Department of Agriculture (ODA) to achieve the goal

- Include an implementation schedule for measures needed to meet applicable dates established by law
- Include guidelines for public participation
- Describe a strategy for ensuring that the necessary measures are implemented

The area plans as well as the reports can be found at the following link: http://egov.oregon.gov/ODA/NRD/water_agplans.shtml.

4.3.1 DEQ and ODA Memorandum of Agreement

DEQ and ODA negotiated and signed a Memorandum of Agreement in May 2012, http://www.deq.state.or.us/wq/nonpoint/docs/ODADEQMOA2012.pdf . The MOA is intended to guide the agencies to fulfill respective legal responsibilities and obligations in an efficient and effective manner.

The following objectives are applicable to DEQ staff and management:

- Leverage and strategically invest funds and resources by engaging in local and statewide watershed protection and restoration efforts.
- Support ODA to develop and implement AGWQMP area plans that would, when implemented, achieve TMDL load allocations and water quality standards including groundwater.
- Support ODA to develop and ensure compliance of AGWQMP area rules that would, when implemented, help achieve TMDL load allocations and water quality standards.
- Evaluate program effectiveness by designing, coordinating, and conducting water quality monitoring projects and compare with implementation activities.
- Capitalize on Water Quality Pesticide Management Team (WQPMT) partnerships to develop and implement a Pesticide Management Plan that would, when implemented, achieve water quality standards and other benchmarks including groundwater protection.

4.3.2. Agricultural Nonpoint Source Program Priorities

Due to limited resources and fluctuating state revenues, it is necessary for DEQ's nonpoint source program to be selective when allocating funds and resources. DEQ has been working with partners in the agriculture sector to coordinate and focus efforts.

4.3.3. TMDL Implementation, Biennial Reviews and Basin Plans

The priority work for DEQ for the next five years is to improve, where needed, water quality on agricultural lands. DEQ considers it important to build Oregon's capacity to be able to measure and report on nonpoint source activities and water quality trends on agricultural lands at various scales.

This is accomplished by the following actions:

- The DEQ NPS Annual Report summarizes implementation of activities to reduce nonpoint sources of pollution and water quality responses.

- TMDL implementation for TMDLs developed to address nonpoint sources could include DMA reporting that would be used by DEQ for reporting on NPS activities and water quality responses.
- DEQ will participate in the biennial review process to assist ODA to identify and document implementation actions. Implementation on agricultural lands should be strategic and future actions should be documented in order to demonstrate accountability and to leverage various funding sources.
- Decisions should be made while considering unique water quality issues. Basin priorities will be identified through the basin plan development process. Where basin plans have been developed, DEQ will use the action plans and basin priorities to determine how DEQ resources for agriculture will be allocated.
- Evaluation and reporting capacity is completed by DEQ, which prioritizes program activities in order to build capacity to report on the effectiveness of agricultural programs and water quality trends.

4.3.4 ODA Strategic Implementation Areas

ODA went through a strategic planning process in 2012. This was followed in May 2012 with an Oregon Board of Agriculture action item recommending that ODA develop additional alternatives to a complaint-based water quality program. The Board further recommended that the AGWQM Program devote more resources to building relationships, plan implementation, and compliance. To reinforce this goal, in March 2013 the Board passed Resolution 331. The resolution supports ODA to establish a strategic implementation process that identifies key geographic areas called strategic implementation areas (SIA) and targets resources to achieve compliance with local water quality regulations.

ODA established two SIAs in 2013, and is in the process of selecting six additional SIAs in 2015. The Board of Agriculture resolution noted that the effort should be founded on the basic conservation principles of erosion control, nutrient management, stream bank stabilization, and moderation of solar heating of streams, promoted by aligning resources with local, state and federal natural resource partners. Within SIAs, ODA will do a pre-assessment to identify locations likely not meeting water quality regulations. ODA will then work with local, state, and federal partners to outreach to agricultural landowners in the area, with a focus on those properties that are likely not in compliance. Following the outreach period, ODA will identify locations likely not meeting water quality regulations and schedule site visits to seek compliance. ODA will then do a post-assessment to measure change and communicate progress. http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/SIA4.pdf

4.3.5 Focus Areas

ODA has asked SWCDs to select “Focus Areas” for implementation in each management area. http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/WaterFocus4.pdf

Focus Areas concentrate limited outreach, technical assistance, and financial assistance resources in smaller geographic areas where change may be measured faster. Focus Areas are identified and implemented by SWCDs for voluntary implementation of the Agriculture Area Plans. These efforts are focused on impaired areas since they are seen as the best, most effective way to prioritize staff and funding to improve water quality.

4.3.6 NRCS National Water Quality Initiative and State Resource Assessment Process

The Natural Resources Conservation Service (NRCS) identifies and works in priority watersheds throughout the Nation to improve water quality through the National Water Quality Initiative (NWQI). NRCS provides financial assistance to help producers and ranchers implement conservation practices and systems to reduce water quality pollution from agricultural lands. In Oregon, NRCS works with local as well as federal partners including DEQ, ODA, USFWS and others to identify NWQI watersheds based on needs as well as opportunities. In addition, EPA has directed the states to conduct effectiveness monitoring using 319 funds in NWQI watersheds.

As of January 2014, EPA has awarded technical assistance grants for Oregon to develop monitoring plans for Fifteen Mile Creek and Willow Creek NWQI effectiveness monitoring projects. DEQ and its partners will be developing and implementing the effectiveness monitoring projects in those watersheds during 2014-2019.

4.3.7 Other Programs and Partners

DEQ works with other partners and ODA programs to meet water quality goals for agricultural lands.

The following programs and partnerships are active in Oregon:

- Conservation Effectiveness Partnership (CEP) NRCS, OWEB, ODA, and DEQ).
- These agencies recognized a benefit to the public and agencies if the programs could more readily share information, and began exploring opportunities for collaboration on the shared grant program goals of improving water quality, watershed functions and processes. The agencies signed a memorandum of understanding in 2010 to formalize this collaboration and allow the sharing of certain types of data.

The goals of the partnership are to:

  - Build an understanding of the extent of the investment in watershed improvement actions through the agencies' collective grant programs;
  - Develop a better understanding of how local organizations are utilizing the agencies' respective grant programs;
  - Evaluate the impacts of grant investments on water quality and watershed health;
  - Describe gaps in the treatment of watersheds; and
  - Design tools and methods to report accomplishments to the public.

The partner agencies selected two "pilot watersheds":

- The Wilson River in Tillamook Bay, and
- Wychus Creek along the Upper Deschutes River.

  - The pilots were selected due to the length of time and investment of grant program dollars, the magnitude of projects undertaken, the availability of current data sets for these watersheds, and the potential to detect trends of change. (3.2.4 MOA between NRCS, OWEB, ODA, and DEQ).
  - Water Quality Pesticide Management Program (ODA, DEQ, ODF, OHA, OWEB, OSU).
  - Local and Statewide groups for strategic implementation.

There are a number of committee meetings held at the state and regional level in order to develop and implement strategies for implementation:

- Oregon Technical Advisory Committee (OTAC): The Natural Resources Conservation Service (NRCS) State Conservationist and Farm Service Agency (FSA) State Director co-chair the OTAC under section 1446 of the 1990 Farm Bill. The Oregon USDA established the committee to provide advice for technical considerations and guidance for implementing programs in the Farm Bill such as Environmental Quality Incentive Program and Conservation Innovation Grants.
- Local and Basin Work Groups: NRCS holds meetings in each basin and county to allocate available funding in strategic manner.
- OWEB grants review group: OWEB convenes regional and statewide teams used to prioritize and recommend projects for OWEB funding.

4.3.8. The NPS Program Agricultural Measures, Timelines, and Milestones

The following strategies for agricultural water quality are applicable to DEQ staff and management between 2014 and 2019. Schedule may be revised based on annual prioritization process and implemented accordingly. DEQ currently works on many of the tasks identified here:

Statewide/Programmatic Projects:

- DEQ's projects often involve partners. DEQ will continue to seek opportunities to collaborate with others. (Ongoing)
- Protection of high quality waters are prioritized locally through Basin Planning process. In addition, protection is considered during triennial review. (Ongoing)
- Basin priorities for agriculture are identified through basin plan development process to ensure decisions are made while considering unique water quality issues. (Ongoing)
- DEQ works with local, state, and federal partners that provide technical assistance to producers to promote conservation practices and restoration. DEQ will continue those partnerships. (Ongoing)
- DEQ considers AGWQMP to be a key program for implementation. Review and update AWQM Program biennial review guidance document. (Annually)
- DEQ considers various programs that provide funding for implementing conservation practices and protection to be key programs for implementation. DEQ will continue to participate in existing statewide efforts to direct funds, and continue to seek other opportunities. (Ongoing)
- DEQ considers TMDL to be a key program for implementation. Revise and finalize TMDL Guidance document. (4/2014 to 4/2015, revise as necessary)
- Develop and incorporate source water protection guidance into AGWQM Program biennial review guidance document. (Annually)
- Develop and provide training related to agricultural land use, policy, and regulations to staff and partners. (As resources allow)
- Participate in Oregon Technical Advisory Committee meetings and subcommittees to direct funds to high priority projects. (Ongoing)
- Work with Clean Water State Revolving Fund program and Source Water programs to identify opportunities to streamline and leverage each other's resources. (Ongoing)
- Develop and implement a programmatic strategy to address agricultural activities on federal lands, such as grazing. (1/2016 to 12/2016)
- Support ODA to develop vegetation assessment methodology for SIA and FA. (evaluate and revise in 2015)
- Work with ODA to prioritize and help develop assessment methodologies for other area rule compliance. (6/2013 to 1/2019)
    - Erosion and sedimentation

  - Manure and nutrients
  - Pesticides
  - Waste management
- Develop capacity and provide GIS and water quality information to ODA during biennial reviews to facilitate prioritization and development of measurable milestones and timelines for implementation. (12/2013 to 1212/2014, then ongoing) - evaluate and revise as needed
- Participate in CEP:
  - Develop success stories by analyzing existing data or collecting additional data. (Ongoing)Collaborate with NRCS and OWEB to align reporting categories so that implementation information reported to both sources could be aggregated and reported by subbasins and basin scale. (66/15 to 3/16)
- Participate in biennial review process. Provide written comments on the contents including the plan objectives, focus area selection, measurable milestones, and timelines for implementation by using internal guidance document. (Ongoing)
- DEQ considers TMDL to be a key program for implementation. Engage and work with agricultural partners. Once TMDL Guidance document is drafted, use it to ensure consistency. (Ongoing)
- As resources allow, work with other WQ programs as well as local partners to leverage their resources. (Ongoing)
- Participate in Local Working Groups and OWEB Grant meetings. (Ongoing)
- Conduct additional vegetation assessment for SIAs and FAs where applicable. (1/2014 to 1/2019)
- Evaluate vegetation assessment data with ODA and estimate percent of SIA and FA meeting TMDL/WQS goals. (6/2015 to 1/2019)
- Implement monitoring plan and measure water quality trend on agricultural lands over time as indicated in monitoring plan (4/2014 to 1/2019)

4.3.9 ODA's Reporting

ODA keeps records of compliance related information, as well as summarizes and reports annually to interested entities including DEQ. ODA and the SWCDs also produce reports associated with AWQM Plan biennial reviews. The reports are updates on compliance and monitoring efforts as well as a summary of progress toward plan objectives and targets on outreach and on the ground projects.

DEQ's regional staff provides technical assistance and coordinates with ODA's water quality specialists to review the area plans and provide information for the reports as resources allow. ODA followed up on complaints by conducting site visits or driving by the sites. More compliance investigations were initiated due to issues related to manure management than other water quality issues. The area plans as well as the reports can be found at the following link: http://egov.oregon.gov/ODA/NRD/water_agplans.shtml.

4.3.9.1. Water Quality Program Compliance Summary

ODA provides the following information to DEQ annually. The following figures are included in NPS annual report to EPA.

- Total number of site visits by ODA's regions
- Compliance investigations by pollutant
- Source of compliance investigation
- ODA compliance action taken

4.3.9.2. Outreach and Education Summary

ODA provides funding to 45 SWCDs for implementation of water quality programs. One of the core components of the water quality program at ODA is its relationships with the SWCDs. ODA and the SWCDs negotiate scope of work agreements to clarify conservation projects to be completed. The SWCDs have used various venues to reach agricultural producers and rural land residents to promote conservation practices.

Additional information on conservation practices is in the funding partner section. **Table 4** provides example of the different types of SWCDs outreach and education activities. **Table 5** identifies the number of SWCD site visits and water quality monitoring sites.

Table 4: Example SWCDs Outreach and Education Summary

SWCDS OUTREACH AND EDUCATION	# EVENTS	ATTENDANCE OR DISTRIBUTION
Presentations	**213**	**7002**
Demonstrations	**24**	**598**
Tours	**73**	**1507**
Displays	**127**	**38457**
Student Events	**201**	**16171**
Fact Sheets	**62**	**20265**
Newsletter articles	**579**	**54641**

Table 5: Other SWCD Activities

OTHER SWCD ACTIVITIES	
Number of Site Visits	**2689**
Water Quality Monitoring Sites	**470**

4.4 State and Private Forest Lands

Oregon's NPS program for forestry uses cooperation between Oregon's DEQ and ODF, respectively to reduce and prevent NPS pollution from non-federal forestlands. Under the Oregon Forest Practices Act (FPA), ODF has exclusive jurisdiction over water quality regulation on non-federal forestlands unless additional protections are required by the federal Clean Water Act.

Under ORS 468B.110(2), ORS 527.765, and ORS 527.770, the Board of Forestry establishes best management practices or other control measures by rule that, to the maximum extent practicable, will ensure attainment and maintenance of water quality standards. If the Environmental Quality Commission (EQC) does not believe that the FPA rules will accomplish this result, the EQC is authorized to petition the Board for rules that are more protective. If the EQC petitions the Board for review of BMPs, the Board has two options: terminate review with the EQC concurrence, or begin rulemaking. If the Board determines that BMPs should be reviewed, rules specifying the revised BMPs must be adopted not later

than two years from the filing date of the petition for review, unless the Board, with concurrence of the EQC, finds that special circumstances require additional time.

Upon the EQC's request, the Board is required to take interim action "to prevent significant damage to beneficial uses" while the BMPs are being reviewed. The "BMP shield" under ORS 527.770 is lost if the Board fails to complete BMP revisions, or makes a finding that revisions are not required, within the statutory deadline. In addition, under 468B.110(2), the EQC cannot adopt rules regulating nonpoint source discharges from forest operations and the DEQ cannot issue TMDL implementation plans or similar orders governing forest operations unless "required to do so by the CWA." This authority would also be triggered by the failure of the Board to adopt adequate BMPs to implement TMDL allocations for forestry or to avoid impairment of water quality such that standards are not met.

The FPA Rules and Best Management Practices (BMPs) protect natural resources including water quality. The FPA rules are periodically evaluated to insure that forest practices do not contribute to violations of water quality standards and those changes to rules be evaluated if the state Board of Forestry finds evidence of resource degradation and the public policy process under ORS 527.714 is completed. ODF has existing processes in place that help guide the work of staff by establishing work priorities.

