

Funding Guidelines – SFY 2014

Water Quality Financial Assistance

Centennial Clean Water Program

Clean Water Act Section 319 Program

Washington State Water Pollution Control Revolving Fund Program

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Funding Guidelines – SFY 2014

Water Quality Financial Assistance Guidelines

by Water Quality Program's Financial Management Section

Water Quality Program Washington State Department of Ecology Olympia, Washington This page is purposely left blank

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Chapter 1: Funding Programs Overview

The Washington State Department of Ecology's (Ecology) Water Quality Program administers three main funding programs under an integrated annual funding cycle. Ecology awards grants and loans on a competitive basis to eligible public bodies for high priority water quality projects throughout Washington State. Proposed projects address point and nonpoint source water pollution control issues. This document describes how to apply for funding, meet program requirements, and manage funded projects.

The three main funding programs are:

- The Centennial Clean Water Program (Centennial).
- The Clean Water Act Section 319 Nonpoint Source Grant Program (Section 319).
- The Washington State Water Pollution Control Revolving Fund Program (Revolving Fund).

Eligible public bodies include:

- Counties, cities, and towns.
- Water districts, sewer districts, and other special purpose districts.
- Conservation districts.
- Political subdivisions.
- Municipal or quasi-municipal corporations.
- Federally recognized tribes.
- Washington State institutions of higher education (provided that the project is not included in that institution's statutory responsibilities).
- Not-for-profit organizations that are recognized as tax exempt by the Internal Revenue Service (Section 319 only).

Eligible project types include:

Wastewater Facility

- Planning, Environmental Review, Design and Construction.
- Facilities for wastewater conveyance and treatment.
- Combined Sewer Overflow abatement.
- Infiltration and Inflow correction.
- Water Reclamation and Reuse, including reclaimed water distribution.

Nonpoint Source Activity

- Agricultural best management practices design and implementation.
- Demonstration projects (as approved by Ecology).
- Groundwater/aquifer/source water/wellhead planning and/or protection.

- Lake restoration planning and implementation.
- Riparian/wetland restoration planning and implementation.
- Public outreach and education.
- Total maximum daily loads (TMDL) support.
- Water quality monitoring.
- Watershed planning and implementation.

On-site Sewage System

- Community systems (planning, design, and construction).
- Planning/survey.
- Repair/replacement program.

Stormwater

- Low impact development techniques.
- Outreach and education.
- Source control activities.
- Stormwater pollution control facilities.
- Stormwater retrofit.
- Stormwater best management practices.

Statutory requirements, administrative rule uses and limitations, and program and agency policy provide the framework for the Funding Guidelines. Listed below are the key statutes, rules, and policies, along with web links to the documents.

- Chapter 173-98 WAC, Uses and Limitations of the Water Pollution Control Revolving Fund. <u>http://apps.leg.wa.gov/WAC/default.aspx?cite=173-98</u>
- Chapter 173-95A WAC, Uses and Limitations of the Centennial Clean Water Program. http://apps.leg.wa.gov/WAC/default.aspx?cite=173-95A
- Chapter 70.146 RCW, *Water Pollution Control Facilities Financing*. http://apps.leg.wa.gov/RCW/default.aspx?cite=70.146
- Chapter 90.50A RCW Water Pollution Control Facilities Federal Capitalization Grants. <u>http://apps.leg.wa.gov/RCW/default.aspx?cite=90.50A</u>
- Federal Clean Water Act of 1987, Section 319. <u>http://www.epa.gov/nps/cwact.html</u>
- Administrative Requirements for Recipients of Ecology Grants and Loans –Yellow Book. www.ecy.wa.gov/biblio/9118.html
- Chapter 173-240 WAC, Submission of Plans and Reports for Construction of Wastewater Facilities. <u>http://apps.leg.wa.gov/WAC/default.aspx?cite=173-240</u>
- Chapter 90.46 RCW, *Reclaimed Water Use*. http://apps.leg.wa.gov/RCW/default.aspx?cite=90.46

Chapter 2: Available Funding

Funding levels for the Water Quality program vary from year to year based on a variety of factors including federal and state legislative decisions, special one-time appropriations, or Revolving Fund repayment schedules. The backbone of the Water Quality Program funding is the Revolving Fund, which typically provides a majority of funds available each year. Recently the Water Quality Program has been designated to distribute funding from special one-time appropriations from the state for the Stormwater Retrofit Low Impact Development funding sources. Ecology administers this program separately from the programs discussed in this guidance.

The funding programs

Ecology manages the three main sources of water quality funding under an integrated annual funding cycle. Applicants use one integrated financial assistance application to apply for Water Quality funds from all three funding sources. Ecology distributes funds to the highest priority projects in a combination of grants and loans depending on the project type and funding source.

Revolving Fund

The United States Congress established the Washington State Water Pollution Control Revolving Fund Program (Revolving Fund) as part of the Clean Water Act (CWA) Amendments of 1987. The Environmental Protection Agency (EPA) offers states capitalization grants each year according to a formula established in the CWA. The state must match the capitalization grant with 20 percent state funds; the state adds the match funds to payments of principal and interest from previous loans. Ecology loans out the combined funds to eligible public bodies, and loan recipients make payments to the Revolving Fund with interest. As a result, the Revolving Fund continues to revolve and grow, and more money becomes available to fund water quality projects. Today, the majority of the fund consists of repaid principal and interest. The Revolving Fund has a portfolio of approximately \$1 billion.

Eligible funding categories

- Pre-construction (hardship through forgivable principal available).
- Facility
 - Wastewater (hardship and forgivable principal available).
 - o Stormwater.
 - o Large On-site Sewage System (hardship with grant and subsidized loan available).
 - Green project reserves (a component of the categories listed above).
- Activities
 - Nonpoint source planning and implementation.
 - Low impact development stormwater (forgivable principal available associated with green project reserve).
 - o Local loan fund for on-site sewage repair and replacement.
 - Green project reserves (a component of the categories listed above).

After subtracting the green project reserve amount from the available Revolving Fund moneys, Ecology splits the remaining moneys with five percent for preconstruction, 75 percent for facilities, and 20 percent for activities. Of the Revolving Fund loan set aside for preconstruction projects, Ecology will award no more than 20 percent for a single project. In both the facility and activity funding categories, Ecology will award no single project more than 50 percent of the available Revolving Fund loan funds.

Funding provisions

Preconstruction

Eligible pre-construction projects include facility planning, facility design, rate studies, sewer use ordinance, and value engineering. Applicants with a population of 25,000 or less and a Median Household Income (MHI) below the state MHI are eligible for funding under the pre-construction category.

Applicants that do not meet either the population or MHI criterion for this category can still apply for pre-construction projects in the facilities category.

Hardship

Ecology may offer a combination of hardship grants from Centennial, forgivable principal loans, and subsidized loans for facility preconstruction or construction projects, and on-site sewage repair and replacement local loan fund projects. Ecology will offer Centennial grant funds to the highest ranking eligible hardship applicants first. Once Centennial grant funds have been exhausted, Ecology will offer available Revolving Fund forgivable principal loans to remaining eligible hardship applicants until forgivable principal funds are exhausted.

Congress has authorized the use of forgivable principal loans since the Fiscal Year 2010 Clean Water Act appropriation. Forgivable principal means the portion of a loan that is not required to be paid back by the borrower. In Fiscal Year 2013 an amount between five and eight percent of the capitalization grant was required to be provided as forgivable principal loans. Applicants receiving a forgivable principal loan must take a portion of the offered funding in a standard Revolving Fund loan. Ecology may offer forgivable principal loans in the 2014 funding cycle if authorized by Congress in the Clean Water Act 2013 appropriation.

The hardship criteria and funding subsidies vary depending on the type of project and level of hardship. If a hardship eligible project is only offered partial funding due to availability of funding, the project may be placed at the top of the priority funding list for the next funding cycle. The applicant must be able to demonstrate that the project can be completed within the allowable funding timeframe in ordered to be placed on the priority funding list for the next funding cycle.

Ecology has created a Financial Hardship Analysis form that applicants for funding complete. The form can be found at: https://fortress.wa.gov/ecy/publications/summarypages/ecy070461.html. Hardship criteria for each eligible project type are discussed below.

Ecology may consider a preconstruction project for hardship if the applicant meets the following criteria:

- The existing residential population of the service area for the proposed project is 25,000 or less at the time of application.
- The MHI is less than 80 percent of the state MHI.

Ecology may award applicants that meet these hardship criteria a forgivable principal loan for up to 50 percent of the eligible project costs.

Ecology may consider wastewater treatment facility applicants for financial hardship consideration if they meet the following criteria:

- The existing residential population of the service area for the proposed project is 25,000 or less at the time of application.
- Residential need exists at the time of application.
- Estimated sewer user fees will be two percent or more of the median household income (MHI) for the service area. Estimated sewer user fees include existing and new operation and maintenance costs, and debt service on the wastewater facility.

If Ecology determines that financial hardship exists, it may structure an offer that includes a combination of grant, forgivable principal loan, and subsidized loan terms. The combined ceiling amount for wastewater treatment facility hardship funding from Centennial grants and Revolving Fund forgivable principal loans is \$5 million. Subsidized loan terms could include a combination of an extended repayment period (up to 20 years) and reduced interest rate (down to zero percent). Hardship funding covers existing residential need at the time of application.

Ecology uses a sliding scale to determine hardship designation for wastewater treatment facility construction projects. Table 1 displays the hardship interest rate continuum for construction loans. Table 2 shows the hardship forgivable principal loan continuum for construction projects.

| Sewer User Fee divided by MHI | Below 2% | 2% and above, but below 3% | 3% and above, but below 5% | 5% and above |
|--|---------------------------------|-------------------------------|-------------------------------|---|
| Hardship Designation | Non-Hardship | Moderate Hardship | Elevated Hardship | Severe Hardship |
| sewer user rates in relation to MHI | (Not funded with grant dollars) | | | Very high sewer user rates in relation to MHI |
| Loan hardship- Funding Continuum | Loan at 60% of market rate | Loan at 40% of market rate | Loan at 20% of market rate | Loan at 0% interest |

Table 2—Forgivable Principal Loan Continuum

| Sewer User Fee divided by MHI | Below 2% | 2% and above, but below 3% | 3% and above, but below 5% | 5% and above |
|---|---|--|--|---|
| Hardship Designation sewer user rates in relation to MHI | Non-Hardship | Moderate Hardship | Elevated Hardship | Severe Hardship Very high sewer user rates in relation to MHI |
| Forgivable Principal Loan Hardship- Funding Continuum | Not eligible for principal forgiveness loan | 50% principal forgiveness loan (up to \$5 million) | 75% principal forgiveness loan (up to \$5 million) | 100% principal forgiveness loan (up to \$5 million) |

Hardship funding is available for on-site sewage system projects in the form of grants and subsidized loans. Ecology determines the final blended subsidized interest rate for the subsidized Revolving Fund loan based on the loans provided to homeowners and small commercial enterprises during the project. Ecology will award no more than \$500,000 in grant to cover all eligible costs, including hardship, for an on-site sewage system project.

The following are requirements in order for project activities to qualify for a subsidized loan interest rate based on hardship:

- Household income not to exceed 80 percent of county MHI.
- Small commercial enterprise annual revenue not to exceed \$100,000.

In the Fiscal Year 2012 Clean Water Act appropriation, Congress directed that the state direct at least 10 percent of the Revolving Fund capitalization grant to GPR. To encourage GPR applications, Ecology can offer up to 25 percent of the GPR funding in the form of forgivable principal loans and the remaining 75 percent as standard loans. Any one project that is categorized for GPR may receive up to 50 percent of the amount available for forgivable principal. Ecology calculates the amount of forgivable principal in this category based only on the portion of the project that meets the GPR criteria (discussed in Chapter 3). Ecology does not consider components that do not fall under GPR when calculating forgivable principal. Ecology may offer GPR funding in this funding cycle if Congress authorizes it in the Fiscal Year 2013 Clean Water Act appropriation.

Funding Guidelines

To calculate the ceiling amount for total Revolving Fund forgivable principal and Centennial grant funding for an application that qualifies for both wastewater facility hardship funding and green project reserve funding, Ecology combines the ceiling amount of both hardship and green project reserve categories.

Centennial

The Centennial Program (Centennial) is state-funded. Ecology administers Centennial by providing grants to public bodies. Ecology awards grants for nonpoint source pollution projects to improve water quality, such as stream restoration, on-site sewage system repair and replacement, and other nonpoint activities. Ecology also uses Centennial grants for wastewater treatment construction projects in financially distressed communities (see Hardship above).

Section 319

Congress established the Section 319 Program (Section 319) as part of the CWA amendments of 1987. EPA provides Section 319 grant funds to the state, and the state must provide a 40 percent match; Washington uses Centennial funding for nonpoint source projects that meet the Section 319 criteria as its Section 319 match. While Ecology has no specific state rule to guide the management of Section 319, federal regulations and guidelines as well as the Centennial rule (Chapter 173-95A WAC) steer much of the program. Ecology places a high priority on implementation of best management practices and the collection of data in order to estimate load reductions of nitrogen, phosphorus, and sediments. Recipients of grants for nonpoint source projects funded by Section 319 grants must report load reductions and other information to Ecology and Ecology reports the data to EPA each year.

Prior funding levels

In the past, total funds available for the Water Quality Program have varied from a low of \$67.5 million to a high of \$140.2 million. The amount of funding available on a competitive basis for each State Fiscal Year (SFY) varies based on legislative provisos and previous commitments. Ecology does not know the exact amount of funding available at the time of application for each SFY. Ecology will not know exact funding levels until federal appropriations are made and the State Legislature passes its capital budget for the coming year.

Table 3 below shows the level of funding for the previous four years. The extended payment grant for Spokane County/City is \$5 million annually and is a long-term funding commitment that runs through SFY 2015.

Table 3—Prior Funding Levels

| FUNDING CATEGORY | SFY | SFY | SFY | SFY |
|---|---------------------------|-------------------------------|------------|------------|
| FUNDING CATEGORY | 2010 | 2011 | 2012 | 2013 |
| Total Funds Available | \$ 140.2 M | \$ 108.5 M | \$ 111.6 M | \$ 88 M |
| | | | | |
| Total Centennial (state funds) | \$ 15 M | \$ 15 M | \$ 21.1 M | \$ 13.5 M |
| Less Spokane County/City Extended Payment Grant | \$(5.0) M | \$(5.0) M | \$(5.0) M | \$ (5.0) M |
| Less Legislative Provisos | | | \$ 8.1 M | |
| Competitive Centennial Grants - | \$ 10 M | \$ 10 M | \$ 8.0 M | \$ 8.5 M |
| Hardship Facilities | \$ 6.7 M | \$6M | \$ 5.3 M | \$ 5.7 M |
| Nonpoint Activities | \$ 3.3 M | \$2 M | \$2.7 M | \$2.8 M |
| Stormwater | | \$1M | | |
| On-site Sewage System | | \$1M | | |
| | | | | |
| Total Revolving Fund (federal/state funds) | \$ 58 M | \$ 87.4 M | \$ 88.5 M | \$ 72.5 M |
| Less Spokane County Previous Commitment Loan | \$(16.2) M | \$(16.2) M | | |
| Competitive Revolving Fund - | \$ 41.8 M | \$ 71.2 M | \$ 88.5 M | \$ 72.5M |
| Preconstruction Loans | φ 11.0 M | φ71.2 M | \$ 00.0 M | \$ 3.5 M |
| Facility Loans | \$ 30.2 M | \$ 40 M | \$ 70 M | \$ 51.5 M |
| Nonpoint Activity Loans | \$ 11.6 M | \$ 10 M | \$ 11 M | \$ 14 M |
| Green Project Reserve | <i>\vee i i i o i i i</i> | \$7M | \$ 5.1 M | \$ 2.5 M |
| Hardship Forgivable Principal | | \$ 14.2 M | \$ 2.3 M | \$ 1.0 M |
| | | <i>•</i> • • • <u>-</u> • • • | <i> </i> | <i>•</i> |
| Section 319 Nonpoint Activity Grants (federal funds) | \$ 1.8 M | \$ 1.8 M | \$ 2.0 M | \$ 1.6 M |
| Stormwater Retrofit Low Impact Development (state funds) | | \$ 4.3 M | \$ 29 M | |
| American Recovery and Reinvestment Act (federal funds) | \$ 65.4 M | | | |

Grant match requirements

All nonpoint source activity grants have matching requirements. The grant share for nonpoint source activity projects funded through Centennial or Section 319 is 75 percent of the total eligible costs.

On-site sewage system repair and replacement grants have a 50 percent match requirement; the match is usually fulfilled by the accompanying Revolving Fund loan.

Centennial grants awarded for wastewater hardship do not have a match requirement. *The following discussion does not apply to projects awarded a grant for hardship.*

Match is often in the form of cash, but a recipient may match some grants with interlocal contributions or other in-kind contributions. The type of match depends on the type of grant or the amount of the grant. Projects awarded a grant of \$250,000 or less may have any combination

of cash, interlocal, or other in-kind match. Projects awarded a grant more than \$250,000 up to the maximum amount of \$500,000 must meet the match requirement with cash only.

Cash match

Cash match includes any eligible project costs paid for directly by the recipient that are not reimbursed by the Ecology grant.

Grants used to match grants

Recipients should check with the funding agency issuing the grant to ensure that it can be used as match for an Ecology grant. The following applies when using other grants to match an Ecology grant:

- The scope of work on the matching grant must directly satisfy the portion of the scope of work on the Ecology grant where the work is contributed.
- The date that the costs for the matching grant are incurred must fall within the effective and expiration dates of the Ecology grant.
- The costs incurred under the matching grant must be eligible according to all criteria for the Ecology grant.
- Generally, the matching grant cannot originate from the same funding source as the Ecology grant.
- Water Quality Program grants cannot be used to match each other.
- Grants provided by the Washington State Conservation Commission cannot be used to match Water Quality Program grants.
- Funds, goods, or services cannot be used as match more than once (that is, no double-dipping).

Ecology uses nonpoint source activities projects funded by Centennial to meet EPA's Section 319 match requirements. If Ecology is using the project as a Section 319 match, the grant agreement will state that. Projects designated for Section 319 match cannot be used to meet match requirements for other funding programs.