A few examples of these processes follow:

- The Forestry Program for Oregon describes the mission, values, vision, goals, objectives, and indicators of sustainable forest management. The Oregon Board of Forestry has developed a Board work plan designed to describe major topics that the Board will discuss based on information from staff. The Private Forests Division has developed an Annual Operations Plan (AOP) that is the framework for staff priorities for the current year. These processes will be used by DEQ to identify common priorities and tasks, and priorities are developed with opportunities for DEQ's input.
- ODF has completed a monitoring strategy to establish priorities for monitoring. DEQ works cooperatively with ODF to evaluate rules and BMPs, design, implement, and analyze studies of forest practice effectiveness, and alter rules and BMPs when necessary This sequence of actions allows ODF to work in a "plan-do-check-act" cycle that affords continuous improvement of the FPA over time. An example of this process is the changes to the road rules over time to prevent sediment movement from forest roads into waters of the state.

Changes to road rules include:

- In 1984, rules with regard to road engineering were upgraded, requiring full bench construction on new and reconstructed roads, for example.
- In 1994, rule changes increased restrictions on deep fills near stream crossings, required the design of stream crossings to pass 50-yr peak flows and juvenile fish, and required stream crossings that are installed to provide fish passage be maintained to provide fish passage.
- In 2003, new rules were adopted restricting wet weather hauling when sediment is entering streams, requiring more frequent cross-drains from road ditches, addressing proposed roads in critical locations, and other measures to improve the hydrological performance of roads.

ODF and DEQ have the following State and Private Forest Lands Priorities:

- In cooperation with ODF Private Forest Division staff, ensure that water quality standards are being attained, TMDL load allocations are being met, and beneficial uses are being supported on private forestlands in Oregon.
- Evaluate voluntary implementation of Oregon Plan for Salmon and Watersheds in reducing water quality risks and impacts, identify information gaps, and collect additional information as needed in cooperation with ODF and landowners.
- Evaluate effectiveness of Oregon Plan for Salmon and Watersheds in reducing water quality risks and impacts.
- Review any changes to state forest management plans and work with ODF State Forest Division staff so changes to plans continue to protect water quality and beneficial uses on state-owned forestlands.

ODF and DEQ have the following State and Private Forest Lands Objectives:

- Continue evaluation of small and medium fish-bearing stream protection rules with respect to the Protecting Cold Water criterion of Oregon's temperature standard and temperature TMDL load allocations under the Human Use Allowance.
- Continue contributing to evaluation of RipStream data on riparian stand characteristics to determine if riparian stand function under the FPA and state forest management plans will provide adequate large woody debris recruitment for maintenance and creation of aquatic habitat, sediment regulation, and cold-water refugia.
- Discuss sufficiency of FPA for protection of water quality and beneficial uses with regard to small non-fish-bearing streams, landslide-prone areas, sediment-related processes, pesticide use (see PSPs), and drinking water sources by assisting ODF with their monitoring strategy and through data analysis and funding, as needed.
- Provide review on any proposed changes to state forest management plans that may impact water quality.
- Collect information on voluntary measures implemented under the Oregon Plan.

4.4.1 RipStream (Riparian Function and Stream Temperature) Study

The products of the RipStream Study relate to **Objectives 1 and 2** above.

ODF's RipStream project has been developed to provide a coordinated monitoring effort with which to evaluate effectiveness of Oregon Forest Practices Act (FPA) rules and strategies in protecting stream temperature, and promoting riparian structure that provides necessary functions for the protection of fish and wildlife habitat. DEQ is participating in the RipStream project by providing 319 funds and assisting in analyses of data and study results in cooperation with ODF staff. DEQ is also providing assistance through scientific, geographic, and policy analysis.

In order to meet this objective, the following questions were addressed:

- Are the FPA riparian rules and strategies effective in meeting DEQ water quality standards regarding protection of stream temperature and attaining the water quality standard?
- Are the FPA riparian rules and strategies effective in maintaining large wood recruitment to streams, downed wood in riparian areas, and shade?
- What are the trends in riparian area regeneration?
- What are the trends in overstory and understory riparian characteristics? How do they, along with channel and valley characteristics, correlate to stream temperature and shade?

ODF has completed their initial analysis to test whether current riparian protections on small and medium fish-bearing streams are adequate to meet water quality standards for temperature. Streams in State Forests are meeting both numeric and Protecting Cold Water (PCW) criteria of the temperature standard. Streams on private forests are typically meeting the numeric criterion, although 3 of 18 experimental stream reaches showed an exceedance after harvest. (Four additional streams exceeded numeric criteria pre-harvest or in the control reach, a mix of state and private sites.)

However, streams are not meeting the PCW criterion in 40% of post-harvest cases compared to a natural background rate of 5% on state and private forests. The higher than background PCW non-compliance rate also indicates an inability to consistently meet TMDL load allocations for forestry on fish-bearing streams. It should be noted that the starting temperatures in these streams are usually far below the numeric criteria.

Streams managed by FPA riparian rules showed a post-harvest average increase of 0.7 degrees C in the daily maximum temperature. State forest rules resulted in no change in the average daily maximum. Subsequent analysis has shown that reductions in shade are the primary factor driving these temperature changes, and shade decreases are primarily connected to lower basal areas.

The Oregon Board of Forestry issued a finding of degradation of resources (water quality) and initiated rulemaking. Rule alternatives are currently being designed and analyzed. Staff from ODF have done further analysis of RipStream data and conducted a Systematic Review of the scientific literature on harvest effects on shade and/or stream temperature. The results of the Systematic Review and analysis will be used to identify alternative rules that can meet the PCW criterion. The rule changes for temperature protection on small and medium fish-bearing streams should be completed over the next year and will have continued involvement and assistance from DEQ. Future analysis will evaluate if riparian management prescriptions are sufficient for riparian large woody debris recruitment needs.

The NPS program is working with ODF and will utilize existing ODF processes such as their monitoring strategy to evaluate FPA sufficiency for small non-fish-bearing streams, landslide-prone areas, sediment processes, pesticides, and drinking water protection. This would incorporate past and ongoing agency work (e.g. Turbidity Report on Coast Range Public Water Systems, FPA compliance monitoring, Regional Solutions projects, PSPs, MidCoast TMDL work) and research (e.g. peer-reviewed studies; Trask, Alsea, Hinkle Creek watershed studies). It might also require new monitoring projects, so scoping and perhaps initiation of those studies would take place during the next 2 years.

4.4.2 Forest Practices Act Sufficiency Analysis

Analysis of Oregon FPA sufficiency relates to **Objective 3** above.

Oregon's DEQ and ODF completed "Sufficiency Analysis: A Statewide Evaluation of Forest Practices Act Effectiveness in Protecting Water Quality" in 2002. The Sufficiency Analysis described forest practice rules and their degree of certainty in terms of meeting water quality standards. It identified, among other things:

- Uncertainties in the ability of riparian rules for small and medium fish-bearing and non-fish-bearing streams to meet the temperature standard;
- Uncertainties in the ability of riparian rules for small and medium fish-bearing and non-fish-bearing streams to provide enough large woody debris over time for habitat creation and maintenance;

- Road rules being insufficient to meet turbidity and sedimentation standards due to inadequate cross-drain spacing and wet-weather hauling problems;
- Corrected in 2003 rule changes;
- Adequacy in current fish passage rules when implemented.

While the Sufficiency Analysis did contain discussion of forest practice (specifically clear cutting) effects on shallow landslide processes, it did not reach any conclusions or evaluate whether current rules for harvest on landslide-prone areas are protective of water quality. There are landslide rules in effect for public safety considerations but not for water quality impacts There are not restrictions to harvesting on steep slopes unless there is a public safety consideration. However, as required in-unit leave trees, (2 trees/acre) must be left along non-fish-bearing streams that could deliver debris flows to fish-bearing streams. In addition, ground-based yarding is restricted on slopes over 60% with additional required BMPs.

There is also a lack of information on upgrades to roads built before the current rules were in effect. Some locations (e.g. steep side slopes and riparian/floodplain areas), types of construction (e.g. cut-and-fill), and stream crossings represent a higher risk for catastrophic failures.

Voluntary upgrades and storm proofing have been extensive, but there is little information about remaining risk on the landscape. In addition, the science around sediment regimes has advanced over the last decade and recent monitoring shows low-levels of herbicides applied in forestry are reaching surface waters, and there are water quality problems (turbidity) for Public Water Systems in the Coastal Zone that may be related to forest practices.

The NPS program plans an evaluation of FPA sufficiency for small non-fish-bearing streams, landslide-prone areas, sediment processes, pesticides, and drinking water protection. This would incorporate past and ongoing agency work (e.g. Turbidity Report on Coast Range Public Water Systems, FPA compliance monitoring, Regional Solutions projects, PSPs, MidCoast TMDL work) and research (e.g. peer-reviewed studies; Trask, Alsea, Hinkle Creek watershed studies). It might also require new monitoring projects, so scoping and perhaps initiation of those studies would take place during the next 2 years.

The NPS Program State and Private Forest Measures, Timelines, and Milestones:

- Continue to participate in ODF/BOF rule work for evaluation of changes to stream protection rules for small and medium fish-bearing streams [Complete during 2014].
- Participate in analysis of riparian stand information to determine if large wood recruitment and other riparian functions are being maintained [Cooperate with ODF in creating a timeline during 2014; Continue assisting ongoing analysis]
- Continue working with ODF to ensure that water quality standards are being met with regard to small non-fish-bearing streams, landslide-prone areas, sediment processes, pesticide use, and drinking water sources on nonfederal forestlands. [In cooperation with ODF during 2014-15]
    - If necessary, create plan to remedy risks and impacts not covered by current rules [In cooperation with ODF by December 2016]
- Update the 1998 MOU between ODF and DEQ [In cooperation with ODF by December 2015]
- Review proposed changes to state forest management plans and comment as needed to ensure state forest plans will meet water quality standards and TMDL load allocations. [As necessary]
- Collect information on work done under the Oregon Plan and remaining water quality risks and impacts not covered by combination of forest practice rules and Oregon Plan implementation. [In cooperation with ODF by December 2015]

- If necessary, create plan to remedy risks and impacts not covered by rules and Oregon Plan [In cooperation with ODF by December 2016]

4.5 Federal BLM and USFS Lands

4.5.1 Coordination with USFS and BLM to Meet State and Federal Water Quality Rules and Regulations

Oregon DEQ has Memoranda of Understanding (MOUs) with both the BLM http://www.deq.state.or.us/wq/nonpoint/docs/USFSDEQWQMU02.pdf and U.S. Forest Service (USFS) http://www.deq.state.or.us/wq/nonpoint/docs/USFSDEQMOU.pdf . The purpose of the MOUs are to document the cooperation between the parties to ensure that the agencies cooperatively meet State and Federal water quality rules and regulations related to point and NPS water pollution from USFS and BLM managed lands.

The federal CWA and associated Oregon Revised Statutes (ORS) and Administrative Rules (OARs) were created to assure that waters of the state (e.g., lakes, ponds, rivers, streams, and groundwater, etc.) in Oregon meet water quality standards. In addition, the implementing programs and regulations require that all feasible steps be taken toward achieving the highest quality water attainable. Federal agencies located within the state are held to the same standards as all other entities to manage waters under their jurisdiction to meet these standards.

The specific tasks identified in the MOU are:

- The USFS will conduct BMP implementation and effectiveness monitoring following the USDA National Best Management Practices for Water Quality on National Forest System Lands National Core BMP Technical Guide BMPs monitoring protocols that will also be required in Forest Plans and projects.
- The BLM and USFS will review and revise BMPs for all land uses and activities including harvest as necessary to improve their effectiveness.
- DEQ will review the BLM and USFS BMPs for the full range of land use activities addressed in Forest Plans, Forest Plan amendments, and Water Quality Restoration Plans (WQRPs).
- The DEQ will review and comment on Forest Plans and Forest Plan amendments, and provide comments and approval of WQRPs.
- The USFS will evaluate whether Regional programmatic and structural BMPs are needed to supplement the national BMPs and develop any deemed necessary. (All developed BMPs will be provided to DEQ for review and comment.)
- Work with the USFS and BLM to develop a water quality-monitoring program that identifies the number, type, and location of WQRP management measures (BMPs) including restoration projects being implemented and the instream water quality effects of implementing the BMPs over time in meeting TMDL Load Allocations and water quality standards. This would include evaluating shade zones and buffer widths, the effectiveness of the BLM roads BMP and other BMPs for all land uses and activities including harvest. The BLM and USFS will provide regulatory compliance data, listing and delisting data and TMDL support data that meets DEQ QA/QC requirements. The BLM and USFS will provide technical assistance in analyzing and interpreting data. Data will be submitted in a format that is compatible with the DEQ databases to the extent possible.
- Work with the USFS and BLM to ensure all TMDLs issued by DEQ have WQRPs completed and submitted to DEQ for approval.

- The BLM and USFS rely on the BMP process (as specified in the USFS NPS Plan) for protection, restoration, and maintenance of water quality through NEPA planning documents, aquatic conservation strategies, WQRPs, and most importantly project implementation. Implementation and effectiveness of BMPs are the legal and policy mechanism for control and management of NPS pollution. This important process was not effectively documented and communicated in the past, and should receive high priority for development, reporting, tracking, and approval by DEQ.
- The BLM and USFS will include as a term and condition of authorizations that the third party will obtain and abide by all required federal, state, or local permits and certifications. The BLM and USFS will not issue any third party authorization that is subject to state certification under CWA section 401 until the agency has received documentation that the state has issued the 401 certification or waived the requirement.
- Establish a process for joint review of ongoing watershed protection, restoration, and compliance activities; including a plan of short and long-term work.
- Participate in Forest Plan and Resource Management Plan revision processes to attain agreement on water quality goals to reduce the need for project level EA and EIS reviews.
- Work with the USFS and BLM to establish a process for joint review (both office and field) of ongoing watershed work/priorities.
- To develop a process of joint review of planning and upcoming activities that will assist with identifying and adjusting where feasible agency priorities, resources and funding, and facilitate implementation and monitoring of WQRP BMPs and restoration activities.

The Legal Authorities identified in the MOU are:

- Authority for controlling point and NPS pollution is provided in the Federal Water Pollution Control Act [As Amended through P.L. 107–303, November 27, 2002, (33 U.S.C. 1251 et seq. SEC. 101 (a) (7))]. The federal CWA establishes a national framework for protecting and improving water quality. The federal CWA was amended in 1987 to require States to develop plans for controlling nonpoint sources of water pollution. Oregon's NPS Control Program was established in 1978 before the passage of the Section 319 amendments in 1987.
- Section 313(a) (33 U.S.C. 1323) of the federal CWA directs the Federal Government to comply with all Federal, State, and local requirements with respect to the control and abatement of both point and NPS water pollution. Executive Order 12088 reinforced federal CWA requirements. Section 319(k) of the federal CWA (33 U.S.C. 1329) specifically addresses NPS pollution by directing Federal agencies to accommodate the concerns of the State regarding the consistency of agency projects with the State's NPS pollution management program.
- The National Forest Management Act (NFMA) of 1976 (P.L. 94-588; an amendment to the Forest and Rangeland Renewable Resources Planning Act of 1974) is the primary statute governing the administration of the USFS which called for the management of renewable resources on national forest lands.
- The U.S. Forest Service will follow the Forest Service/Bureau of Land Management Protocol for addressing Clean Water Act 303(d) listed waters[3] in subbasins with 303(d) listed stream(s), and in watersheds where there is no TMDL scheduled.