Loans used to match grants

A recipient may use Centennial or Revolving Fund loans to match Centennial and Section 319 grants.

Interlocal contributions

Interlocal contributions are those made by another government through an interlocal agreement and not reimbursed by the grant or other outside funding source. The interlocal agreement should detail the work to be accomplished, the goods and services to be provided, and their value. Interlocal contributions can satisfy a cash match requirement. Interlocal contributions differ from other in-kind contributions because the following are eligible costs:

- An indirect rate of up to 25 percent of salaries and benefits.
- Cost of transportation through mileage (at the current state rate) or an indirect rate.
- Per Diem, travel, and subsistence expenses at state travel rates.
- Prevailing wages of the public body.

Other in-kind

Other in-kind match contributions are property, goods, or services contributed to the recipient (or any contractor under the agreement) without direct monetary compensation. Other in-kind match includes donated or loaned real or personal property, volunteer services, and employee services donated to a project. Other in-kind match does not include eligible project costs paid directly by the recipient (see Cash Match above). Other in-kind contributions must be fully documented and reported separately when requesting reimbursement.

The current in-kind rate for volunteer services includes the value of travel expenses contributed by volunteers. For adults, the rate is \$15.00 per hour. For persons under the age of 18, the rate is the Washington State minimum wage at the time the service is provided.

The following are examples of ineligible other in-kind contributions:

- Contributions of overhead costs, per-diem, travel, and subsistence expenses.
- Contributed time from individuals receiving compensation through the grant, except when that individual is off duty and contributing on their own time.
- Time spent at advisory groups or meetings that do not directly contribute to project activities.
- Studies conducted by other state or federal agencies.

Third-party in-kind contribution

When a third-party employer (not the recipient, state agency, or a contractor under the agreement) contributes the services of an employee, in the employee's normal line of work, to the project at no charge to the recipient, the services may be valued at the employee's regular rate of pay.

Small Towns Environment Program (STEP)

In-kind contributions may be used for an Ecology-designated STEP project.

Donations

Donations that become the long-term property of the recipient are considered cash match.

Refinancing existing debt

Revolving Fund loans are available for refinancing of existing debt. Refinancing can take the form of interim refinance and standard refinance.

Interim refinance

Interim refinancing is available for projects that are in progress and using non-Ecology funds. Any project that is eligible for a Revolving Fund loan is eligible for interim refinance.

Applicants for interim refinancing apply for funding in the same manner as any new project. Ecology rates and ranks applications for interim refinance along with all other applications for new projects. Ecology awards funding on a competitive basis for all applications (including interim refinance application) based on project ranking, project category, funding program eligibility, and funding availability. Applicants need to clearly state in the project description that the project is underway. Applicants should also note that the loan request is to retire an existing debt and to fund all or part of the rest of the project. As with any other project, an applicant must meet all applicable requirements for that project type.

Standard refinance

Standard refinance is for projects that have been successfully completed using non-Ecology funding sources where the recipient wants to refinance at a lower interest rate. Standard refinance is limited to water pollution control facilities where project construction began after March 7, 1985. Applicants must meet all applicable requirements for the project and must meet all Ecology prerequisites at the time the project was undertaken. Hardship assistance is not available for standard refinance projects.

Standard refinance projects are a low priority, and Ecology does not rate and rank them as competitive projects. Ecology makes funding offers for standard refinance projects only if Revolving Fund money is left after funding of competitively ranked projects. Ecology ranks multiple standard refinance projects competing for funding according to financial burden on the ratepayers.

Applicants must explain the original source of project funding (e.g., internal funds, other agencies, bond issuance). Applicants must also explain the specific provisions for repayment. The debt for the project must still be outstanding, and bonds must be callable. Ecology will not advance refund a prior debt.

Chapter 3: Eligible Project Types

Some projects are eligible for both loans and grants, while other projects are eligible for only loans. Eligible projects fall into four main categories: wastewater facilities, nonpoint source activity, on-site sewage, and stormwater. In addition to these four categories, Green Project Reserve (GPR) is a designation that can be applied to an entire project or a component of a project.

For more information regarding the eligibility of specific projects or project components, see the tables in <u>Appendix C</u> and <u>Appendix D</u> or contact Ecology's financial management staff.

Wastewater facility projects

Water pollution control facilities projects can include planning, design, and construction of wastewater infrastructure, including treatment, collection, combined sewer overflow (CSO) abatement, and infiltration and inflow (I/I) correction. The technical prerequisites and approval process for facilities projects can be extensive. Ecology encourages applicants to work closely with the Ecology project engineers to ensure that all technical prerequisites are in place when planning facilities projects.

Planning

Costs of preparing planning documents, including General Sewer Plans, Engineering Reports, environmental review, value engineering studies, and rate studies are eligible for Water Quality Program funding. Applicants must comply with planning requirements in order to be eligible for financial assistance from Ecology.

Subsequent project steps often require Ecology approval of a planning document. Plans approved by Ecology more than two years prior to the close of a loan and grant application period must contain evidence of a recent review by Ecology to ensure that the document reflects current conditions.

Water reclamation facilities

Water reclamation facilities are eligible for loans. Water reclamation facilities must meet the same eligibility standards as other water pollution control facilities, including demonstrating that the project is the cost effective solution to a water quality problem. Cost effectiveness can include the environmental benefits of advanced wastewater treatment as well as the provision of additional water supplies.

Generally, project components with water quality benefits are eligible. Components with strictly water supply benefits are not eligible. Eligible project elements may include, but are not limited to:

- Wastewater treatment plant facilities.
- Rapid infiltration basins.
- Dedicated irrigation systems necessary to support the use of the water, such as poplar plantations.
- Purchase of land when that purchase is necessary for water storage or is the cost effective option, such as a dedicated land application site.
- Distribution piping and appurtenances needed to transport reclaimed water to the reuse site.

The purchase of land and distribution systems for recreation facilities (e.g., golf courses, ball fields, and parks) and similar community development features not directly related to water and wastewater infrastructure needs are not eligible for financial assistance.

Design

Facility design is eligible for funding. Design plans and specifications must be consistent with:

- Chapter 173-240 WAC, Submission of Plans and Reports for Construction of Wastewater Facilities. Chapter 173-240 WAC can be found at: http://apps.leg.wa.gov/wac/default.aspx?cite=173-240.
- An approved planning document.
- Conditions resulting from the State Environmental Review Planning (SERP) process or federal cross cutter consultation.
- Ecology's *Criteria for Sewage Works Design* (the "Orange Book"). The Orange Book can be found at: <u>https://fortress.wa.gov/ecy/publications/publications/9837.pdf</u>.
- Other applicable requirements.

Applicants must base the plans and specifications on the preferred cost-effective alternative identified in the cost effectiveness analysis.

Construction

Facility construction is eligible for loans and hardship assistance in the form of grants, forgivable principal loans, and reduced interest rate loans. Facility construction must comply with the federal requirements of the Revolving Fund program, including Equal Employment Opportunity, Davis-Bacon wages, and Disadvantaged Business Enterprise requirements.

Recipients of grants and loans for facility construction must ensure that the project complies with the approved Plans and Specifications. To this end, the applicant must provide adequate and competent construction management and inspection. This may involve procuring professional engineering services.

Design and construction

Applicants can also apply for a combined design and construction project. The total project cost for both phases of a "Design and Construct" project must be less than \$5 million to be eligible to apply under one application. All the applicable requirements for both design and construction projects apply, including the possibility of hardship assistance for the construction elements and pre-construction funding for the design portion of the project.

Requests for additional funding

Subject to available funding, Ecology may provide additional funds to a facility project to cover additional costs or address unforeseen circumstances. Requests for additional funding for construction bid overruns and change orders are subject to the following limitations.

Construction bid overruns

Ecology may adjust a recipient's facility construction loan or grant agreement by amendment to be consistent with the low, responsive, responsible bid. If the low, responsive, responsible bid exceeds the engineer's estimate of construction costs, Ecology may approve a funding increase for up to 10 percent of the engineer's cost estimate. If funding is available for bid overruns, hardship communities will be given first priority based on the severity of financial need of the community. Ecology will fund bid overruns for non-hardship recipients on a first-come, first-served basis.

If the low, responsive, responsible bid falls below the existing loan or grant agreement amount, Ecology will amend the agreement to match the actual eligible bid amount based on the percentage of Ecology's participation in the overall funding of the project. Ecology will begin the amendment process as soon as possible after the completion of the bid process in order to make any surplus funds available to other public bodies.

Construction change orders

A change order is a formal document that modifies some condition(s) of the original construction contract. Ecology reviews all construction change orders for funding eligibility and approves or disapproves them. Significant changes that reflect a deviation from the approved planning

document require pre-approval. Variations typically include changes in scope of work, contract price, construction methods, times to complete the work, and major design or process changes (such as changes in location, size, or capacity). Ecology may require a final quantity adjustment at the end of each contract to reconcile the originally contracted quantities with the quantities actually used.

Ecology may provide a five-percent contingency for change orders subject to available funding. The five-percent contingency will be based on the actual low, responsive, responsible bid. The five-percent contingency can be included in the grant or loan agreement. Change orders are not eligible for design-build or design-build-operate projects. If funding is available for change orders, hardship communities will be given first priority based on the severity of financial need of the community. Ecology will provide a contingency for change orders to non-hardship recipients on a first-come, first-served basis.