[3] The *FS/BLM Protocol for Addressing Clean Water Act Section 303(d) Listed Waters (The Protocol), May 1999*, and/or updates are the guidance for meeting these responsibilities. The protocol was signed by the Regional Administrator of the EPA for Region 10, by the Regional Foresters for the FS in Regions 1, 4, and 6, and by the State Directors for the FS in Oregon, Washington, Idaho, and Montana.

The MOU identified priorities:

- The DEQ and the U.S. Forest Service will continue to collaborate on identification and prioritization of water quality restoration projects. Priorities include the closing and restoration of roads so that soil and other road pollutants do not enter waters of the state and restoring riparian and wetland habitat so that shading is restored in order to meet DEQ temperature standard and to reduce soil, pesticides, and other pollutants from entering into waters of the state.
- Work with USFS and BLM to get water quality data and riparian restoration information for inclusion in the Oregon NPS Annual Report
- Prevent, reduce, eliminate, or remediate point and NPS water pollution and, where necessary, improve water quality to support beneficial uses on BLM and USFS administered lands.
- Cooperate on priorities, strategies, and funding using a watershed approach to protect and restore water quality on BLM and USFS administered lands.
- Foster and enhance communication, coordination, and working relationships between the USFS, BLM, and DEQ.
- Identify and implement USFS, BLM, and DEQ authorities, policies, programs, and practices that collectively ensure attainment of Federal and State water quality standards and TMDL load allocations on BLM and USFS administered lands.
- Identify, clarify, and support DEQ, BLM and USFS roles and responsibilities specific to water quality in a manner that reduces duplication of work.
- Establish a process and time line for joint review of ongoing watershed protection, restoration, and compliance, including development of a plan for short and long-term work.
- Evaluate progress and success in meeting or surpassing water quality goals and requirements.

The objectives identified in the MOU to be used by DEQ, the USFS, and BLM:

- Acquire and utilize information collected by USFS and BLM about BMP implementation, effectiveness, and water quality responses on BLM and USFS administered lands.
- Identify information gaps/uncertainties and means to fill those gaps.
- Define BLM, USFS, and DEQ's roles and responsibilities when contractor actions, vandalism, or other third party actions result in violations of state water quality rules and standards on BLM and USFS administered lands.
- A Statewide Annual Status Report will be written with involvement from each agency. This written report will satisfy MOU and DEQ TMDL reporting requirements.
- BLM and USFS will provide updates to WQRP status (e.g., "in progress", "completed", "approved", "being revised", other.) using a WQRP/TMDL tracking table. The BLM, USFS, and the DEQ will work together to develop a centralized streamlined process using existing databases and reporting mechanisms.
- The BLM and USFS will provide a summary of WQRP accomplishments including restoration and WQRP coverage with spatial context for BLM and USFS.
- The BLM and USFS agencies will provide the results of BMP implementation and effectiveness monitoring required in management plans and WQRPs.
- The agencies will provide updates on internal strategic planning that could affect MOU implementation.

Additional guidance for WQRPs include DEQ's current May 2007 TMDL Implementation Plan Guidance – for State and Local Government Designated Management Agencies available at: http://www.deq.state.or.us/WQ/TMDLs/docs/impl/07wq004tmdlimplplan.pdf.

- The agencies will provide updated contact lists to include the DEQ Basin Coordinators and NPS Coordinator along with BLM Oregon districts, USFS Regional Office, and USFS and BLM Oregon Water Program contacts.
- During the fifth year of implementation, the MOU will be reviewed to evaluate effectiveness and discuss MOU update and renewal. A five-year progress report will be prepared by the USFS Pacific Northwest Regional Office and the DEQ headquarters with input from the DEQ Regional and USFS National Forest offices and transmitted to the DEQ Water Quality Administrator and USFS Regional Forester.
    - The 5-Year Report will use information gathered in each Annual Status Report and recommend any changes to the future MOU. The MOU should serve as an outline for the 5-Year Report. The basic elements would include the following:
        i. The spatial coverage of Federal land ownership, WQRP extent, and WQRP status ("in progress", "completed", "approved", "being revised", and "other").
        ii. Individual WQRP development and implementation progress.
        iii. A summary of BMP implementation and effectiveness monitoring.
        iv. An evaluation of agency activities in meeting Federal and State Water Quality programs and standards.
        v. The recommendations for MOU updates.

4.5.2 Revision of BLM Resource Management Plan and EIS for Western Oregon

In March 2012, the BLM began the process of revising the Resource Management Plans (RMPs) for 2.5 million acres of forested lands across six BLM Districts in western Oregon. BLM intends to revise the six RMPs with an associated EIS for the Western Oregon Planning Area. BLM has begun the scoping process, to determine the scope of issues to be addressed by the environmental analysis, including alternatives and the significant issues related to the planning process.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires the development, maintenance, and revision of land use plans. Preparation of the RMPs and EIS will conform to federal and state management laws including the Endangered Species Act, the Clean Water Act, and the National Environmental Policy Act.

In 2012, the State of Oregon signed an MOU defining the process and scope of the state's involvement in developing an RMP that involves and receives better understating of how the state and federal clean water act and state rules and regulations are included in the RMP. DEQ, ODF, ODFW, and DSL directors signed the MOU.

The key federal and state natural resources agencies are members of the Cooperating Agencies Advisory Group and technical workgroups such as riparian/aquatic resources.

BLM is on a schedule to have a final RMP and EIS completed by 2015.

4.5.3 USFS and BLM BMPs for Land Management Activities

4.5.3.1. USFS BMPs for All Land Management Activities

The purpose and objectives of the USFS National BMP Program is to provide a standard set of core BMPs and a consistent means to track and document the use and effectiveness of BMP use on NFS lands across the country. The objectives of the National BMP Program are:

- To consolidate direction applicable to BMP use for NPS pollution control on all NFS lands to avoid, minimize or mitigate adverse effects to soil, water quality and riparian resources.
- To establish a uniform process of BMP implementation that will meet the intent of the federal and state water quality laws and regulations, Executive Orders, and the United States Department of Agriculture (USDA), and Forest Service directives.
- To establish a consistent process to monitor and evaluate Forest Service efforts to implement BMPs and the effectiveness of those BMPs at protecting water quality on regional and national scales.
- To establish a consistent and creditable process to document and report agency BMP implementation and effectiveness.

This technical guide contains the national core set of BMPs to be used in the National BMP Program. A separate technical guide is being prepared that will contain the national BMP monitoring protocols.

This technical guide provides information for implementing the National Core BMP portion of the Forest Service National BMP Program. The National Core BMPs were compiled from Forest Service manuals, handbooks, contract and permit provisions, policy statements and state or other organization's BMP documents. The National Core BMPs are not intended to supersede or replace existing regional, state, Forest or Grassland BMPs. Rather the National Core BMPs provide a foundation for water quality protection on NFS lands and facilitate national BMP monitoring.

The National Core BMPs encompass the wide range of activities on NFS lands across the nation. The primary intent of the National Core BMPs is to carry out one of the federal CWA purposes to maintain the chemical, physical and biological integrity of the Nation's waters. To that end, the National Core BMPs are focused on water pollution control. The National Core BMPs also address soil, aquatic, and riparian resources, but only to the extent that they contribute to maintenance of chemical, physical and biological water quality.

The National Core BMPs in this technical guide are deliberately general and non-prescriptive. As this document is national in scope, it cannot address all possible practices or practices specific to local or regional soils, climate, vegetation types, or state-specific requirements. The National Core BMPs require the development of site-specific prescriptions based on local site conditions and requirements to achieve compliance with established state or national water quality goals. It is expected that State requirements and BMP programs, Forest Service regional guidance, and Forest or Grassland Plans will provide the criteria for site-specific BMP prescriptions. The National Core BMPs provide direction on "what to do" and the local direction will provide "how to do it".

contains two examples comparing the National Core BMP direction with Forest Service regional direction and state BMPs. Forest Service Regions may supplement the National Core BMPs with additional practices or practices that are more specific to meet Regional needs.

The federal CWA does not regulate NPS pollution. Instead, Sections 208 and 319 require states to develop a process to identify, as appropriate, agricultural, silvicultural and other categories of nonpoint sources of pollution and to set forth procedures and methods, including land use requirements, to control to the extent feasible such sources. Each state has a NPS Management Program and Plan that directs how the state will control NPS pollution. The NPS Management Plan describes the process, including intergovernmental coordination and public participation, for identifying BMPs to control identified nonpoint sources and to reduce the level of pollution from such sources.

Once BMPs have been approved by a state, the BMPs become the primary mechanism for meeting water quality standards in that state. Proper installation, operation and maintenance of state-approved BMPs are

presumed to meet a landowner or manager's obligation for compliance with applicable water quality standards. If subsequent evaluation indicates that approved and properly installed BMPs are not achieving water quality standards, then the state should take steps to revise the BMPs, evaluate and, if appropriate, revise water quality standards (designated uses and water quality criteria), or both. Through the iterative process of monitoring and adjustment of BMPs and/or water quality standards, it is anticipated and expected that BMPs will lead to achievement of water quality standards (EPA-823-B-94-005a (SAM 32)).

The US Forest Service Manual Direction requires all land use activities on national forests to meet federal and state water quality standards; Clean Water Act Section 303(d) and federal and state TMDL requirements (including, as required in some states, the development and implementation of TMDL Implementation Plans (sometimes called WQRPs); point source NPDES permits; Drinking Water Protection; and Groundwater Protection requirements. BMPs applied should be based on site-specific conditions and political, social, economic and technical feasibility. Methods that reflect NPS conditions should be used to measure effectiveness of those BMPs.

4.5.3.2. BLM Best Management Practices to Reduce Sediment Delivery from BLM Roads in Oregon

BLM has developed a BMPs list for roads that is being used throughout Oregon (\\Deqhq1\wqnps\BLM and USFS\BLM Roads BMP List 2011\W_Or_BLM Road_BMP_Draft_2_ODEQ_Review_4_15_11 DY 5-4-11 epf 20110504_jds5-6-2011.xlsx). DEQ has approved this list.

The Road BMPs include the following:

- Written Plans for Road Construction
- Road Location
- Road Design
- Road Prism
- Stream Crossing Structures
- Drainage
- Waste Disposal Areas
- Road Construction
- Disposal of Waste Materials
- Drainage
- Stream Protection
- Stabilization
- Rock Pit and Quarry
- Road Maintenance
- Vacating Forest Roads
- Wet Weather Road Use
- Guidelines for maximum distance between contiguous cross drains based on U.S. Conservation Service soil erodibility groups
- Waterbar Spacing By Gradient And Erosion Class

4.6 Urban and Rural Residential

Although much of Oregon is in forestry and agricultural land uses, urban and rural residential areas can contribute much more pollution on a per acre basis. For the mostly urbanized watersheds, the impacts of urban development can include a longer list of different types of pollutants, including heavy metals, urban

use pesticides, nutrients, sediment, hydrocarbons and combustion related by-products, bacteria, and emerging pollutants like fire retardant products. Increased levels of impervious surfaces (e.g., roads, rooftops and parking lots) associated with urbanization alter the hydrology of the landscape, often causing an increase in stormwater runoff volume/rates – resulting in unstable stream banks or increased flooding – and the discharge of additional pollutants to surface water bodies. In these urban or urbanizing watersheds, natural surface water systems are replaced by stormwater infrastructure, connecting this water pollution source directly to the nearest stream, lake or wetland.

In Oregon, it is important to note that polluted runoff from urban areas is addressed by NPS programs or stormwater point source permits, and in some instances both programs. For example, larger cities or more populated counties may have both NPS and permitted stormwater requirements or commitments. Whereas, most medium and small sized communities may only address stormwater runoff through NPS programs and Clean Water State Revolving Fund (CWSRF) for funding NPS projects

Oregon relies on the following programs for the prevention, control, and treatment of urban pollution:

- **TMDL Water Quality Management Plan** – DEQ identifies the urban pollutants located within a city, county and/or stormwater district's waters of the state that do not meet water quality standards and require TMDL load allocations to be met in order to protect beneficial uses.
- **TMDL Implementation Plan** – The TMDL identifies those city, county, and/or stormwater district DMAs that need to develop and implement a TMDL Implementation Plan. The Plan, developed by DMAs and approved by DEQ, must identify the programmatic and structural BMPs that are needed to control, reduce, and treat pollutants that have TMDL load allocations. The goal is for the DMA to meet TMDL load allocations and the waterbody to meet water quality standards.
- **NPDES Municipal Separate Storm Sewer System (MS4) Phase I or II Stormwater Permit** - Phase I or Phase II MS4 communities address their requirements for urban runoff-related pollutants (e.g., bacteria, sediment), by developing a Stormwater Management Plan (SWMP) and submit it to DEQ for approval and incorporation as permit conditions.

4.6.1. TMDL Implementation for Urban and Rural Residential DMAs

Each DMA identified in the Water Quality Management Plan is required to prepare an individualized TMDL implementation plan that provides a description of the management strategies necessary to prevent, control, and/or treat specific sources of the TMDL pollutant (OAR 340-042-0080(4)). The TMDL WQMP may provide information that the DMA *must* include in the TMDL Implementation Plan.

Each TMDL Implementation Plan must include the management strategies the DMA will use to reduce pollutant loading and achieve the load allocations. The TMDL Implementation Plan must describe the selected management strategies and measurable milestones in sufficient detail, such as providing siting criteria and operating methods, to inform DEQ's independent and objective review and effectiveness evaluation.

The TMDL Implementation Plan must also include implementation timelines and performance monitoring, including specific timelines for each practice to ensure that the TMDL load allocation is met within a reasonable timeframe.

The DMA should also include in the Implementation Plan reasonable assurances that the strategies described in the plan will work. There are two elements to these assurances. First, the management

strategies selected should to be justified with estimates of their contribution to load reduction targets. Second, a description of funding sources and other mechanisms that will be used to assure implementation of strategies is essential for a complete plan. The cost of administration, operation and maintenance, and monitoring should be considered for the long-term implementation of the Implementation Plan.

4.6.2 NPDES MS4 Stormwater Permit

EPA's NPDES Phase I or Phase II Stormwater rules (http://cfpub.epa.gov/npdes/stormwater/munic.cfm) require the Municipal Separated Storm Sewer Systems (MS4) permitted community to implement a stormwater management program and to prepare a Stormwater Management Plan (SWMP) in order to reduce the discharge of pollutants into the storm sewer system to the maximum extent practicable. The SWMP can be used as the TMDL implementation plan but must be reviewed for adequacy to meet TMDL requirements.

The MS4 permittee submits its SWMP (or TMDL Implementation Plan) to DEQ for approval and incorporation as permit conditions. In addition, for those impaired water bodies that a MS4 Phase I permitted community discharges to 303d listed impaired waters that do not yet have an approved TMDL, the MS4 permit requires the permittee to evaluate all 303(d) listed pollutants to determine the adequacy of the SWMP to reduce the 303(d) listed pollutant to the maximum extent practicable, and make modifications to the SWMP BMPs as needed.

4.6.3 State Land Use Planning Goals

The Oregon Department of Land Conservation and Development (DLCD) implements the State of Oregon land use planning laws and regulations. Where implemented, Goals 5, 16, and 17 in protect wetlands, riparian areas, coastal shore lands, and estuaries by ensuring cities and counties identify environmentally sensitive areas in comprehensive plans and adopt zoning ordinances to protect them. Goal 6 can be used to support water quality related zoning and development ordinances such as riparian and wetland protection and stormwater control and treatment. It also allows jurisdictions to incorporate DEQ NPS directives into local plans and codes. Goal 7 directs local governments to apply land use management strategies that reduce risk to life and property. Goal 7 measures can integrate with NPS reduction measures in floodplains and landslide prone areas.

Statewide land use goals 11 and 14 also help to reduce the impacts of urbanization on water quality. Goal 11 requires jurisdictions to have public facility plans in place to serve as a framework for urban and rural development. Stormwater management plans are required under Goal 11 for all existing urban areas and when urban areas are expanded. Goal 14 provides standards for designating and expanding urban growth boundaries (UGBs). In Oregon UGBs limit urban sprawl. Goals 3 and 4 work to preserve productive farm and forestland. Nonpoint pollution from residential land use in farm and forest zones is minimal because new development is severely restricted in these zones.

DEQ coordinates with DLCD to provide information to local governments on NPS reduction, and TMDL compliance strategies.
It is however important to note that a DMA will still need to meet both the TMDL load allocations and the state land use-planning goals individually. For example, even if a local jurisdiction has adopted a Goal 5 "safe harbor" for riparian and wetland areas protection, the DMA will need to analyze the adequacy of their Goal 5 program in meeting their TMDLs, particularly the shade requirements with a temperature TMDL. For most urban areas, the riparian areas are degraded and may contain very few trees. In addition, the "safe harbor" buffer widths may not provide sufficient shade to meet the

temperature TMDL shade surrogates in some instances. A local jurisdiction may determine that they comply with Goal 5 and not Goal 6 or their TMDL.

Urban and rural nonpoint contributing sources need development-related controls administered through local land use ordinances. Goal 6 requires local jurisdictions to comply with state and federal water, land, and air quality laws. Land use planning is one of the most important first steps in meeting an urban and rural residential TMDL load allocation. It is essential that city and county land use related TMDL Implementation Plan measures are enforced through the local plan.

A city or county should review, and if needed, amend their comprehensive plan and applicable implementing ordinances. The city and county land use related TMDL Implementation Plan measures should be enforced through the local plan and development ordinances. 5. Oregon 319 Grant Program

5. Funding

5.1 Federal CWA Section 319(h) NPS Grant Funding

The NPS Grant Program is administered by the Oregon DEQ for providing funding to stakeholders for supporting activities that address the goals and objectives of the NPS Management Program. Section 319(h), federal funds are provided annually through the EPA to States for the development and implementation of each State's NPS Management Program. In Oregon the 319 grant dollars are used to fund DEQ NPS staff positions for implementing the NPS Program (Sect. 5.2) and to fund priority projects (Sect. 5.3) (Table 6).
Project priorities for 319 Pass Thru Grants are identified by DEQ NPS staff and included in the NPS RFPs.

Table 6 identifies the total Section 319(h) dollars, for the years 2007-2014. Funding of both staff and projects has decreased with cuts made by Congress to the EPA 319 Program. In the last three years (2011 to 2014), funding for projects has decreased by hundred thousands of dollars. The total EPA Region 10 funding has decreased in the last three years by >$1.4 million dollars (Table 6).

Table 6: Oregon Total Section 319 Funding 2007 to 2014

YEAR	STAFF	PROJECTS	TOTAL	LOSS
2014				
2013	$1,301,492	$756,508	$2,058,000	-$617,700
2012	$1,249,000	$905,000	$2,154,000	-$521,700
2011	$1,230,168	$1,111,832	$2,342,000	-$333,700
2010	$1,288,300	$1,387,400	$2,675,700	SIMILAR FUNDING LEVEL

YEAR	STAFF	PROJECTS	TOTAL	LOSS
2009	$1,288,300	$1,387,400	$2,675,700	SIMILAR FUNDING LEVEL
2008	$1,288,300	$1,387,400	$2,675,700	SIMILAR FUNDING LEVEL
2007	$1,279.900	$1,387,400	$2,667,300	SIMILAR FUNDING LEVEL
TOTALS	$7,646,840	$8,322,940	$17,248,400	

5.2 Performance Partnership Agreement

A portion of DEQ's NPS program activities are funded through the EPA and DEQ Performance Partnership Agreement (PPA). PPAs cover activities from July 1 to June 30. This funding is used in waters impaired by NPS pollution or to protect waters from NPS of pollution to support program implementation, management, administration, TMDL development and implementation, and agency coordination.

These funds will support staff within DEQ that will conduct the following activities:

- Implement TMDLs for NPS in watersheds where TMDLs/WQMPs have been completed, such as the Willamette River and Columbia River Basins.
- Implement the Willamette Mercury TMDL (Phase I) using DEQ's Mercury Reduction Strategy and mercury source characterization work to help identify priorities and strategies.
- Implement strategies for GWMA's with established Action Plans.
- Distribute 319 grants to fund project proposals in Oregon's priority basins based on TMDL implementation, 303(d) listings, GWMAs, and Drinking Water Source Areas.
- Administer 319 Grants.
- Prepare an annual report of NPS program accomplishments.
- Determine with EPA potential NPS success stories documenting either that the water body is meeting WQS or making water quality progress under EPA's national measures.
- Enter GRTS 319 project tracking mandated data elements by national deadlines, including pollutant load reductions, as available.
- Coordinate with the Oregon Department of Land Conservation and Development (DLCD) on the Oregon Coastal Nonpoint Pollution Control Program (CNPCP).
- Coordinate with state and federal natural resource managers on meeting water quality goals and objectives.
- Characterization of NPS problems/concerns.
- Monitoring to support and determine effectiveness of BMP programs.
- Best management practices development/implementation.
- Coordination between stakeholders.
- Liaison support staff to other state and federal agencies.
- Restoration activities.
- Development and modeling for NPS TMDLs.
- Development of UAA)/SSC as related to NPS activities.

- Public education.
- 319 Grant administrations for individual projects.

5.3 Oregon NPS Program Funding

The Oregon DEQ requests proposals for watershed assessment, planning, implementation, demonstration and education projects within the boundaries of impaired watersheds on a yearly basis. Since 2012, the RFP process has been a two-step application. The pre proposal application is the first step to gather concept project ideas from potential applicants. Requesting full proposal from selected pre proposal applicants is the second step.

Benefits to applicants of the pre-proposal process include:

- Simplified process for matching project ideas to DEQ's priorities,
- Increased focus on achieving desired results,
- Technical assistance and guidance from DEQ staff to develop final proposal, budget, and project that meet EPA 319 program requirements,
- Reduced risk to applicant of investing time and resources to develop a full proposal that may not be funded.

The projects funded are very specific in targeting the NPS priorities in the RFP. Additional information can be found in the 2014 Oregon 319 NPS Implementation Pre-Proposal Application http://www.deq.state.or.us/wq/nonpoint/grants.htm

The proposals must focus on preventing, controlling, and eliminating water pollution from nonpoint sources in waters of the state to meet water quality standards and TMDL load allocations. In addition, proposals must be consistent with the goals, objectives, and priorities identified in the RFP. DEQ Region and HQ NPS and TMDL staff use existing information such as: TMDL/WQMP; Integrated Report; Watershed Approach Basin Reports; GWMA Action Plans; agricultural biennial reviews of area rules and plans; water quality data; and other relevant information to identify and prioritize projects for the RFP. Region and HQ RFP priorities are reviewed by NPS and TMDL staff and managers before inclusion in the RFP. The NPS and TMDL staff score and select pre-proposals for full proposals, which are then reviewed by NPS and TMDL staff, and management for funding. In addition, DEQ NPS and TMDL staffs are 319 Grant Administrators for the individual project grants. Typically, DEQ targets Pass Thru Grant funds for the following types of projects:

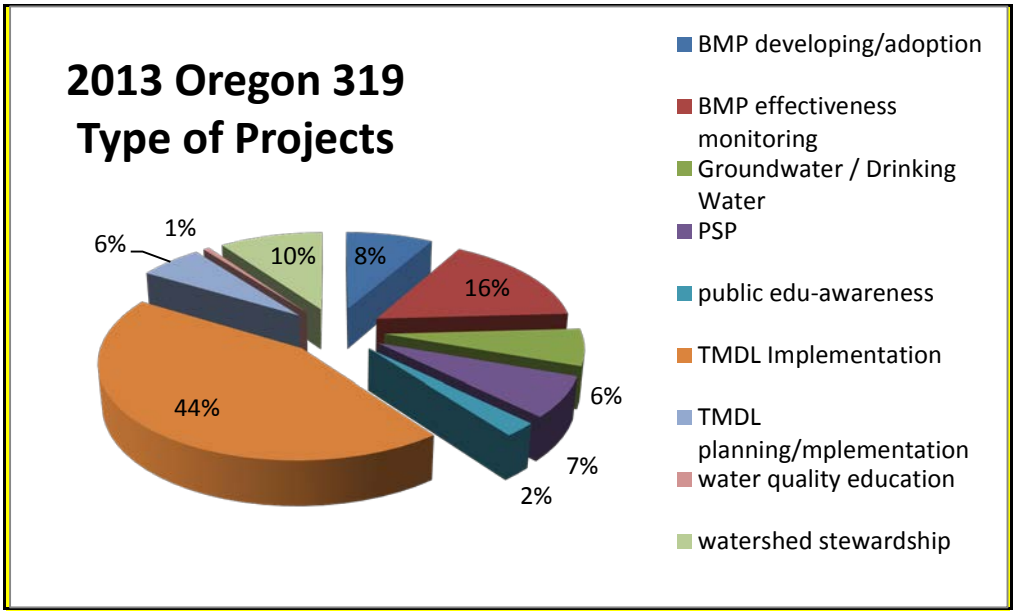
- TMDL implementation plans,
- Surface and ground water quality monitoring,
- Data analysis and modeling,
- Demonstration of innovative BMPs,
- Technical assistance to landowners for conservation planning,
- Public outreach/education,
- Implementation and development of EPA's nine-element, including the formation and facilitation of stakeholder groups,
- Monitoring activities to determine the effectiveness of specific pollution prevention methods.

Project proposals should, where applicable, stress interagency coordination, demonstrate new or innovative technologies, use comprehensive strategies that have statewide applicability, and stress public participation.

5.4 Project Funding

DEQ seeks proposals from government agencies, tribal nations and nonprofit organizations to address non-point sources (NPS) of pollution affecting coastal, river, lake, drinking and ground water resources of the state. DEQ identifies specific regional priorities for implementation of the Oregon 319 NPS Grant. The priorities provide the objective and the type of strategy to implement. As an example, Figure 2 is the 2013 grant project objectives and is characteristic of previous year's project types. DEQ prioritizes the projects on how well the proposal reflects the listed priorities in the RFP.

Figure 2: 2013 Oregon 319 Type of Projects



5.5 EPA Grants Reporting and Tracking System – GRTS

The Grants Reporting and Tracking System (GRTS) is the primary tool for management and oversight of the EPA's NPS pollution control program. GRTS pulls grant information from EPA's centralized grants and financial databases and allows grant recipients to enter detailed information on the individual projects or activities funded under each grant.

Oregon DEQ reports annually to EPA the progress in meeting milestones, including:

- Estimates of loading reductions of NPS pollutants;
- Improvements to water quality achieved by implementing NPS pollution control practices;
- Include WQ10 Success Stories into the DEQ NPS Annual Report when data shows water quality standards and/or TMDL allocations are being met.
- Oregon needs to develop a data collection and analysis protocol to determine when a WQ-10 story can be included into DEQ's NPS Annual Report); and
- Identification of the status of all subbasins in Oregon in improving water quality at all stages:
    - Impaired waters that do not meet water quality standards or TMDL Load Allocations.

- Meets TMDL Load Allocations.
- Meets Water Quality Standards.
- Determine with EPA available NPS Success Stories documenting either water quality progress or full restoration under Program Activity Measure (PAM).
- Outstanding Waters

GRTS is used by Oregon to supply information about the State's NPS Management Programs and annual Section 319 funded work programs, which include watershed-based BMP implementation projects. GRTS includes information about BMPs implemented under 319-funded watershed projects and the NPS load reductions achieved. EPA uses GRTS to compile and report information about state section 319 program projects including load reductions for nitrogen, phosphorus, and sediment.

As part of the reporting via GRTS, Oregon fulfills requirements of the federal CWA Sections 319(h) (11) and 319(m) (1). However, GRTS also provides EPA and other stakeholders greater and more efficient access to data, information, and program accomplishments than would otherwise be available. Besides load reduction information, GRTS, in conjunction with WATERS (see below) provides detailed geo-referencing (i.e., National Hydrograph Dataset (NHD) or NHD reach addresses) for 319-funded projects, project cost information, and a host of other elements.

GRTS is also part of the Watershed Assessment, Tracking, and Environmental Results System (WATERS), which is used to provide water program information and display it spatially using a geographic information system integrated with several existing databases. These databases include the STOrage and RETrieval (STORET) database, the Assessment TMDL Tracking and Implementation System (ATTAINS) the Water Quality Standards Database (WQSDB), and GRTS.

Oregon continues to enter load reduction data for identified 319-funded projects into GRTS. Oregon is in the process of identifying additional watershed models to estimate the load reductions resulting from implementation of BMPs. In the meantime, Oregon continues to use the Spreadsheet Tool for Estimating Pollutant Loads (STEPL) directly supported by EPA and the "Region 5" model to estimate loading reductions of the following parameters:

- Sediment
- Sediment-borne phosphorus and nitrogen
- Feedlot run-off
- Commercial fertilizer, pesticides, and manure utilization

5.5.1 Grants Reporting to OWRI

In addition to GRTS reporting, DEQ requires that 319 project accomplishments for water quality and habitat restoration projects be entered into the OWEB's Oregon Watershed Restoration Inventory (OWRI) database located at http://apps.wrd.state.or.us/apps/oweb/owrio/selectproject.aspx.

Watershed restoration projects information included in this database is as follows:

- Activities designed to restore aquatic, riparian, estuarine, wetland, upland, or overall watershed conditions or functions.
- Completed projects or a completed phase of a project.

5.5.2 Oregon Nonpoint Source Pollution Program Annual Report

DEQ prepares an Oregon Nonpoint Source Pollution Program Annual Report that is submitted to EPA Region 10 for review. The NPS Annual Report contains the previous year's NPS Management Program performance including reports on progress on meeting goals, objectives, and priorities. This is the primary document EPA uses in making its determination on whether Oregon has made satisfactory progress on its NPS program goals. With an EPA determination of making satisfactory progress then EPA Region 10 provides 319 funding to Oregon.