Nonpoint source activity projects

Nonpoint source water pollution control activities include a wide variety of projects that do not involve constructing or preparing to construct a traditional wastewater pollution control facility. These types of projects involve installing best management practices (BMPs) and use outreach and education to help improve water quality by addressing nonpoint source pollution. Ecology may require specific review and approval for certain BMPs in the individual loan or grant agreements.

All proposed nonpoint source activity projects must implement an element of a state or local plan directed at addressing water quality issues (e.g., watershed management plan, nonpoint source pollution control plan). The plan being implemented must meet the criteria of the nine Key Elements for nonpoint source projects as outlined in EPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters* (chapter 2, page 2-15). The handbook can be found at: http://www.epa.gov/nps/watershed_handbook/.

All funded Ecology nonpoint source activity projects must also meet the objectives of *Washington's Water Quality Management Plan to Control Nonpoint Sources of Pollution (Vol. 3).* The plan can be found at: <u>https://fortress.wa.gov/ecy/publications/publications/0510027.pdf.</u>

Water quality projects located in the Puget Sound basin must be consistent with the Puget Sound Partnership's *Puget Sound Action Agenda*. Projects in the Puget Sound basin that address specific actions outlined in the *Puget Sound Action Agenda* may get preference over projects in the Puget Sound basin that do not. The agenda can be found at: http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%202_Aug%2029%202012.pdf.

Following is an overview of project types that qualify as nonpoint source activity projects.

Best management practices implementation projects

Water quality best management practices (BMPs) are defined as structural or non-structural method(s), recommended through a planning process that have a demonstrated success for

addressing or preventing water quality degradation. Implementation of BMPs refers to the use of established approaches or practices to address water quality problems. BMPs are physical, structural, and managerial practices that prevent or reduce nonpoint source pollution.

Ecology may fund BMPs that address or correct water quality degradation through facility- or activity-focused projects. However, BMP eligibility is not the same for loans and grants.

<u>Appendix D</u> contains a list of eligible BMPs and applicable funding sources.

BMP funding eligibility

BMPs for water quality improvements on private property, public property, public easements, or public rights-of-way through private property are eligible for loan funding. BMPs eligible for grants include livestock exclusion fencing, riparian buffer establishment and planting, riparian restoration activities, direct seeding, and certain livestock feeding practices.

Implementation of agricultural BMPs on property owned by Washington State and federal governments are largely ineligible, regardless of the eligibility of the applicant. However, Ecology may provide financial assistance to an eligible public body to participate with other state and federal agencies in comprehensive watershed planning and large scale monitoring programs that extend substantially beyond federal and state lands.

General farm planning for resource and land management is an eligible activity; however, it is a low priority for projects funded with Centennial or Section 319 funds. Ecology will prioritize projects that involve site-specific project planning and technical assistance for planning, design, and implementation of grant and loan eligible water quality BMPs.

Agricultural best management practices

Direct seed systems

Direct seed systems are eligible for Water Quality Program financial assistance. Direct seed systems plant and fertilize into undisturbed soil and eliminate full width tillage for seedbed preparation. Equipment used for direct seeding disturbs only a narrow strip of soil and retains a majority of residue from the previous crop. Direct seed systems significantly reduce erosion, improve soil quality, reduce fuel consumption, and are a viable alternative to traditional, full tillage systems. Direct seeding practices are eligible for three types of funding:

- Equipment rental cost reimbursement.
- Cost of custom application fee reimbursement.
- Direct seed equipment purchase.

<u>Appendix J</u> contains the eligibility conditions for direct seed systems.

Livestock exclusion fencing

Livestock exclusion fencing is eligible for Water Quality Program financial assistance when installed at a minimum setback of 35 feet from the ordinary high watermark. Fencing protects riparian areas from impacts due to livestock activities in and around streams. This minimum setback helps protect surface waters from pollutants such as pathogens, sediment, and nutrients, and provides physical protection so riparian areas may be restored.

Livestock off-stream watering facilities

If an applicant proposes to install livestock exclusion fencing as part of a riparian protection/restoration project and the fencing meets the minimum standards for that BMP, Ecology may award grant dollars to install an off-stream watering facility. A livestock owner uses off-stream watering to provide an alternative source of watering where fencing or other method(s) exclude livestock from streams in order to protect water quality. Off-stream watering facilities (including well construction) are conditionally eligible for Water Quality Program financial assistance for projects that include privately owned livestock operations.

Appendix K contains the complete eligibility conditions for off-stream watering facilities.

Livestock feeding BMPs

Livestock feeding BMPs are intended to support the relocation of livestock activities that threaten water quality, or to enhance existing feeding areas distanced from surface waters. Recipients may install a combination of these BMPs when appropriate. Funding for livestock feeding BMPs only applies to projects that will improve existing water quality problems, and may not be used to rebuild feeding facilities where the primary purpose is to repair existing structures. Ecology's project management team must approve all projects before installation. Eligible livestock BMPs include heavy use area protection, waste storage facilities, and windbreaks.

<u>Appendix L</u> contains the complete eligibility conditions for livestock feeding BMPs.

Demonstration BMP projects

Ecology will consider demonstration BMP activity projects for funding if they meet the following two conditions.

- The practice has a proven record to improve the water quality problem of concern.
- The practice has not previously been demonstrated in the Ecology region where the project is proposed.

Demonstration projects should be relatively small in scope, yet large enough to clearly evaluate BMP effectiveness. Demonstration projects also need to incorporate education and outreach, including direct involvement from the local county cooperative extension office or local conservation district. The applicant should plan outreach efforts that include news articles, focus sheets, or other written materials to maximize public exposure and increase the public awareness of the project. The applicant should describe approaches for planned outreach in the application.

Ecology expects recipients with demonstration projects to include a thorough analysis of the effectiveness and outcomes of the project in the final report, as well as recommendations for the potential of the BMP to become a grant-eligible activity.

Groundwater/aquifer/wellhead planning and implementation

Planning for and implementation of wellhead protection projects, groundwater protection projects, source water (including groundwater and surface water) protection, and critical aquifer recharge area projects are eligible for loan or grant funding. Applicants undertake these projects to protect the quality of groundwater used as a public drinking water supply. Decommissioning of abandoned wells and land acquisition for groundwater protection are not eligible for funding.

Lake restoration planning and implementation

Lake restoration planning and implementation projects on lakes with public access are eligible for loan or grant funding. Lake restoration implementation projects where there is no public access are not eligible for funding. The "Step Process" is required for all lake restoration projects (see Application Requirements below for a description of the Step Process). Step 1 is planning and involves the identification of problems and evaluation of cost-effective alternatives. Step 2 is the implementation of the planning document. If the project includes construction, a design element may be included before the implementation step.

In-lake treatments, such as alum, are only eligible for Revolving Fund loans.

Public outreach and education projects

Projects with public outreach and education components are eligible for loan or grant funding. Public outreach and education use effective methods and programs, guided by a detailed outreach strategy, to engage the public's interest in improving water quality. Applicants should consider that the public has different levels of background knowledge of both water quality management and its role in reducing water pollution. Therefore, applicants should consider a multi-pronged approach to outreach. Public outreach efforts should include:

- Generating basic awareness of water pollution.
- Educating at a more sophisticated level using more substantive content.
- Building on existing recognition of the issue to prompt behavior changes that reduce pollution or opportunities for pollution.

The strategy should also specifically address combining public outreach with the implementation of other water quality management measures. This aspect of outreach could involve more substantive education, possibly short training courses, live presentations and slideshows, handbooks, posters with educational content and captioned illustrations, and web-based training modules, or websites with photos of good and bad practices.

Applicants should target their outreach and education efforts to landowners with properties adjacent to surface waters. Ecology acknowledges it is important to educate the general public about behaviors and impacts to water quality; however, for grant management purposes, the most benefit is gained by targeting landowners with properties adjacent to surface waters.

<u>Appendix H</u> provides guidance on how to develop outreach and education project proposals. Ecology provides this information as a resource or checklist and does not require the applicant to follow it. The goal of the checklist is to help design effective projects that change behaviors and achieves environmental results.

Riparian/wetland restoration planning and implementation

Planning and implementing riparian and wetland habitat restoration and enhancement projects are eligible for loan or grant funding. Land acquisition for wetland habitat preservation is eligible for loans only. Applicants can include installation of livestock exclusion fencing as part of a riparian protection/restoration project. The Step Process is not required for riparian and wetland projects, but Ecology strongly encourages it.

Ecology's *Restoring Wetlands in Washington: A Guidebook for Wetland Restoration, Planning & Implementation* provides guidance in developing a project proposal. The guidebook can be found at: <u>https://fortress.wa.gov/ecy/publications/publications/93017.pdf</u>.

<u>Appendix M</u> contains requirements for riparian restoration and planting projects.

Total Maximum Daily Loads (TMDL) support projects

Projects that support the planning and implementation of TMDL programs are eligible for grant and loan funding. The BMPs recommended for TMDL implementation are subject to the same eligibility criteria as projects that are not part of a TMDL implementation plan.