This NPS program annual update report is to meet the requirements of section 319 (h) (8) and (11) of the Federal CWA (33 USC 1329). The report documents the activities and accomplishments of the State of Oregon in general and the DEQ in particular regarding the administration of the State's NPS Management Program during the period January – December.

For DEQ's NPS Program Annual Report, the EPA, Region 10 staff provided assistance in the development of the NPS Annual Report. This included providing assistance in the development of the review of 319-grant work plans and processing Oregon's grant and GRTS technical assistance and training to develop pollutant load reduction estimates of the funded projects.

Following EPA Section 319 Grant reporting guidelines, the report contains the following elements:

- Description of Oregon's NPS Program.
- Description of Oregon's Baseline Regulatory Statutes and Non-Regulatory NPS Programs.
- Annual Program Directions and Priorities.
- Nonpoint Source Management and Administration, Including a Description of Oregon's Performance Partnership Agreement (PPA) and Use of 319 Funds.
- Identification of the Annual Project Implementation Activities, which Included the Following Programs/Projects:
    - Total Maximum Daily Loads
    - New Water Quality Standards
    - Watershed Plan Development
    - NPS Projects Funding by Basin/Subbasin
    - Toxic Chemicals
    - Water Quality Issues on Agricultural Lands
    - Pesticide Management
    - Water Quality Issues on State and Private Forest Lands
    - Water Quality Issues on Federal Forest Lands
    - Clean Water State Revolving Fund
    - Drinking Water Protection in Oregon
    - Coastal Zone NPS Program
    - Monitoring and Data
    - Groundwater Management Areas (GWMAs)
- Progress of 319 Grant Funded Projects, including Grant Performance Report Summary, Description of Geographic and Programmatic Priorities for annual 319 Funding, and progress of 319-Grant Funded Projects and Categories.
- Calculated Nitrogen, Phosphorus, and Sedimentation-Siltation Annual Pollutant Load Reduction Estimates of Funded Projects.
- Description of DEQ's Watershed-Based Plans.
- Success Stories/Environmental Improvement (WQ-10) and (SP-12) Projects and Other.
- Oregon's 319-Grant allocation to Projects, Staff, and the NPS program.

- Annual 319 funded projects are usually divided in four areas of emphasis, as follows:
    - BMP Implementation (?%),
    - TMDL Implementation (?%),
    - Pesticide Stewardship Program (?%), and
    - Information and Education (?%).
- SP-12 or WQ-10 Project success stories Program Directions

6. Other State Operated NPS Funding Sources

Oregon's NPS Management Program is funded from other DEQ, state, and federal programs. For DEQ, there is the Clean Water State Revolving Loan (CWSRF) program. Other state funding programs include the Drinking Water Revolving Loan Fund (DWRLF), the following OWEB grants: Small Grants; Local Capacity Support Grants; Outreach; Monitoring; Restoration; Partnership Investments; which include Investments in Longer-Term, and Larger-Scale Activities**.**

6.1 Clean Water State Revolving Fund

With the amendments to the Clean Water Act in 1987, Congress ushered in a new era in financing water quality improvements. Under Title VI, the CWA established the innovative Clean Water State Revolving Fund program. The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects.

The CWSRF loan operates much like an environmental infrastructure bank that is capitalized with federal and state contributions. The fund loans to public agencies and loan repayments are recycled back into the program to fund additional water quality improvement projects. The revolving nature of the loan provides for an ongoing funding source intended to be available in perpetuity.

Many think of the CWSRF program as a source of funding for municipal projects. It is. Yet, it is also a significant resource for funding nonpoint source and estuary management projects. To date, the CWSRF has provided over $3 billion in funding for nonpoint source projects nationally.

In Oregon, the loan program provides low-cost loans to public agencies for the planning, design or construction of various projects that prevent or mitigate water pollution. The Oregon Department of Environmental Quality administers the program. Eligible public agencies include federally recognized Indian tribal governments, cities, counties, sanitary districts, soil and water conservation districts, irrigation districts, various special districts and certain intergovernmental entities.

When used to address nonpoint source pollution, the CWSRF loan can be a very effective source of financing. Not a grant perhaps, but these are low-cost loans that are apt to qualify as match for a 319 grant, an OWEB grant or USDA conservation programs.

In addition to direct, nonpoint source loans, Oregon's CWSRF program includes a specific form of loan, the Sponsorship Option that encourages a partnership between an operator of a publicly owned wastewater system and an organization seeking funding for a qualifying nonpoint source project. By

agreeing to fund a nonpoint source project in conjunction with wastewater project, the operator could be eligible for a discounted CWSRF loan resulting in the funding of both the wastewater project and the nonpoint source project at a cost equivalent to just the wastewater project. The goal of this approach is to match an existing source of funding to those needed water quality improvements that would likely be overlooked for funding.

DEQ accepts new applications year-round. Applicants must provide information on the project's water quality benefits, environmental impact and estimated cost. DEQ reviews and scores all applications against specific ranking criteria using the information submitted. DEQ then lists applicant's projects for possible funding, in rank order, within the program's project priority list.

Applicants whose projects are placed on the project priority list must still complete all required program documents. These documents may include land-use compatibility statements evidence of authority to undertake the project, and financial reports. Once DEQ approves the required documentation, DEQ considers the project ready-to-proceed. DEQ only considers those projects identified as ready-to-proceed for a loan. DEQ offers loans to applicants in rank as funds become available. The program typically provides about $50 million annually for funding planning, point source and nonpoint source projects.

In order to receive CWSRF funds, all proposed nonpoint source projects must align with, and support the goals of Oregon's Nonpoint Source Control Program Plan. Nonpoint source staff at DEQ headquarters reviews the proposed project's information and goals. With input from the appropriate basin coordinator, headquarters staff determines whether the proposed project aligns with the Nonpoint Source Control Program Plan. If the proposed project does not align with the Nonpoint Source Control Program Plan, it is not eligible for CWSRF funding.

In 2013, DEQ revised its administrative rules to improve the program's ability to provide financial assistance to public agencies that have diverse water quality improvement needs. The new rules:

- Encourage public agencies to address water quality improvements through integrated approaches and encourage planning efforts.
- Broaden and clarify current project eligibility to include more types of water quality improvements. Previous project eligibility may have been a barrier to funding nonpoint source projects.
- Clarify that stormwater improvement projects (both point source and nonpoint source) are eligible for CWSRF funding, and project criteria are now more inclusive of these types of projects.
- Shift ranking criteria emphasis to encourage projects to integrate sustainable and "green" components with conventional "gray" infrastructure.
- Encourage those projects that address water quality benefits and the relationship of those benefits to a watershed.

For almost two decades, DEQ's CWSRF staff has administered Oregon's implementation of EPA's Clean Watershed Needs Survey. This national survey and other recent studies consistently indicate nonpoint sources of pollution continue to be an important source of water impairment. DEQ's CWSRF loan program continues to scrutinize effective avenues to financial support projects addressing nonpoint source pollution.

6.2 Drinking Water Revolving Loan Fund (DWRLF)

In Oregon, the Drinking Water Revolving Loan Fund (DWRLF) is administered by the Oregon Health Authority (OHA), the state agency that regulates drinking water under state law and the Safe Drinking Water Act. OHA works cooperatively with DEQ on source water protection efforts.

Money from the DWRLF is used to fund:

- Source Water Protection Grants (up to $30,000) to fund source water protection activities, monitoring, and planning in Drinking Water Source Areas (DWSAs);
- Loans for improving drinking water treatment, source water protection activities, or land acquisition in DWSAs; and
- DWRLF set-asides for administration fund five Drinking Water Protection positions at Oregon DEQ, which delineate DWSAs, integrate Clean Water Act programs (including the NPS Program) with source water protection needs, provide technical assistance to public water systems, and research NPS impacts on surface and ground drinking water sources.

6.3 OWEB

The Oregon Watershed Enhancement Board (OWEB) is a state agency that provides grants to help Oregonians take care of local streams, rivers, wetlands and natural areas. OWEB grants **http://www.oregon.gov/OWEB/GRANTS/pages/grant_faq.aspx** are funded from the Oregon Lottery, federal dollars, and salmon license plate revenue. OWEB offers a variety of grant types and programs. The OWEB mission of *restoring, maintaining, and enhancing watersheds* implicitly recognizes that specific goals for improvement will vary between watersheds.

OWEB has the following grants for the various watershed improvement activities identified in watershed assessments, action plans, restoration plans, and other plans such as DEQ's TMDLs and Water Quality Basin Status and Action Plans, local Watershed Plans prepared by Watershed Councils. These plans focus on water quality improvements to meet water quality standards and TMDL load allocations. These grants are also used to implement habitat, stream, fish and wildlife restoration projects.

6.3.1 OWEB Grants Program

Small Grants:
The Small Grant Program is a competitive grant program that awards funds of up to $10,000 for on-the-ground restoration projects that address local priorities. Watershed councils, soil and water conservation districts and tribes submit applications on behalf of landowners.

- **Technical Assistance Grants**
  CREP Technical Assistance grants to SWCD and/or Watershed Councils.
  http://www.oregon.gov/OWEB/GRANTS/pages/crep_tech_assist_grants.aspx
- **Restoration Grants**
  The Restoration Grant Program is a competitive grant program that awards funds to local partners for projects to improve watershed health. Grant projects address non-point source pollution

issues, groundwater issues, water conservation/water efficiency, water quality, instream needs, climate change adaptation, fish and wildlife habitat, irrigation efficiency infrastructure and stormwater.

- **Outreach Grants**
  The Outreach Grant Program is a competitive grant program that awards funds to perform outreach activities that provide information to increase awareness and understanding of watershed restoration and protection, and are related directly to efforts to protect or restore native fish or wildlife habitat or water quality or stream flows.

- **Monitoring Grants**
  The Monitoring Grant Program is a competitive grant program that awards funds to perform monitoring projects that identifies conditions in the watershed. It may be for the purpose of gathering baseline data on current conditions, for evaluation of the specific effects of management actions, or for comparing similar watershed components before and after a project.
- **Local Capacity Support Grants:**
  These grants are used for investing in the watershed restoration infrastructure. OWEB supports the capacity of watershed councils and soil and water conservation districts so that the state has an enduring, high capacity local infrastructure for conducting watershed restoration and conservation. See http://www.oregon.gov/OWEB/GRANTS/pages/grant_faq.aspx.
- **Watershed Council Support**
  Watershed councils are locally organized, voluntary, non-regulatory groups established to improve the condition of watersheds in their local area. Watershed councils bring varied interests together to form a common vision for the watershed, prioritize activities, and identify landowner participants for important projects. OWEB council support grants provide funds for watershed council coordinator salary, operating costs, risk management and accountability insurance, and other costs.
  See http://www.oregon.gov/OWEB/GRANTS/Pages/council_capacity_apps.aspx#Purpose_of_Council_Capacity_Grants
- **Soil and Water Conservation Districts**
  Soil and water conservation districts historically focused primarily on helping farmers and ranchers protect soil and water resources. Today, there are 45 districts providing technical information and guidance to landowners, managers, and citizens across the state. OWEB provides funding to support the capacity of soil and water conservation districts to work with landowners in support of the Oregon Plan for Salmon and Watersheds and the local Agricultural Water Quality Management Plans.

Partnership Investments; Investments in Longer-Term, Larger-Scale Activities:
The Partnership Investment Program is a means by which OWEB works closely with partners and utilizes a different process to invest in longer-term activities intended to result in larger-scale ecological outcomes. Ideally, a Partnership Investment contributes to a historic change or surge of progress in the recovery of a species, the restoration of an ecosystem, or the launching of an initiative that addresses widespread issues.

- The Special Investment Partnership (SIP) Program
  Partnerships have been established in the Upper Deschutes, Willamette and Upper Klamath basins. Additional SIPs are being considered for future funding.
- Deschutes Special Investment Partnership

The goal of the Deschutes SIP is to re-establish the stream flow, restore habitat, and re-establish extirpated salmon and steelhead runs in the Deschutes River and tributaries above the Round Butte Dam.

- Willamette Special Investment Partnership
  The main goal of the Willamette SIP is to restore the main stem river's meanders, natural floodplains, and fish and wildlife habitats in order to slow floodwaters and allow the river to interact with the land and plants around it. The Willamette SIP is built on a companion effort of the Meyer Memorial Trust who is an active funding partner and committed to increasing the pace of restoration in the Willamette basin.
- Upper Klamath Special Investment Partnership
  The Upper Klamath SIP desired outcomes are to contribute to chemical, thermal, and physical aquatic conditions that will benefit fish populations and water quality in the Upper Klamath Basin by reestablishing, improving, and sustaining the ecologic and hydrologic connectivity of aquatic ecosystems. The Upper Klamath SIP is built on a companion effort with The National Fish and Wildlife Foundation. The Partnership will enable conservation and restoration of local ecosystems, while supporting local communities.
- Whole Watersheds Restoration Initiative (EcoTrust and WWRI)
  WWRI is a partnership with U.S. Forest Service, NOAA Fisheries, and EcoTrust that focuses funding on restoring land across public and private ownerships within priority watersheds.

The goal of this prioritization framework is to create a science-guided process that incorporates local priorities into regional (basin) improvement project priorities. Input from other stakeholders, like DEQ, are used to identify watershed improvement project priorities.

OWEB's process for establishing watershed improvement activity priorities:

- Information from watershed assessments, action plans, other studies such as DEQ's TMDLs and Water Quality Basin Status and Action Plans, and input from local Watershed Councils and other stakeholders, like DEQ, have been used to identify watershed improvement project priorities.
- Five general types of activities have been identified to address watershed function improvement:
  1. Actions that restore habitat connectivity;
  2. Actions that address impaired watershed processes that affect the aquatic system or water quality;
  3. Actions that address key habitats and water quality for ESA-listed species;
  4. Actions that reduce human impacts and inputs to the watershed; and
  5. Actions that address symptoms of impaired watershed processes (e.g., placing large wood in streams) that impact fish habitat or water quality, or affect specific wildlife concerns (e.g. wildlife guzzlers).

OWEB staff work with DEQ basin coordinators, watershed councils and other conservation entities to develop basin priorities. The priorities are intended to be used as guidance by OWEB in the review of grant applications and to help ensure a clear and strategic approach to prioritizing the funding of projects. http://www.oregon.gov/OWEB/pages/restoration_priorities.aspx shows which basin priorities are complete.

6.3.2 OWEB Prioritization Framework: Improvement Priorities at Basin and Watershed Scales

In OWEB's "*Draft OWEB Prioritization Process V 4.2 3, Prioritization Framework, Improvement Priorities at Basin and Watershed Scales* http://www.oregon.gov/OWEB/GRANTS/docs/grants_restoration_prioritization_frmwork.pdf" OWEB developed a framework that establishes improvement priorities at regional geographic scales and evaluates the relative merits of proposed improvement projects at local watershed scales (similar to 3rd field HUCs).. The term regional (as used here) refers to the 15 basins described in the Oregon Plan Biennial Report (**Figure 3).**

Figure 3: OWEB Prioritization Framework At The Regional Level – 15 Basins

OWEB is required by statute to establish regional priorities that will guide funding decisions by the Board (ORS 5431.371 (1) (c)). In addition, OWEB's Board clarified its funding goal in a "grant funding preference criterion" in September 2001. The Board agreed that, "Capital expenditure project funding priorities will primarily focus on addressing those factors in the watershed that directly limit the improvement of water quantity and water quality and the recovery of fish species listed under the state or federal Endangered Species Act." OWEB developed a Prioritization Framework that reflects this preference. The framework is founded on principles of conservation biology and applicable to all basins.

Basin and watershed scale priorities are identified through a review of watershed assessments and conversations with local stakeholders where the most often reported local improvement needs identified are captured. Those improvement needs that address conditions as a result of historical (legacy) land management and those needs that address conditions under current land management practices can also be identified.The following **Table 7** provides an example of identified restoration priorities at the basin scale for the Hood River Basin:

Table 7: OWEB Grant Funding Example

OWEB GRANT FUNDING EXAMPLE HOOD RIVER BASIN: Watershed Improvement Priorities.		
KEY PRINCIPLES	**ISSUES (WATERSHED LOCATION)**	**WATERSHED IMPROVEMENT PRIORITIES**
Actions that address impaired watershed processes that affect the aquatic system or water quality. Actions that address key habitats and water quality for these ESA-listed fish: • Winter Steelhead • Summer Steelhead • Spring Chinook • Fall Chinook • Bull Trout Actions that restore habitat connectivity.	Fish Passage Barriers due to roads and dams, including the Clear Branch Dam. In stream sedimentation, particularly Fifteen mile Creek. Water quality concerns: temperature. Irrigation diversions create low summer flows and dewater some reaches (Hood, Fifteen mile, Mosier). Retain water and soil in upland areas, particularly Fifteen mile Creek.	Restore / improve fish passage at road crossings, irrigation diversions and dams. Restore instream flows, increase irrigation efficiency or water leasing. Promote ecologically sound range management to improve vegetative cover in grasslands and reduce grazing pressure on riparian areas. Encourage conversion to no-till or perennial crops. Restore riparian conditions for habitat and aquatic shade.

6.3.3 Oregon Watershed Restoration Inventory (OWRI)

The Oregon Watershed Restoration Inventory (OWRI) originated at the onset of the Oregon Plan for Salmon and Watersheds to track Oregonians' voluntary efforts to restore habitats for salmon and wildlife. For more information on the OWRI program, please refer to http://www.oregon.gov/OWEB/monitor/Pages/owri.aspx.

While the database is managed by OWEB and contains information about grants funded by OWEB, the majority of the OWRI entries represent voluntary actions of private citizens and landowners who have worked in partnership with federal, state, and local groups to improve aquatic habitat and water quality conditions. With over 14,000 records of projects completed since 1995, OWRI is the single largest restoration information database in the Western United States.

The DEQ Section 319 NPS Grant Program and the OWEB grant program http://www.oweb.state.or.us/ complement each other as many projects are co-funded by these programs. It is a requirement of all

projects funded by the DEQ Section 319 NPS Grant Program to report also into the OWRI database if the project involves restoration.
Watershed restoration activities included in the inventory are:

- Activities designed to restore aquatic, riparian, estuarine, wetland, upland, or overall watershed conditions or functions;
- Completed projects or a completed phase of a project; and
- Activities beyond normal maintenance and management procedures in cases such as road and culvert improvements, erosion control, etc.

How OWRI information is used:

- To report Oregon Plan for Salmon and Watershed accomplishments;
- To support effectiveness monitoring of restoration activities; and
- To inform watershed assessments and future restoration project planning and prioritization.

DEQ is beginning to use data in OWRI for tracking and reporting on restoration activities that are expected to reduce NPS pollution. This information will be useful in finding and writing WQ10 stories. And this information will be reported in the Oregon NPS Program Annual Reports.

6.3.4. Oregon Conservation Reserve Enhancement Program (CREP)

The Conservation Reserve Enhancement Program (CREP) is a state and federal partnership that allows landowners to receive incentive payments and conservation rental payments from the USDA Farm Services Agency for establishing long-term riparian buffers on eligible land. The Oregon CREP was approved in 1998. As an offspring of the Conservation Reserve Program, CREP is a voluntary program for agricultural landowners.
http://www.oregon.gov/OWEB/GRANTSODA/NRD/pages/water_crep_tech_assist_grants.aspx

The following projects are likely to be funded during the 5-year timeframe of this Plan:

- Projects addressing stream water quality issues; primarily stream temperature;
- Establishing long-term riparian buffers on eligible land;
- In addition to providing partial funding to direct landowner payments for conservation activities, OWEB has participated in providing funding for outreach, technical assistance and program coordination;
- DEQ, ODA, ODF, OWRD, and NRCS also assist in CREP implementation and coordination; and
- OWEB fund annual grants from January 1 to December 31 that will provide funding for staff positions to assist landowners with conservation plan development and implementation, including the completion of Endangered Species Act and cultural resources reviews.

7. Water Quality Data and Assessments

The NPS Program using data and information from water quality monitoring performed by a variety of entities including: DEQ, watershed councils, ODF, USFS, BLM, and others. This data and information is used for helping with identifying implementation priorities and effectiveness of the program.

Some of the DEQ monitoring activities include:

- TMDL Development – Collect data to develop TMDLs for 303(d) listed streams.
- Groundwater – Identify areas of groundwater contamination and determine trends in Groundwater Management Areas.
- Large River Ambient – Collect data for long term trending at fixed sites across the state.
- Volunteer Monitoring – Improve data quality collected by third parties and increases the data accessibility for local and state assessments.
- Coastal Environmental / Bacteria Monitoring – Collects data to determine the need for beach advisories.
- Toxics Monitoring - Toxics Monitoring Project for surface waters in watersheds across Oregon and Drinking Water Toxics Monitoring. These projects will give information about current and emerging contaminants that threaten aquatic life and human health.
- Pesticide Stewardship Partnership - Collaborative approach to reduce instream pesticide concentrations in agricultural, urban and forest areas. Instream pesticide information is shared with growers to help them target management practices that reduce pesticides in water.
- Effectiveness monitoring in some 319 grant-funded projects.

Priorities for future monitoring and data collection by DEQ or in cooperation with related agencies are:

- Implementation and effectiveness monitoring for private and state forest practices rules.
- Implementation and effectiveness monitoring and reporting on work-to-be-done for voluntary improvements to forest roads and other voluntary conservation practices on private forestlands.
- Implementation and effectiveness monitoring for BLM and USFS to ensure that approved BMPs are being correctly implemented by agency personnel, stewardship contractors, and timber operators.
- Implementation and effectiveness monitoring for agricultural area rules.
- Implementation and effectiveness monitoring for agricultural area plans and other voluntary conservation practices on agricultural lands.
- Updating of Real Estate Transaction data for private domestic wells to include recent years of time-of-transfer data for required nitrate, coliform bacteria, and arsenic testing.
- Collection of raw water data from Public Water Systems for analysis of amount and sources of turbidity/sediment, pesticides, and organic matter contributing to disinfection by-products. These data would be used to evaluate whether nonpoint sources are causing impairments of drinking water provision in the state.

8. Success Stories

Annual milestones in state agencies' NPS work plans describe key actions expected each year, e.g., delivering a certain number of WQ-10 success stories or implementing projects in a certain number of high priority impaired watersheds.

8.1 USEPA Strategic Plan - 2015 National Water Program Guidance Measures

- WQ-10 Measure: Primarily NPS-impaired waters that are partially or fully restored thanks to restoration.

- SP-12 Measure: Impaired waters that are improved by using the watershed approach. For detailed descriptions of each measure, see http://water.epa.gov/resource_performance/planning/FY-2015-NWPG-Measure-Definitions-Water-Quality.cfm

8.2 How are the NPS Success Stories Classified for EPA's Web Page?

1. Fully or Partially Restored Waters
2. Waters Showing Measurable Progress
3. Waters Showing Ecological Restoration

View completed WQ-10 Success Stories at http://water.epa.gov/polwaste/nps/success319 WQ-10: What Qualifies as "Fully Restored?"

- Waters that were previously primarily NPS-impaired now meet all designated uses/water quality criteria
- Scale: Waterbodies/segments on the state's impaired waters list

WQ-10: What Qualifies as "Partially Restored?"

- After restoration efforts, either of the following two conditions are met:
  - A waterbody meets the criteria for one or more pollutants that had been identified as causes of impairment on the state's impaired waters list/section 303(d) list, **or**
  - A waterbody fully supports one or more uses that had been impaired (but remains impaired for other uses/pollutants). WQ-10: Other Key Requirements Needed to Qualify
- Waters must be:
  - Moved from integrated report category 4 or 5 to category 1 or 2 as a result of primarily NPS restoration efforts.
  - Included on the state's impaired waters list in 1998 or after.
  - Either already removed from the impaired waters list, or data show the water meets standards and therefore the state intends to remove it during the next listing cycle.
- If a Waterbody Doesn't Qualify as Fully/Partially Restored under WQ-10

  1. Waters showing measurable progress
     You have data showing improvement
  2. Waters showing ecological restoration
  3. Waterbody had water quality problems but was not listed as impaired (e.g., invasives)

SP-12: What Qualifies?

1. SP-12 documents water quality improvement on a 12-digit hydrologic unit code* level.
2. One or more waters in that HUC-12 must have been listed as impaired (in category 4 or 5).
3. Improvement is due to a watershed approach.

* May receive partial credit for smaller watersheds

SP-12: What Qualifies?

1. SP-12 documents water quality improvement on a 12-digit hydrologic unit code* level.

2. One or more waters in that HUC-12 must have been listed as impaired (in category 4 or 5).
3. Improvement is due to a watershed approach.

* May receive partial credit for smaller watersheds

SP-12: What Qualifies?

1. SP-12 documents water quality improvement on a 12-digit hydrologic unit code* level.
2. One or more waters in that HUC-12 must have been listed as impaired (in category 4 or 5).
3. Improvement is due to a watershed approach.

* May receive partial credit for smaller watersheds

What is a "Watershed Approach?"

- Is focused on hydrologically defined areas
- May be smaller or larger than the HUC-12 level
- Involves key stakeholders
- Uses an iterative planning or adaptive management process to address priority water resource goals
- Uses an integrated set of tools and programs

SP-12: Reporting Options Three options to report improvement:

1. Option 1: fully restoring one or more impaired uses on at least 40% of impaired waters in the HUC 12 watershed*, OR
2. Option 2a: statistical improvement, OR
3. Option 2b: weight of evidence of improvement

* As shown through the removal of the waterbody/ pollutant combination from categories 4 or 5.

- Restoration Activities - Use data in OWRI for tracking and reporting on restoration activities that are expected to reduce NPS pollution in the 72 subbasins in Oregon. Annually DEQ includes the status of restoration projects into the DEQ NPS Annual Report. (The 2014 DEQ NPS Annual Report was the first year of reporting).
- DEQ NPS Annual Report -- Next year's (Year 2015) NPS Annual Report is planned to include NRCS restoration projects status.
- Progress of restoration projects - EPA has requested that the progress of restoration projects towards meeting WQS for impaired watersheds where restoration work has been completed will be included in future DEQ NPS Annual Reports

APPENDIX 1: Acronyms and Abbreviations

Acronym	Translation/Capitalization
319	Section 319 of the federal Clean Water Act; Nonpoint Source Pollution Program
401	Certification of Fill and Removal and Hydroelectric Projects
ACP	Aquatic Conservation Strategy
ACWA	Association of Clean Water Agencies
AFO, CAFO	Animal Feeding Operation, Concentrated Animal Feeding Operation
AG	Attorney General
AGC	Associated General Contractors
AWQMAP	Agricultural Water Quality Management Area Plan
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
CAFO	Confined Animal Feeding Operation
CBOD	Carbonaceous Biochemical Oxygen Demand
CC	Washington State Conservation Commission
CCWF	Centennial Clean Water Fund
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
CFR	Code of Federal Regulations
CIDMP	Comprehensive Irrigation District Management Plan
CNPCP	Coastal Nonpoint Pollution Control Program
COE	US Army Corps of Engineers
CPM	EPA core performance measure
CRAB	Washington State County Roads Administration Board
CREP	Conservation Reserve Enhancement Program (State)
CRP	Conservation Reserve Program (Federal)
CSO	Combined Sewer Overflow
CSP	Conservation Security Program
CTA	Conservation Technical Assistance
CWA	Clean Water Act
CWAP	Clean Water Action Plan
CZARA	Coastal Zone Act Reauthorization Amendments
DCTED, CTED	Washington State Department of Community, Trade and Economic Development
DEQ	Oregon Department of Environmental Quality
DFW, WDFW	Washington State Department of Fish and Wildlife
DLCD	Oregon Department of Land Conservation and Development
DMA	Designated Management Agencies (Federal, USA EPA)
DNR	Washington State Department of Natural Resources
DOGAMI	Department of Geology & Mineral Industries
DOH, Health	Washington State Department of Health
DOJ	Department of Justice
DSL	Division of State Lands
ECY, Ecology	Washington State Department of Ecology

Acronym	Translation/Capitalization
EMAP	Environmental Monitoring and Assessment Program
EPA, US EPA	US Environmental Protection Agency
EPOC	Environmental Partnership for Oregon Communities
EQC	Oregon's Environmental Quality Commission
EQIP	Environmental Quality Incentives Program
ER	Eastern Region
ESA	Endangered Species Act (federal)
ESU	Evolutionarily Significant Unit
FFR	Forests and Fish (Report)
FLIR	Forward-looking infrared radiometer
FPA	Forest Practices Act
FPAC	Forest Practices Advisory Committee
FSA	Farm Services Agency
GIS	Geographic Information System
GMA	Growth Management Act
GWMA	Groundwater Management Area
H20	Headwaters to Ocean project (Oregon)
HCP	Habitat Conservation Plan
HPA	Hydraulic Project Approval
HSP	Healthy Streams Partnership
HSPIG	Healthy Streams Partnership Implementation Group
HSRAF	Hazardous Substance Remedial Action Fund
HUC	Hydraulic Unit Code
HW	Hazardous Waste program
IAC	Washington State Interagency Committee for Outdoor Recreation
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IMST	Independent Multidisciplinary Science Team
IPM	Integrated Pest Management
IUP	Intended Use Plan
IWR	Instream Water Rights
LASAR	DEQ's Laboratory Analytical Storage & Retrieval System
LCREP	Lower Columbia River Estuary Program
LEAD	DEQ's Laboratory and Environmental Assessment Division
LLID	Latitude Longitude Identification
LLP	Landowner Landscape Plan
LUCS	Land Use Compatibility Statement
LQ	DEQ Land Quality Division
MAO	Mutual Agreement And Order
MOA	Memorandum Of Agreement
MOU	Memorandum Of Understanding
NALMS	North American Lake Management Soiety
NEP	National Estuary Program
NFP	Northwest Forest Plan
NHD	USGS National Hydrography Dataset
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NON	Notice of Noncompliance