Applicants should work directly with Ecology's TMDL coordinators in their region on planning for and managing these projects. A list of TMDL coordinators can be found at: www.ecy.wa.gov/programs/wq/tmdl/contacts.html.

Water quality monitoring

Water quality monitoring before, during, and after implementation and project completion is critical for tracking environmental and project results. Ecology may provide loan or grant funding for water quality monitoring projects. Typically, a recipient undertakes monitoring to characterize the existing conditions of ground waters and surface waters, to identify or quantify pollutant sources or loads, or to establish the effectiveness of BMPs. Monitoring may be the entire project or a component of a larger project.

Water quality sampling for Deoxyribonucleic Acid (DNA)-typing is not an eligible activity.

Quality Assurance Project Plan (QAPP)

Prior to initiating water quality monitoring activities, the applicant must prepare a Quality Assurance Project Plan (QAPP). The QAPP must follow Ecology's *Guidelines and Specifications for Preparing Quality Assurance Project Plans for Environmental Studies*. The guidelines can be found at: <u>https://fortress.wa.gov/ecy/publications/publications/0403030.pdf</u>. A QAPP template is available at Ecology's Environmental Assessment Program (EAP) website at: <u>www.ecy.wa.gov/programs/eap/qa/docs/QAPPtool/index.html</u>.

Standard Operating Procedures (SOPs) for field sampling and testing activities associated with monitoring QAPP development can be found at: <u>www.ecy.wa.gov/programs/eap/quality.html</u>.

Applicants may also reference Ecology's *Technical Guidance for Assessing the Quality of Aquatic Environments* in developing the QAPP. The guidance can be found at: <u>https://fortress.wa.gov/ecy/publications/publications/9178.pdf</u>.

The QAPP must:

• Describe in detail the monitoring and data quality objectives, procedures, and methodologies that will be used to ensure that all environmental data generated will meet the QAPP requirements.

- Describe in detail the water quality monitoring approach and laboratory protocols, including types of data and samples to be collected, sample location, sampling frequency, sampling procedures, analytical methods, quality control procedures, and data handling protocols.
- Describe data assessment procedures.
- Explain how the project will yield sufficient information to achieve the purpose and intent of monitoring.
- Discuss data accuracy and statistical requirements.

The recipient must submit the QAPP to Ecology's Project Manager for review, comment, and approval before starting the environmental monitoring activities. Any monitoring activity conducted before the QAPP receives final approval is not eligible for reimbursement.

Use of an ecology accredited laboratory

The recipient must use an environmental laboratory accredited by Ecology to analyze water samples for all parameters that require bench testing. Information on currently accredited laboratories and the accreditation process is provided on the Ecology's Environmental Assessment Program's website, available at: /www.ecy.wa.gov/programs/eap/labs/search.html.

The recipient should manage all monitoring data collected or acquired under the agreement to be available to secondary users and meet the "10-year rule." The 10-year rule means that data documentation is sufficient to allow an individual not directly familiar with the specific monitoring effort to understand the purpose of the data set, methods used, results obtained, and quality assurance measures taken 10 years after data are collected.

Monitoring data management and submittal

The recipient must submit all monitoring data to Ecology's Environmental Information Management System (EIM) including meta-data (data about the data) and a complete datadictionary. Common standards must be used for infrastructure details, such as geographic names, Geographic Information System (GIS) coverages, list of methods, and reference tables. The data submittal portion of the EIM website provides information and help on formats and requirements for submitting tabular data. The EIM website is available at: www.ecy.wa.gov/eim.

Specific questions about data submittal can be directed to the EIM Data Coordinator, currently available at:

https://fortress.wa.gov/ecy/eimsubmittal/eimimport/Contact.aspx?urlBack=submit.htm.

Recipients must submit water quality data collected during the project to the EIM database before project closeout and release of final payment.

Watershed planning and implementation

Watershed planning projects are eligible for loan or grant funding. If the project is located in the 12 counties that border Puget Sound, it must comply with planning criteria contained in Title 400 WAC, *Puget sound partnership*. Ecology provides guidance for other jurisdictions.

All watershed plans must comply with the State Environmental Policy Act (SEPA) and must be submitted to Ecology for review and approval. Watershed-wide planning projects funded by Section 319 must also meet the nine Key Elements for Watershed Plans in EPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters*. The handbook can be found at: http://www.epa.gov/nps/watershed_handbook/.

On-site sewage system projects

On-site sewage system projects are grant and loan eligible. Funded projects have included planning, design, and construction of community large on-site sewage systems (LOSS), surveys of existing on-site sewage systems throughout watersheds, local government loan programs provided to homeowners and small commercial enterprises for the repair and replacement of failing on-site sewage systems, and homeowner education and outreach on the topic of on-site sewage system operation and maintenance.

Grants, for up to \$500,000, may be awarded with a 50 percent cash match. Match may be either a State Revolving Fund loan or the recipient's own source of funds.

Recipients may use Centennial grants and Revolving Fund loans for the following:

- Subsidized loans to property owners with financial hardship.
- Project administration and management.
- A loan loss reserve account in accordance with the following:
 - The grant recipient can establish and accumulate a reserve account using Centennial funds and local sources to secure the potential loss from default on individual homeowner on-site sewage system repair or replacement local loans.
 - Up to 10 percent of the total eligible cost for an individual on-site sewage system repair and replacement project may be deposited from the Centennial grant into the reserve account.
 - Recipients must apply the amount of Centennial funds on deposit in the reserve account to either:
 - Cover, in part or in full, losses realized by the grant recipient on homeowner default.
 - Additional on-site sewage system repair or replacement local loans at the timing discretion of the grant recipient.

Large on-site sewage systems (LOSS)

The Department of Health permits LOSS (Chapter 246-272B WAC) that are designed to treat less than 100,000 gallons per day. With the exception that planning and design documents are approved through the Department of Health, these systems are considered facilities, and all the

rules and requirements for facility projects apply. For example, LOSS projects are eligible for hardship subsidy, and State Environmental Review Process (SERP) environmental review is required.

Planning and survey

On-site sewage system pollution identification and survey projects may be conducted throughout a watershed. Funded projects have included identification of sewage systems along the marine water shoreline and fresh water drainage shoreline. In addition to identification of fecal coliform hotspots within the waterbody, recipients may use grant or loan dollars to conduct door-to-door surveys for sewer infrastructure evaluation. Other project components eligible for funding include: Homeowner Septic Self-Inspection Trainings or Septics 101 classes.

Local loan program

Ecology may provide loans and grants to local governments to establish and manage on-site sewage system repair or replacement local loan programs. On-site Sewage System (OSS) funding programs through local governments provide low-interest loan options to homeowners and small commercial enterprises for on-site sewage system repair or replacement. Local governments that have OSS funding programs in place have ensured improvement to water quality, protection of public health, and assisted in the protection and restoration of critical commercial and recreational shellfish habitat through the reduction of fecal coliform bacteria and nutrient levels in surface waters.

Grant dollars may be used to implement, market, and manage an OSS local loan program, assist financially challenged homeowners with on-site sewage system repairs or replacements, and to establish a loan-loss reserve account.

Revolving Fund loan interest rates may be adjusted to a lower rate at the end of the project based on the recipient's assistance to financially challenged homeowners. Ecology adjusts the interest rate on the local loan program based on the income of loan recipients in comparison to the county Median Household Income (MHI).

Side sewer repair or replacement is eligible for loans through the Centennial program or the Revolving Fund program under certain circumstances, including the following:

- 1. If there is an existing side-sewer lateral, an easement is needed for loan participation in the on-site sewage system abandonment and connection to the available sewer trunk line.
- 2. If there is no existing side-sewer lateral, the property owner must provide documentation of septic system abandonment and connection to the available sewer trunk line. The documentation must include:
 - a. The OSS failure.
 - b. Poor soil conditions that will not support a rehabilitated system.

A local government can tailor the OSS financial assistance program to fit into its existing water quality management strategies and efforts. Local governments may use an outside administrator for complete program management, or provide some or all aspects of the loan program using internal resources. Local governments with successful local loan programs use a variety of internal and external resources for marketing and implementing the OSS loan program,

application review, loan authorization and processing, and establishment and collection of homeowner installment payments.

Aspects of a successful program include one or more of the following:

- Establishment of a program framework which addresses the identification and/or assessment of the failing on-site sewage system, homeowner loan application processing, and management, and an on-going Operation and Maintenance program for repaired septic systems.
- Establishment of environmental and credit worthiness criteria.
- Staffing for program oversight.
- Marketing and promotion of the program through the local Health Department, Septics 101 workshops, and local septic designers, installers, and pumpers.
- Septic surveys to identify on-site sewage system failures.

Before signing a loan agreement, the Water Quality Program must review and approve:

- The priority system used by a local government to identify and fund projects with the most critical water quality and public health problems.
- The local government's dedicated source of revenue to repay the loan to Ecology.
- Procedures to ensure that the citizens repay their loans to the local governments.
- Procedures to ensure adequate inspection of the project by the local government during implementation.
- Assurances that citizens receiving local loan funds will properly operate and maintain the systems that are constructed.