Acronym	Translation/Capitalization
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source Pollution
NPV	Notice Of Permit Violation
NRCS	Natural Resources Conservation Service
NRI	Natural Resources Inventory
NWMTA	Northwest Marine Trade Organization
NWR	DEQ Northwest Region
OAR	Oregon Administrative Rules
OCSRI	Oregon Coastal Salmon Restoration Initiative
OD	DEQ Office of Director
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Dept of Transportation
OECA	US EPA Office of Enforcement and Compliance Assurance
OPSW	Oregon Plan for Salmon and Watersheds
ORS	Oregon revised statutes
OSPI	Washing Office of the Superintendent of Public Instruction
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board
OWQI	Oregon Water Quality Index
P2	Pollution Prevention
PARKS	Washington State Parks & Recreation Commission
PBT	Persistent Bioaccumulative Toxics
PCS	Permit Compliance System
PNCERS	Pacific Northwest Coastal Ecosystems Regional Study
PPIS	Pollution Prevention Incentives For States
PSAT	Puget Sound Action Team
PSU	Portland State University
RBP	Rapid Bioassessment Protocol
RCRA	Resource Conservation & Recovery Act
REMAP	Regional Environmental Monitoring and Assessment Program
RMA	Riparian Management Area
SB 1010	Oregon Senate Bill 1010, Agricultural Water Quality Management Act (1996)
SB 737	Oregon Senate Bill 737, pollution prevention and toxics reduction (2007)
SDWA	Safe Drinking Water Act
SEPA	State Environmental Policy Act
SOLV	Stop Oregon Litter & Vandalism
SMA	Shoreline Management Act
SRA	Salmon Recovery Act
SRF	State Revolving Fund
SRO	Salmon Recovery Office
STAC	USDA State Technical Advisory Committee
STORET	US EPA Storage and Retrieval System
SWCD	Soil And Water Conservation District
TBNEP	Tillamook Bay National Estuary Project
TCPP	Tillamook County Performance Partnership

Acronym	Translation/Capitalization
TDG	Total Dissolved Gas
TFW	Timber Fish and Wildlife (replaced by FFR – Forest and Fish)
TMDL	Total Maximum Daily Load
TRIBES	Indian Tribes of Washington
UAA	Use Attainability Analysis
UIC	Underground Injection Control
USACE (US COE)	US Army Corps of Engineers
USDA	US Department of Agriculture
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
UST	Underground Storage Tanks
UW	University of Washington
UWA	Unified Watershed Assessment
WACD	Washington Association of Conservation Districts
WALPA	Washington Lake Protection Association
WMC	DEQ Waste Management & Cleanup Division
WPCF	Water Pollution Control Facility
WQ	Water Quality Division
WQMP	Water Quality Management Plan
WR	DEQ Western Region
WRD	Oregon Water Resources Department

APPENDIX 2: GLOSSARY

Abiotic — non-living

Aerobic — (of an organism or tissue) requiring air for life; pertaining to or caused by the presence of oxygen

Algae — non-vascular plants that are very small; algae are the main producers of food and oxygen in aquatic environments

Alluvial plain — the floodplain of a river, where the soils are deposited by the overflowing river

Alluvium — any sediment deposited by flowing water, as in a riverbed, floodplain, or delta

Alternate hypothesis — a statistical hypothesis that disagrees with the tested hypothesis, e.g., these two wetlands do not have the same vegetation community

Anaerobic — living in the absence of oxygen; pertaining to or caused by the absence of oxygen

Anoxic — without oxygen

Anthropogenic — caused by humans; often used when referring to human induced environmental degradation

Aquatic — living or growing in or on water

Attenuation — to lessen the amount, force, magnitude, or value of

Backwater — a body of water in which the flow is slowed or turned back by an obstruction such as a bridge or dam, an opposing current, or the movement of the tide

Baseline measurements — a set of measurements taken to assess the current or pre-restoration condition of a community or ecosystem

Beach seine — a short (typically 20 m or less) fine mesh catch net that can be pulled through shallow water on to beach areas by hand

Benthic — on the bottom or near the bottom of streams, lakes, or oceans

Biogenic — produced by living organisms

Biomass — the amount of living matter, in the form of organisms, both plants and animals, present in a particular habitat, usually expressed as weight-per-unit area

Blackwater streams — streams that do not carry sediment, but are dark in color due to the tannins dissolved in them from flowing through peat-based areas

Brackish — water with a salinity intermediate between seawater and freshwater, often referred to as oligohaline (salinity 0.5 to 5.0 ppt). Interlacing or tangled network of several small branching and reuniting shallow channels are also often present.

Brackish marsh — marsh areas containing a mixture of salt and fresh water; however, the salinity level is less than seawater

Breeder trap — a small box shaped trap containing a funneled entrance and constructed of clear Plexiglas, that is set on the sediment surface to catch fry and small sized fish species

Calcareous — sediment/soil formed of calcium carbonate or magnesium carbonate due to biological deposition or inorganic precipitation

Catchment — the land area drained by a river or stream; also known as "watershed" or "drainage basin"; the area is determined by topography that divides drainage between watersheds

Coastal habitat restoration — the process of reestablishing a self-sustaining habitat in coastal areas that in time can come to closely resemble a natural condition in terms of structure and function

Coastal habitat restoration monitoring — the systematic collection and analysis of data that provides information useful for measuring coastal habitat restoration project performance

Community — all the groups of organisms living together in the same area, usually interacting or depending on each other for existence; all the living organisms present in an ecosystem

Coral reefs — highly diverse ecosystems, found in warm, clear, shallow waters of tropical oceans worldwide. They are composed of marine polyps that secrete a hard calcium carbonate skeleton, which serves as a base or substrate for the colony.

Coralline algae — algae that contains a coral-like, calcareous outer covering

Cost estimate — estimates on costs of planning and carrying out a project. Examples of items that may be included in a cost estimate for a monitoring plan may be personnel, authority to provide easements and rights-of-way, maintenance, labor, and equipment.

Deepwater swamps — forested wetlands that develop along edges of lakes, alluvial river swamps, in slow-flowing strands, and in large, coastal-wetland complexes. They can be found along the Atlantic and Gulf Coasts and throughout the Mississippi River valley. They are distinguished from other forested habitats by the tolerance of the dominant vegetation to prolonged flooding.

Demersal — bottom-feeding or bottom-dwelling fish, crustaceans, and other free moving organisms

Desiccation – process of extracting moisture

Detritivorous — the practice of eating primarily detritus

Detritus — fine particles of decaying organic and inorganic matter formed by excrement and by plant and animal remains; may be suspended in water or accumulated on the bottom of a water body

Diatoms — any of a class (Bacillariophyceae) of minute planktonic unicellular or colonial algae with silica-based skeletons

Dissolved oxygen — oxygen dissolved in water and available to aquatic organisms; one of the most important indicators of the condition of a water body; concentrations below 5 mg/l are stressful and may be lethal to many fish and other species

Dominant species — a plant species that exerts a controlling influence on or defines the character of a community

Down welling — the process of build-up and sinking of warm surface waters along coastlines

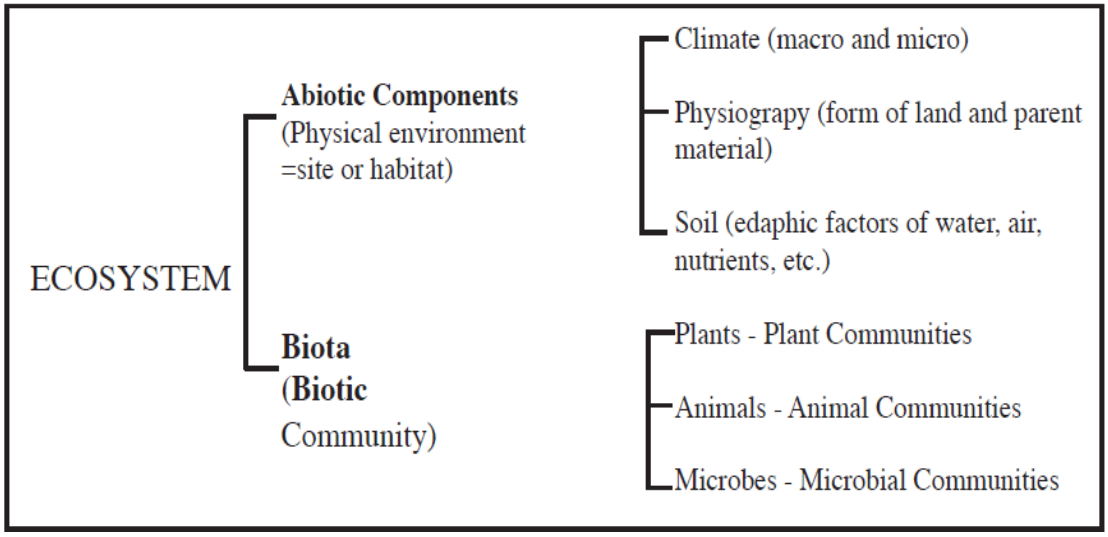
Drop sampler — a shallow water sampling device, typically 1 – 2 m in diameter used to collect fish and decapods via a drop in the water from a boom or support platform, and subsequent collection using small seines or suction pumping the water within the trap

Duration — a span or interval of time

Ebb — a period of fading away; low tide

Echinoderms — any of a phylum (Echinodermata) of radially symmetrical primitive marine animals including the starfishes, sea urchins, and related forms

Ecosystem — a volume of land and air including all the biotic and abiotic components (*Graphic courtesy of B. Barnes, University of Michigan*)



Emergent plants — aquatic plants with roots and part of the stem below water level, but the rest of the plant is above water; e.g., cattails and bulrushes

Ephemeral — lasting a very short time

Epifaunal — animals living on the surface of the sediment or other substrate such as debris

Epiphytes — plants that grow on another plant or object upon which it depends for mechanical support but not as a source of nutrients; i.e. not parasitic

Estuary — a part of a river, stream, or other body of water that has at least a seasonal connection with the open sea or Great Lakes and where the seawater or Great Lakes water mixes with the surface or subsurface water flow, regardless of the presence of man-made structures or obstructions

Eulittoral — refers to that part of the shoreline that is situated between the highest and lowest seasonal water levels

Eutrophic — designating a body of water in which the increase of mineral and organic nutrients has reduced the dissolved oxygen, producing an environment that favors plant over animal life

Eutrophication — a natural process, that can be accelerated by human activities, whereby the concentration of nutrients in rivers, estuaries, and other bodies of water increases; over time this can result in anaerobic (lack of oxygen) conditions in the water column; the increase of nutrients stimulates algae "blooms" as the algae decays and dies, the availability of dissolved oxygen is reduced; as a result, creatures living in the water accustomed to aerobic conditions perish

Evapotranspiration — the combination of water that is evaporated and transpired by plants as a part of their metabolic processes

Exotic species — plants or animals not native to the area

Fauna — animals collectively, especially the animals of a particular region or time

Fecal coliform — any of several bacilli, especially of the genera *Escherichia*, found in the intestines of animals. Their presence in water suggests contamination with sewage of feces, which in turn could mean that disease-causing bacteria or viruses are present. Fecal coliform bacteria are used to indicate possible sewage contamination. Fecal coliform bacteria are not harmful themselves, but indicate the possible presence of disease-causing bacteria, viruses, and protozoans that live in human and animal digestive systems. In addition to the possible health

risks associated with them, the bacteria can also cause cloudy water, unpleasant odors, and decrease dissolved oxygen in the water.

Fetch — the distance along open water or land over which the wind blows

Flooding regime — pattern of flooding over time

Floodplain — a strip of relatively flat land bordering a stream channel that may be overflowed at times of high water; the amount of land inundated during a flood is relative to the severity of a flood event

Flora — plants collectively, especially the plants of a particular region or time

Fluvial — of, relating to, or living in a stream or river

Food chain — interrelations of organisms that feed upon each other, transferring energy and nutrients; typically solar energy is processed by plants who are eaten by herbivores which in turn are eaten by carnivores: sun –> grass –> mouse –> owl

Food webs — the combined food chains of a community or ecosystem

Frequency — how often something happens

Fronds — leaf-like structures of kelp plants

Function — refers to how wetlands and riparian areas work – the physical, chemical, and biological processes that occur in these settings, which are a result of their physical and biological structure regardless of any human benefit

Functional habitat characteristics — parameters that describe what ecological service a habitat provides and may be used as a measure to determine how well a particular place performs a specific function

Fyke net — a collection net which is staked to the sediment surface and constructed of small mesh that uses tidal fluctuation or current to entrain fish and decapods via wings that act to funnel the catch into a box like mouth containing a series of chambers and partitions used to retain the catch

Gastropods — any of a large class (Gastropoda) of mollusks (as snails and slugs) usually with a single shell or no shell and a distinct head bearing sensory organs

Geomorphic — pertaining to the form of the Earth or its surface features

Geomorphology — the science that treats the general configuration of the Earth's surface; the description of landforms

Habitat — the sum total of all the living and non-living factors that surround and potentially influence an organism; a particular organism's environment

Hectare – the area of a square 100 m on each side: approximately 107,600 square feet; 12,000 square yards; or 2.5 acres

Herbivory — the act of feeding on plants

Holdfasts — a part by which a plant clings to a surface

Hydric soil — a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of hydric soils can include a thick layer of decomposing plant material on the surface; the odor of rotten eggs (sulfur); and colors of bluish–gray, gray, black, with occasional contrasting brighter spots of color

Hydrodynamics — the motion of water that generally corresponds to its capacity to do work such as transport sediments, erode soils, flush pore waters in sediments, fluctuate vertically, etc. Motions can vary within each of three flow types: primarily vertical, primarily bidirectional and horizontal, and primarily unidirectional and horizontal. Vertical fluxes are driven by evapotranspiration and precipitation. Bidirectional flows are driven by astronomic tides and wind-driven seiches. Unidirectional flows are down slope movement that occurs from seepage slopes and on floodplains.

Hydrology — the study of the cycle of water movement on, over and through the earth's surface; the science dealing with the properties, distribution, and circulation of water

Hydro period — depth, duration, seasonality, and frequency of flooding

Hydrostatic pressure — the pressure water exerts at any given point when a body of water is in a still motion

Hyper saline — extremely saline, generally over 30 ppt salinity (average ocean water salinity)

Hypoxic — waters with dissolved oxygen less than 2 mg/L, the point at which most aquatic life dies

Infauna — plants that live in the sediment

Interspersion — scattered or distributed at regular intervals

Interstices — a space that intervenes between things; especially one between closely spaced things

Intertidal — an area that is alternately flooded and exposed by tides

Intralittoral — a sub-area of the sublittoral zone where upward-facing rocks are dominated by algae, mainly kelp

Invasive species — a species that does not naturally occur in a specific area and whose introduction is likely to cause economic or environmental harm

Invertebrate — an animal with no backbone or spinal column; invertebrates include 95% of the animal kingdom

Irregularly exposed — refers to coastal wetlands with substrate exposed by tides less frequently than daily

Lacunars — a small cavity, pit, or discontinuity

Lacustrine — pertaining to, produced by, or formed in a lake

Lagoons — a shallow stretch of seawater (or lake water) near or open to the sea (or lake) and partly or completely separated from it by a low, narrow, elongate strip of land

Line transect — a straight line is laid out across a project area. Samples or measurements are taken at specific, predetermined locations along this straight line

Littoral — refers to the shallow water zone (less than 2 m deep) at the end of a water body, commonly seen in lakes or ponds

Macro algae — relatively shallow (less than 50 m deep) sub tidal algal communities dominated by very large brown algae. Kelp and other macro algae grow on hard or consolidated substrates forming extensive three-dimensional structures that support a diversity of other plants and animals.

Macro fauna — animals large enough to be seen with the naked eye, typically exceeding 1 mm in length or that will not pass through a 1 mm sieve

Macroinvertebrate — animals without backbones that can be seen with the naked eye (caught with a 1 to 2 mm mesh net); includes insects, crayfish, snails, mussels, clams, fairy shrimp, etc.

Macrophytes — plant species that are observed with the naked eye, e.g., vascular plants

Mangroves — swamps dominated by shrubs that live between the sea and the land in areas that are inundated by tides. Mangroves thrive along protected shores with fine-grained sediments where the mean temperature during the coldest month is greater than 20° C, limiting their northern distribution.

Marine polyps — the small living units of a coral, responsible for secreting calcium carbonate maintaining coral reef shape

Marshes (marine and freshwater) — transitional habitats between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water tidally or seasonally. Freshwater species are adapted to the short- and long-term water level fluctuations typical of freshwater ecosystems.

Mast — the nuts of forest trees accumulated on the ground

Meiofauna — diverse microorganisms that are approximately between .042 mm and 1 mm in size

Metadata — data that describes or provides background information on other data

Microfauna — animals that are very small and best identified with the use of a microscope, e.g., protozoans and nematodes

Micro invertebrates — invertebrates so small they can only be observed with a microscope

Micro-topography — very slight changes in the configuration of a surface including its relief and the position of its natural and man-made features

Migratory — a creature that moves from one region to another when the seasons change

Morphology — the study of structure and form, either of biological organisms or features of the earth surface

Mottling — contrasting spots of bright colors in a soil; an indication of some oxidation or ground water level fluctuation

Mudflat — bare, flat bottoms of lakes, rivers and ponds, or coastal waters, largely filled with organic deposits, freshly exposed by a lowering of the water level; a broad expanse of muddy substrate commonly occurring in estuaries and bays

Nanoplankton — plankton of minute size, generally size range is from 2 - 20 micrometers

Native — an animal or plant that lives or grows naturally in a certain region

Near shore — near shore waters beginning at the shoreline or the lake ward edge of the coastal wetlands and extending offshore to the deepest lakebed contour where the thermocline typically intersects with the lakebed in late summer or early fall

Non-point source — the origin of any water-carried material from a broad area rather than from a discrete point, e.g., runoff from agricultural fields

Nuisance species — undesirable plants and animals, commonly exotic species

Null hypothesis — a statistical hypothesis the truth of which is to be investigated by sampling, e.g., these two wetlands have the same vegetation community

Nutria — a large South American semi-aquatic rodent (*Myocastor coypus*) with webbed hind feet that has been introduced into parts of Europe, Asia, and North America

Nutrient — any inorganic or organic compound that provides the nourishment needed for the survival of an organism

Nutrient cycling — the transformation of nutrients from one chemical form to another by physical, chemical, and biological processes as they are transferred from one trophic level to another and returned to the abiotic environment

Oligotrophic — a water body that is poor in nutrients, refers mainly to lakes, ponds, and some wetlands

One-hundred year flood — refers to the floodwater levels that would occur once in 100 years, or as a 1.0 percent probability per year

Organic — containing carbon, but possibly also containing hydrogen, oxygen, chlorine, nitrogen, and other elements

Organic material — anything that is living or was living; in soil it is usually made up of nuts, leaves, twigs, bark, etc.

Osmotic stress — water stress due to differences in salinity between an organism and its aquatic environment

Overstory — trees that tower above the surrounding canopy

Oyster beds — dense, highly structured communities of individual oysters growing on the shells of dead oysters

Palustrine — non tidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%

Pelagic — pertaining to, or living in open water column

pH — a measure of the acidity (less than 7) or alkalinity (greater than 7) of a solution; a pH of 7 is considered neutral

Physiographic setting — the location in a landscape, such as stream headwater locations, valley bottom depression, and coastal position, similar to geomorphic setting

Physiography — a description of the surface features of the Earth, with an emphasis on the mode or origin

Phytoplankton — microscopic floating plants, mainly algae that are suspended in the water column and are transported by wave currents

Piscivorous — feeding on fish

Pit trap — a collection method that uses shallow depressions dug into the sediment surface that are lined with a non porous water retaining container, to collect select fish and decapods species that use depression on the sediment surface as refuge habitats during low tide

Planktivorous — eating primarily plankton

Plankton — plants and animals, generally microscopic and float or drift in fresh or saltwater

Pneumatocysts — known as gas bladders or floaters that help a plant stay afloat, e.g., bladders seen in the brown alga *Macrocystis*

Pneumatophores — specialized roots formed by several species of plants occurring in frequently inundated habitats. The root is erect and protrudes above the soil surface.

Pop net — a shallow water sampling gear typically 1 – 2 m in diameter composed of fine mesh that is used to collect fish and decapods. The pop net is attached to the sediment surface, and after some time a connected float collar is released from the sediment surface to encompass the whole of the water column in the area of the net. Catch within the pop net is then collected via seines or suction pumping the water within the trap.

Population — a collection of individuals of one species or mixed species making up the residents of a particular area

ppt — parts per thousand, the salinity of ocean water is approximately 35 ppt

Prop roots — long root structures that extend midway from the trunk and arch downward creating tangled branching roots above and below the water's surface, such as in the mangrove *Rhizophora*

Propagules — a structure (such as a cutting, a seed, or a spore) from which a new plant can grow

Pseudofeces — material expelled by the oyster without having gone through the animal's digestive system

Quality assurance/quality control plan — a detailed plan that describes the means of data collection, handling, formatting, storage, and public accessibility for a project

Rebar — also called reinforcing bar; a steel rod with ridges for use in reinforced concrete

Receiving water bodies — lakes, estuaries, or other surface waters that have flowing water delivered to them

Redox potential — oxygen-reduction potential, often used to quantify the degree of electrochemical reduction of wetland soils under anoxic conditions

Reference condition — set of selected measurements or conditions to which a restoration project will be compared, may be relatively pristine or very degraded

Reference site — a site that is representative of the expected ecological conditions and integrity of other sites of the same type and region

Regime — a regular pattern of occurrence or action

Restoration — the process of reestablishing a self-sustaining habitat that in time may come to closely resemble a natural condition in terms of structure and function

Restoration monitoring — the systematic collection and analysis of data that provides information useful for measuring restoration project performance at a variety of scales (locally, regionally, and nationally)

Rhizome — somewhat elongate usually horizontal subterranean plant stem that is often thickened by deposits of reserve food material, produces shoots above and roots below, and is distinguished from a true root in possessing buds, nodes, and usually scale-like leaves

Riparian — a form of wetland transition comprised of multiple habitats and located between permanently saturated wetland and upland habitats. These areas exhibit vegetation or physical characteristics reflective of permanent surface of subsurface water influence. Lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels are typically riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

Riverine — associated with rivers

Riverine forests — forests found along sluggish streams, drainage depressions, and in large alluvial floodplains. Although associated with deepwater swamps in the southeastern United States, riverine forests are found throughout the United States and are not subject to prolonged flooding.

Rock bottom — all wetlands and deepwater habitats with substrates having an areal cover of stones, boulders, or bedrock 75% or greater, and vegetative cover of less than 30%

Rocky shoreline — extensive littoral habitats on wave-exposed coasts, the substrate is composed of boulders, rocks, or cobble

Salinity — the concentration of dissolved salts in a body of water, commonly expressed as parts per thousand

Salt pans — an undrained natural depression in which water gathers and leaves a deposit of salt upon evaporation

Sampling designs — the procedure for selecting samples from a population and the subsequent statistical analysis

SAV (marine, brackish, and freshwater) — flowering plants that grow on soft sediments in sheltered shallow waters of estuaries, bays, lagoons, and lakes. Freshwater species are adapted to the short- and long-term water level fluctuations typical of freshwater ecosystems.

Seasonality — the change in natural cycles over time, such as lunar cycles and flooding cycles; changes from one season to the next

Seiches — a sudden oscillation of the water surface in a moderate-size body of water, caused by wind

Senescence — the life stage in a plant or plant part (such as a leaf) from full maturity to death, also applies to winter dormancy

Sessile — permanently attached or established, not free to move about

Socioeconomic monitoring — tracking of key indicators that characterize the economic and social state of a human community

Soft bottom — loose, unconsolidated substrate characterized by fine to coarse-grained sediment

Soft shoreline — sand beaches and muddy shores; stretches of land covered by loose material, exposed to and shaped by waves and/or wind.

Statistical hypothesis — a statement about the population or populations being sampled, or occasionally a statement about the sampling procedure

Statistical protocol — a method of analyzing a collection of observed values in order to make an inference about one or more characteristic of a population or unit

Strands — a diffuse freshwater stream flowing through a shallow vegetated depression on a gentle slope

Stratified random sampling — a population is divided into subgroups that are homogeneous. Random samples are then taken within each subgroup, assuring that key subgroups within a population are sampled, particularly those in the minority. This type of sampling can be done for populations or for areas.

Structural habitat characteristics — characteristics that define the physical composition of a habitat, the functions an ecosystem can perform are often dependent upon its structure

Subtidal — continuously submerged areas affected by ocean tides

Supralittoral region — an area above the high tide mark receiving splashing from waves

Taxa — a grouping of organisms given a formal taxonomic name such as species, genus, family, etc. (singular form is taxon)

Tested hypothesis — a statistical hypothesis the truth of which is to be investigated by sampling, sometimes called the null hypothesis

Thermocline — a horizontal region in a thermally stratified body of water than separates warmer oxygen-rich surface water from cold oxygen-poor deep water

Tide — the rhythmic, alternate rise and fall of the surface (or water level) of the ocean, and connected bodies of water, occurring twice a day over most of the earth, resulting from the gravitational attraction of the moon, and to a lesser degree, the sun

Time series — an ordered sequence of values of a certain variable that are equally spaced over time

Time series analysis — looking for patterns such as seasonal variations or impacts of events in data sets whose measurements are collected at equally spaced intervals over time

Topography — the general configuration of a land surface or any part of the earth's surface, including its relief and the position of its natural and man-made features

Transient — passing through or by a place with only a brief stay or sojourn

Trophic — refers to food, nutrition, or growth state

Trophic level — a group of organisms united by obtaining their energy from the same part of the food web of a biological community

Unconsolidated — loosely arranged

Understory — trees and tall bushes that are completely submerged under the canopy

Viviparous — producing living young instead of eggs from within the body in the manner of nearly all mammals, many reptiles, and a few fishes; germinating while still attached to the parent plant

Water column — a conceptual volume of water extending from the water surface down to, but not including the substrate, found in marine, estuarine, river, and lacustrine systems

Watershed — surface drainage area that contributes water to a lake, river, or other body of water; the land area drained by a river or stream

Zonation — a state or condition that is marked with bands of color, texture, or different species

Zooplankton — free-floating animals that drift in the water, ranging in size from microscopic organisms to larger animals such as jellyfish

APPENDIX 3: Revised Section 6.1 Clean Water State Revolving Fund

6.1 Clean Water State Revolving Fund

With the amendments to the Clean Water Act in 1987, Congress ushered in a new era in financing water quality improvements. Under Title VI, the CWA established the innovative Clean Water State Revolving Fund program. The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects.

The CWSRF program operates much like an environmental infrastructure bank. EPA capitalizes the program annually with a federal grant that also requires the state to contribute to the program. The fund loans to public agencies and repayments are recycled back into the program to fund additional water quality, improvement projects. The intention of the revolving nature of the program is to provide a perpetual source of funding for water quality improvements.

Many think of the CWSRF program as a source of funding for municipal projects. It is. Yet, it is also a significant resource for funding nonpoint source and estuary management projects. To date, the CWSRF has provided over $3 billion in funding for nonpoint source projects nationally.

Oregon's larger municipalities address urban stormwater issues through Oregon's NPDES permit-based stormwater program. The treatment of collected stormwater runoff sometimes involves technology similar to that for treating sewage and other point sources. Nevertheless, stormwater runoff remains essentially a nonpoint source of pollution. This plan does not go into details about Oregon's NPDES stormwater permit program. When not required under a NPDES stormwater permit, activities addressing stormwater runoff are part of the state's overall NPS Program. This NPS Plan addresses the causes of nonpoint source pollution regardless of how that pollution might be regulated or controlled, and allows for 319 grant funding and CWSRF loans for any and all activities that evaluate, prevent, reduce, eliminate or remediate the effects of nonpoint source pollution.

In addition to direct loans, the CWSRF program offers an incentive to communities upgrading their wastewater facilities while allowing the community to fund a nonpoint source project at no cost or for a substantially reduced cost. Referred to as a Sponsorship Option, this incentive encourages a partnership between an operator of a publically owned wastewater system and an organization seeking funding for a qualifying nonpoint source project. The partnership can be under the same entity such as a municipal public works department and between different divisions of this entity such as the wastewater and stormwater utility. When an applicant agrees to fund a nonpoint source project in conjunction with a wastewater project, the CWSRF program is able to reduce the combined loan's interest rate so the debt service for the combined project is equal, or nearly equal to what the debt service would have been for just the traditional wastewater facility project. The savings generated by reducing the loan interest rate is then available to cover all or a portion of the cost for the nonpoint source project.

In order to receive CWSRF funds in Oregon, all proposed nonpoint source control projects must align with and support the goals of Oregon's Nonpoint Source Management Program Plan. Those nonpoint

source activities, practices and strategies intended to improve water quality and generally identified in the following plans and documents may qualify as nonpoint source control activities as required in Oregon Administrative Rule, Chapter 340, Division 54:

- TMDL Water Quality Management Plans
- TMDL Implementation Plans
- Stormwater Management/Master Plans
- Water Quality Status and Action Plans
- Watershed Approach Basin Reports
- Watershed Council Action Plans
- Source Water Protection Plans
- Water Conservation Plans
- Oregon Plan for Salmon and Watersheds
- Coastal Nonpoint Pollution Control Plan (CNPCP)
- National Estuary Comprehensive Conservation & Management Plans
- Various Water Quality Restoration Plans
- Ground Water Management Area Action Plans
- Agriculture Water Quality Management Area Plans
- State Forest Management Plans
- DLCD's 2000 Water Quality Model Code and Guidebook
- EPA's 1993 Guidance Specifying Management Measure for Sources of Nonpoint Pollution in Coastal Waters
- Any relevant plans or documents incorporated within this NPS Plan

DEQ considers the nonpoint source activities, practices and strategies identified in the above plans and documents as reasonable practices statewide unless a practice is determined appropriate and useful only under certain circumstances.

Additionally, activities, practices and strategies reducing nonpoint pollution from onsite systems; agricultural and livestock activities; or conserving water or augmenting water flows may qualify as nonpoint source control activities.