The following guidelines must be used when local governments consider providing loans from local loan funds to small commercial enterprises for on-site septic rehabilitation or replacement:

- No more than one-third of the local loan fund may be used by small commercial enterprises for on-site wastewater treatment corrections.
- No more one-sixth of the local fund may be loaned to any single individual or business, up to a maximum of \$50,000.
- The average daily flows for any small commercial enterprise cannot exceed 3,500 gallons per day.

Small commercial enterprises may include public lodging (including motels, hotels, and bed and breakfast establishments), rentals (apartments, duplexes or houses), small restaurants, stores, or taverns.

Stormwater projects

Ecology may provide loans or grants to eligible applicants for stormwater-related projects. Activities required by NPDES (National Pollutant Discharge Elimination System) permits are loan eligible only. Eligible local governments may apply for financial hardship consideration for a stormwater-related project. Funded stormwater facilities and BMPs must meet standards outlined in the Western and Eastern Washington Stormwater Management Manuals (see Resources below).

Projects located in the Puget Sound basin must comply with the Puget Sound Action Agenda. The agenda can be found at:

http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%202_Aug%2029%202012.pdf.

Following is a list of grant and loan eligible activities:

- Land use/stormwater management planning.
- Reviewing existing local stormwater regulations.
- Conducting inventories and mapping of stormwater sources.

The following list identifies project components that are eligible for loan only:

- Establishment of stormwater utilities.
- Source control activities.
- Implementation of Low Impact Development techniques.
- Stormwater retrofit planning, design, and construction.
- Stormwater pollution control facility planning, design, and construction.

Resources include:

- Green Infrastructure approaches to managing wet weather with State Revolving Funds: <u>http://www.epa.gov/owm/cwfinance/cwsrf/green_if.pdf</u>.
- Low Impact Development Technical Guidance Manual for Puget Sound: <u>http://www.psparchives.com/publications/our_work/stormwater/lid/LID_manual2005.pdf</u> ; <u>http://www.psp.wa.gov/LID_manual.php</u>.
- Western and Eastern Washington Stormwater Management Manuals: <u>http://www.ecy.wa.gov/programs/wq/stormwater/tech.html</u>.

Green Project Reserve

Green Project Reserve (GPR) is a category of projects or project elements that focus on green infrastructure, water or energy efficiencies, and environmentally innovative activities. Although GPR projects can be stand-alone projects, GPR is typically an element of a larger project type.

To qualify for GPR consideration, projects or project components must meet the general categorical definition of GPR as identified in EPA guidelines. EPA guidelines can be found in <u>Appendix E</u>.

Green infrastructure

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and maintain and restore natural hydrology by infiltrating, evapotranspiring,

harvesting, and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements, and cisterns.

Water efficiency improvements

EPA's Water Sense Program defines water efficiency improvement as the use of improved technologies and practices to deliver equal or better services with less water. This encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future. Water efficiency improvement projects include reduction of water usage, water conservation, or water reuse.

Energy efficiency improvements

Energy efficiency improvement is the use of improved technologies and practices to reduce the energy consumption of water quality infrastructure projects, use energy in a more efficient way, or produce or use renewable energy.

Environmentally innovative activities

Environmentally innovative projects include those that demonstrate new or innovative approaches to delivering services or managing water resources in a more sustainable way.

Ineligible projects

In general, projects or project elements that do not have a direct water quality benefit are not eligible for funding. Projects or project elements prohibited by statute, federal appropriation, or administrative rules are also ineligible. A list of ineligible projects and project elements for the Revolving Fund, Section 319, and Centennial programs can be found in Appendices C, D, J, K, and L of this document and also in the Revolving Fund and Centennial statutes. For consistency, Ecology has chosen to apply the same eligibly rules to Section 319 funds.

Chapter 4: How to Apply for Funding

Ecology manages the three major funding programs for water quality projects as one program. We have one combined funding cycle, one application form, and one Final Offer List and Intended Use Plan.

The funding cycle

The funding cycle covered by this Guidance is State Fiscal Year (SFY) 2014. The SFY 2014 application cycle begins on September 1, 2012. Ecology receives applications in the fall of 2012 prior to the State Legislature taking action in the spring of 2013 on the SFY 2014 State budget.

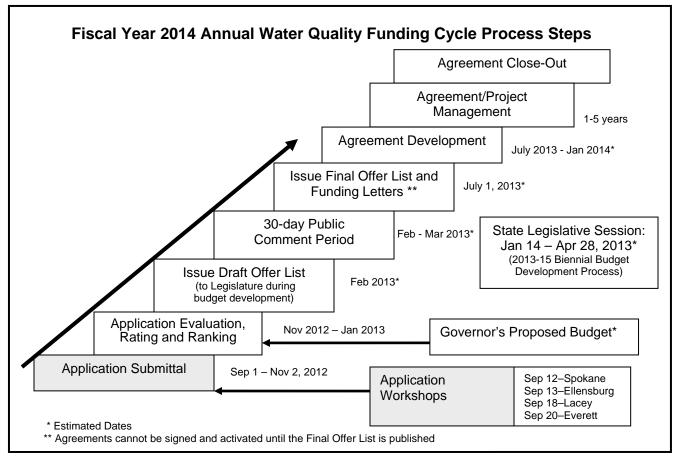
Before the application period opens, Ecology posts information explaining the application process and sends out a public notice about the application period and corresponding application workshops. Ecology holds application workshops in September at four locations around the state. For SFY 2014, Ecology holds the application workshops in Everett, Ellensburg, Lacey, and Spokane.

During the funding cycle, Ecology:

- Accepts applications from September 1, 2012, to November 2, 2012.
- Rates and ranks the eligible applications based on the evaluation criteria.
- Solicits advice on project scope of work from other state agencies, if applicable.
- Conducts an evaluators' meeting to: discuss the project proposals, water quality priorities, finalize evaluations, and develop a Draft Offer List and Intended Use Plan (Draft List).
- Sends the Draft List to the Governor's Office of Financial Management and the State Legislature for consideration during the funding appropriation process.
- Opens a 30-day public review and comment period.
- Makes adjustments to the Draft Offer List based on legislative provisions.
- Conducts a public meeting during the 30-day public review process to present the Draft List.
- Issues a responsiveness summary to comments received on the Draft List.
- Publishes the Final Offer List and Intended Use Plan (Final List).
- Develops project agreements by mid-February of the year following the publication date of the Final List.
- Closes-out projects within five years of the publication date of the Final List.

Figure 1 below illustrates the estimated timeline for the funding cycle steps for SFY 2014.





How to Apply

The Application

The Water Quality Financial Assistance Application Form (Application) has two parts; both parts must be completed to be considered for funding. Part 1 of the Application requests general information about the applicant, project type, project location, and the amount of funds requested. Part 2 of the Application requests detailed information about the project and the water quality benefits envisioned as a result of the project. Ecology staff use Part 2 of the Application to rate and rank the applications.

Application material is available at application workshops or from Ecology's Website at: www.ecy.wa.gov/programs/wq/funding/Cycles/2014/index.html.

The Application is provided in Microsoft Word format and must be returned in Microsoft Word format on a disc. Ecology staff is available to assist with any questions you may have on the application. Page vii of this document includes a list of Ecology staff contacts.

Applicants need not specify a funding program in the application. Ecology will determine the appropriate funding program based on eligibility, project type, and availability of funds.

Applicants must complete Section 11 of Part 1 of the Application in order to be considered for Green Project Reserve funding. Pages 23-24 of this document provide an overview of Green Project Reserve categories.

Applicants requesting hardship consideration must also fill out and return the hardship analysis form with their completed application. The form can be found at: <u>https://fortress.wa.gov/ecy/publications/summarypages/ecy070461.html</u>. See the Hardship section of this document for information on hardship considerations.

Submitting the Application

Application submission packets must include all of the following:

- One hardcopy with an original signature (signed in blue ink).
- Two additional hardcopies of the signed original.
- One electronic copy of the Application in Microsoft Word format on disc (maps and other attachments to the Application can be submitted in PDF format with the electronic copy).

Ecology headquarters' staff must receive the signed original by the application deadline of 5:00 p.m. on November 2, 2012. Ecology will not accept applications after November 2, 2012, even if they are postmarked prior to the deadline. The applicant may have the signed application hand delivered, sent by package delivery service, or sent by U.S. mail to Ecology's headquarters building in Lacey.

Ecology will not accept faxed applications.

The addresses for sending packages to Ecology using U.S. mail and package delivery service are different:

U.S. Postal Mailing Address:

(not to be used for UPS or other package delivery services) Department of Ecology Water Quality Program Financial Management Section P.O. Box 47600 Olympia, WA 98504-7600

Overnight Mail or Hand Delivery Address:

(physical location/package delivery – not to be used for U.S. Mail) Department of Ecology Water Quality Program Financial Management Section 300 Desmond Drive Lacey, WA 98503

Evaluation process

Ecology evaluates project proposals based on responses to Part 2 of the Application. A total of 1,000 points are possible for the evaluation. Table 4 shows the scoring breakdown by question and rating criteria. The beginning of each section in Part 2 of the Application includes a more detailed explanation of the scoring criteria.

Table 4—Application Rating and Ranking Criteria

| Question • Rating Criteria | Points Available |
|--|---------------------|
| Scope of Work Complete and concise description of the project tasks and outcomes. Clear detailed description of deliverables, timelines, and purpose. Project directly and measurably addresses a water quality problem. | Up to 250 |
| Proposed Budget Complete project budget is consistent with the scope of work. The cost estimate process is reasonable. The project budget represents a good value for the work and water quality benefits achieved. Applicant identifies match sources. | Up to 150 |
| Water Quality and Public Health Improvement How severe is the water quality problem and how well is it defined? The project will achieve substantial water quality and public health benefits. Project success can be measured, and proposed methods to measure success are reasonable. The project provides long-term sustainability of water quality benefits (e.g., operation and maintenance of the system, long-term on-site sewage program follow-up). | Up to 250 |
| Coordination with State and Federal Priorities Example: How well does this project address permit requirements, enforcement orders, or implement the Puget Sound Partnership Action Agenda? | Up to 100 |
| Project team | Up to 50 |
| Project Development, Local Support, and Past Performance A comprehensive decision making process was used to arrive at the proposed project. Plans for long-term project success and sustainability will be considered. The level of local support and commitment for the project. Past performance on other water quality projects, including Ecology funded projects. | Up to 75 |
| Readiness to Proceed Project elements are in place for the project to proceed, such as technical prerequisites for planning, design, or implementation. | Up to 75 |
| Hardship Sewer ratepayer impacts for small, financially-challenged communities that meet the hardship requirements. This applies only to wastewater construction projects. | 50 |
| TOTAL | Up to 1,000 |

Two Ecology staff review the project proposal; each reviewer gives the proposal a numeric score. One reviewer is from the Ecology region where the project is located, and the second reviewer is from one of the other regions. Ecology staff compares the two scores to ensure evaluation consistency for the application. If needed, a third Ecology reviewer performs an evaluation to ensure accurate, consistent scoring. Ecology develops a ranked list of projects based on the project scores.

Ecology may request input from other state agencies about certain types of projects. This outside review may not generate a numerical score, but it can influence the score. Outside reviewers

could include staff from the State Conservation Commission, Puget Sound Partnership, or the State Department of Health.

The information provided in the application is the basis for the scope of work used in a funding agreement. If the applicant makes significant changes to the scope of work after the application deadline, Ecology may withdraw a funding offer.

An applicant must receive a score of 125 points or higher on Part 2, Question 3 Water Quality and Public Health improvements of the Financial Assistance Application to be eligible for funding. An applicant must also receive a combined score of 600 points or higher on the Financial Assistance Application in order to be eligible for funding.

The successful project proposal

Demand for water quality program funding has routinely outstripped available funding. With such a competitive funding environment, applicants must develop a strong project application to display the project in the best light. While there is no guarantee that a project proposal will be funded, applicants can do several things to improve their chances of success.

In general, a successful project proposal will:

Show how the project solves or addresses a water quality problem.

- Identify a documented water quality issue.
- Demonstrate a clear connection between the proposed project and how it will help resolve the identified water quality issue.
- Explain how the applicant will document the water quality benefit.

Explain why the applicant chose this project.

- Describe the process the applicant used to select this project over other solutions.
- Provide documentation of plan(s) that supports this project.
- Explain why this project is the applicant's highest priority.

Demonstrate that the project is well thought out.

- Include a well-defined scope of work that has goals, objectives, timelines, and measurable outcomes.
- Show how the project enjoys broad support by the community and agency partners.

Show that funds will be well spent.

- Provide an accurate and reasonable budget.
- Show that the funding request is reasonable compared to the proposed water quality benefit.

Illustrate that the project is ready to go.

- Confirm that the applicant has completed all required environmental review.
- Document that the applicant has obtained or applied for all permits.
- Verify that the applicant has completed all necessary easements, property owner agreements, or land acquisition.

Be easy to read and understand.

- Carefully read the evaluation criteria and scoring guide at the beginning of each section in Part 2 of the Application. Make sure that your application addresses all of the items identified in the evaluation criteria and scoring guide.
- Give clear, concise answers to all questions.
- Write in complete sentences.

Helpful hints:

- Verify that the budget in Part 2, Question 2 is consistent with Part 1, Question 12.
- Include maps, diagrams, and pictures of the project and project area and display past projects (if any exist).
- Provide documentation to support answers.
- Include applicable letter(s) of support.
- Include citations.
- Include applicable forms, such as Financial Hardship Analysis Form.

Application requirements

Applicants with facilities projects need to complete certain prerequisites in order to be eligible for funding assistance. All applicants will be evaluated on how they are implementing the State's requirements for Greenhouse Gas Emissions reductions. Applicants in the Puget Sound basin must be consistent with the Puget Sound Partnership's Action Agenda.

Planning requirements

Applicants that propose facilities projects must proceed according to a systematic method known as the Step Process. Funding for one Step does not guarantee funding for subsequent Steps. The Step Process consists of three steps.

- Step 1 (planning) involves preparing a site-specific facilities plan that identifies the costeffective alternatives for addressing a water pollution control problem.
- Step 2 (design) involves preparing plans and specifications for use in construction.
- Step 3 (construction) is the actual building of the facilities based on the approved design.

Ecology must approve the planning document before an applicant can apply for Step 2 funding. Ecology must also approve the plans and specifications before the applicant can apply for Step 3 funding. The applicant must provide a copy of Ecology's signed approval letter with their application. Stormwater projects, irrigation efficiency projects, and other types of projects that are not required to prepare a General Sewer Plan or Engineering Report may substitute a pre-design report for Step 1 of the process.

Design and construction (Steps 2 and 3) can be combined into one application in certain cases; these projects are called Step 4 projects. To qualify for Step 4, the project must be \$5 million or less, and the applicant must be able to demonstrate that they can complete the design and have it approved within one year of the funding agreement.

Ecology encourages applicants to follow the Step Process for activities projects; however, it is not required and may not be applicable in every case. Lake restoration and planning activities on lakes with public access are eligible for loan or grant funding. The Step Process is required for nonpoint source activity lake restoration projects.

Preliminary development layout for stormwater projects

The following guidelines will help you prepare a Preliminary Development Layout for stormwater infrastructure. These reports are necessary to obtain Ecology funding for stormwater construction projects. A Stormwater infrastructure Preliminary Development Layout gives Ecology an opportunity to review and comment on the technical merits and cost effectiveness of the project, ensuring that Ecology uses its funds for only high quality projects.

A Preliminary Development Layout for stormwater infrastructure is not a permit requirement, but a prerequisite for applying for construction funding from Ecology. If you do not include a detailed Preliminary Development Layout with your application, Ecology will automatically exclude the application from review and scoring.

Required elements of preliminary development layout

The Preliminary Development Layout must be sufficiently complete so that Ecology can fully understand the project. A fully thought out project will score higher than one with limited information. The following elements must be addressed in the Preliminary Development Layout:

- The designer and their qualifications including professional licenses, experience, and relationship with applicant. Include contact information for the designer.
- A project description that includes a location map and a topographical map of the drainage area overlain with project elements (buildings, swales, erosion control structures, etc.).
- The characteristics of the stormwater, including pollutant load and the land use in the area where the flow originates.
- The design water quality and flow control flow rates for the project and a discussion of why the proposed flows are appropriate.
- If the project is a retrofit, provide a discussion of how the proposed level of water quality treatment and flow control compare with the new and redevelopment standards.
- A discussion of the alternative projects evaluated and the reasons they are unacceptable.
- The basic design data for the proposed project.

- An estimate of the cost of the proposed project compared to the alternatives considered.
- For infiltration sites, a discussion of the site suitability for the proposed project.
 - Discussion of soil suitability to the site and depth to groundwater if known.
 - Discussion of site characteristics that would likely yield a suitable site. Include the plan for further investigation that will be carried out in the design phase.

GMA compliance

To be eligible for grant and loan funding, applicants with facilities projects in jurisdictions that are required to plan under Washington's Growth Management Act (GMA) must be in compliance with the GMA. For Ecology's purposes, applicants must comply with the requirements for comprehensive planning and development regulations.

For special districts (such as sewer districts or public utility districts), the county, city, or town in which the facility is located, must be in compliance with the requirements for comprehensive planning and development regulations.

Any public body required to comply with the GMA must certify its compliance with the applicable GMA requirements at the time a loan or grant agreement is signed, unless exceptional situations exist. The public body certifies its compliance by signing the loan agreement. Ecology may make exceptions in situations involving a public health need or a significant environmental degradation.

GMA compliance impacts the program in several ways:

- 1. GMA compliance status may have an impact on the priority evaluation of proposed facilities projects, because facilities projects in areas out of compliance with the GMA may not be ready to proceed.
- 2. Ecology coordinates with the Washington State Department of Commerce to help ensure the applicants are in compliance when the financial assistance agreement is signed. Loan and grant offers are effective for six months from the publish date of the Final List. If an applicant achieves GMA compliance during that time period, Ecology may sign the agreement.
- 3. Ecology exceptions do not relieve applicants of their responsibilities to comply with the GMA requirements. However, under certain circumstances Ecology will make temporary exceptions to the GMA compliance requirement if the proposed project is required to address a "serious public health need" or a "significant environmental degradation." Ecology looks at these designations very carefully and makes these determinations on a case-by-case basis.

GMA compliance does not affect activity project applications, such as watershed planning, water quality monitoring, public information and education, etc. GMA compliance also does not affect facilities projects proposed by public bodies not planning under the GMA.

Environmental review

Environmental review applies to wastewater and stormwater facility projects. However, all watershed plans must comply with the State Environmental Policy Act (SEPA) and must be submitted to Ecology for review and approval.

State environmental review process for Revolving Fund projects

Any applicant with a facility design or construction project applying for Revolving Fund financing must complete the State Environmental Review Process (SERP) prior to applying for funding. This requirement applies to wastewater, stormwater (construction projects only), reclaimed water, combined sewer, and large on-site sewage systems projects.

Any facility planning project using Revolving Fund financing must include SERP review as part of the scope of work in the loan agreement.

The review completed under the State Environmental Policy Act (SEPA) is Washington State's environmental review process. A basic overview of SEPA is available at: http://www.ecy.wa.gov/programs/sea/sepa/e-review.html. SEPA applies to decisions made by every state and local agency, including state agencies, counties, cities, ports, and special districts. The SEPA lead agency is responsible for identifying and evaluating the potential adverse environmental impacts of a proposal. This evaluation is documented and sent to other agencies and the public for review and comment. Every facility construction project is subject to SEPA review regardless of how the project is financed.

SEPA provides a framework for considering the environmental consequences of a project and provides a familiar, well-understood method for citizens to provide their input. However, SEPA alone does not meet all the federal requirements that projects using Revolving Fund financing must meet. Several elements must be added:

- 1. SEPA documentation.
- 2. Cost effectiveness analysis.
- 3. Public participation including a public meeting, the name of the publication where the public comment and public meeting information was published, date of the publication, dates comments, all comments (oral and written), and how the comments were addressed.
- 4. Review and concurrence by Ecology.

If a federal agency (e.g., Rural Development or EPA) has completed a National Environmental Policy Act (NEPA) review of the project, that review can be used to satisfy SERP requirements. Applicants who have completed the NEPA process should also adopt the federal environmental review documents according to Part 6 of SEPA rules.

Federal environmental cross cutter requirements

Applicants for Step 3 wastewater projects must complete cross cutter review and concurrence before the Water Quality Program Manager may sign the Revolving Fund loan agreement. Step 4 projects must meet these requirements before starting any construction activities. Any construction activities that occur prior to Ecology's cross cutter concurrence will not be eligible for reimbursement. Federal cross cutter review is a requirement for wastewater treatment, wastewater collection, reclaimed water, infiltration and inflow correction, and combined sewer projects. Many cross cutters affect how a project is implemented, bid, or managed. These requirements are detailed in the loan agreement and are implemented in the construction contract by including the Ecology specification inserts into the bid package.

Loan applicants/recipients will prepare a cross cutter report that documents their actions in regard to each federal cross cutter. When complete, the applicant/recipient will submit the report to the regional Project Manager for review.

The following is a list and brief description of the federal cross cutters required for Revolving Fund facility construction projects.

- The *Clean Air Act* establishes air quality standards. This cross cutter applies to projects located in nonattainment areas (areas out of compliance with the standards) or maintenance areas (areas that have come back into compliance). Compliance may require estimating the air pollution emissions associated with the project.
- The *Coastal Zone Management Act (CZMA)* protects the nation's coastal areas. This cross cutter applies to any project located in a county adjacent to Puget Sound, the Pacific Ocean, or the Lower Columbia River Estuary. Compliance requires receiving CZMA concurrence from Ecology.
- The *Endangered Species Act* identifies and protects species at risk of extinction. This cross cutter may apply if the project is located near any endangered species or their critical habitat. Because so many of Washington's rivers are habitat for endangered salmonid species, this cross cutter applies to many water quality projects. Compliance may require receiving formal concurrence after consultation with the US Fish and Wildlife Service and the National Marine Fisheries Service.
- The *Farmland Protection Policy Act* protects the nation's productive farmland. This cross cutter may apply if the project converts farmland to another purpose. Compliance may require consultation with the US Soil Conservation Service.
- *Floodplain Management Executive Orders* are a series of presidential executive orders that protect floodplain function and protect federally funded projects from flood damage. This cross cutter may apply if the project is located in the 100-year floodplain. Compliance may require consultation with the Federal Emergency Management Agency.
- *Environmental Justice* seeks to protect minority, low-income and tribal communities that may experience disproportionate environmental or human health impacts caused by project activity.
- The *National Historic Preservation Act* protects archeological and cultural resources and historic structures. This cross cutter may apply if the project modifies a building older than 50 years old, or if the project involves any amount of excavation.
- The *Safe Drinking Water Act* protects sole source drinking water aquifers. This cross cutter may apply if the project is located on a sole source aquifer. Compliance may require consultation with the Environmental Protection Agency.
- The *Sustainable Fisheries Act* protects habitat for commercially valuable fish species. This cross cutter may apply if the project is located near essential fish habitat. Compliance may require consultation with the National Marine Fisheries Service.

- *Wetland Protection Executive Orders* protect the nation's wetlands. This cross cutter may apply if the project is located near any wetlands. Compliance may require consultation with the US Fish and Wildlife Service.
- The *Wild and Scenic Rivers Act* protects the free flowing character of designated rivers. This cross cutter may apply if the project is located in the river basin of a wild and scenic river. Compliance may require consultation with the US Forest Service.

Historic and cultural resources requirements

Many proposed projects have the potential to significantly impact culturally or historically significant locations or artifacts. Ecology staff coordinates with the Department of Archaeology and Historic Preservation (DAHP) to meet all state or federal requirements regarding cultural and historic preservation.

All projects that disturb soils from their natural state or impact buildings 50 years or older must comply with the applicable state or federal laws. Staff from Ecology's Water Quality Program work with grant and loan recipients to follow the appropriate steps to work with the DAHP and tribes to determine if a site has the potential of disturbing or significantly impacting cultural or historic resources. All activities associated with site assessments for cultural and historic resources are grant and loan eligible.

<u>Appendix N</u> provides a complete description of requirements and the process.

Puget Sound Action Agenda

The Puget Sound Partnership is a Washington State agency created by the State Legislature and is charged to create an Action Agenda that leads to a healthy Puget Sound. The Puget Sound Partnership Action Agenda prioritizes cleanup and improvement projects; coordinates federal, state, local, tribal, and private resources; and makes sure that they are all working cooperatively.

Water quality projects located in the Puget Sound basin must not be in conflict with the Puget Sound Partnership Action Agenda. The Puget Sound basin is defined at WRIAs 1 through 19 (see <u>Appendix F</u> for a map of WRIAs in Washington State).

Projects in the Puget Sound basin that address specific actions outlined in the Puget Sound Partnership Action Agenda will receive preference over projects in the Puget Sound basin that do not. The Puget Sound Partnership Action Agenda can be found at: http://www.psp.wa.gov/downloads/AA2011/083012_final/Action%20Agenda%20Book%202_Aug%2029%202012.pdf .

Greenhouse gas emission reductions

In 2009, the State Legislature passed ESSB 5560 adding new policies related to green house gas (GHG) emissions to state funding for infrastructure. These policies are codified in RCW 70.235.070 (*Distribution of funds for infrastructure and capital development projects – Prerequisites*).

Requirements of RCW 70.235.070 must be included in the Revolving Fund and Centennial programs as a factor for consideration as part of the competitive selection process. The

integration of GHG consideration should be a factor that influences project selection, but should not overwhelm the underlying goals of the funding programs. Ecology has added criteria related to applicant and project consistency with GHG emissions reduction goals to its Application. Question 4 of part 2 of the application asks the applicant to describe how it is meeting requirements of RCW 70.235.070.

Measures *the applicant* can take to reduce GHG emissions include:

- Enacting goals and policies committing to GHG emissions reduction targets.
- Adopting energy efficiency policies to reduce consumption in buildings and infrastructure.
- Adopting policies that promote and support the generation and use of alternative energy.
- Adopting waste reduction and diversion policies such as methane recovery or waste to energy programs.
- Adopting policies to replace or repower existing vehicles with cleaner, more efficient vehicles.
- Adopting equipment procurement policies that result in reduced consumption of fossil fuels.
- Implementing commute trip reduction plans and policies that establish reduction goals and strategies to reduce annual per capita vehicle miles travelled by the entity's community or workforce.
- Adopting policies that preserve forest, agricultural, and open space lands.
- Adopting comprehensive land use plans or planning policies that promote and support development patterns that encourage compact and transit-friendly communities and protect natural resources lands from conversion.

Examples of how *the project* can be designed or built to reduce GHG emissions include:

- The *project site* reduces GHG emissions by being located in:
 - Existing developed areas (e.g., high-density areas, urban growth areas, or designated urban centers) where services exist or are planned.
 - Areas where transportation options can be efficiently provided.
 - Areas where conversion of natural resources and rural land is prevented.
 - Areas that promote transportation choices such as transit, bicycle, and pedestrian accessibility.
 - o Brownfield redevelopment areas.
 - Other areas that encourage the use of non-single occupancy vehicles and minimize the amount of land to be devoted to the project.
- Methods used to develop, construct, and operate the project reduce the use of fossil fuels (GHG emissions) by:
 - Using high performance sustainable building design, such as the use of green building standards.
 - Using green materials and high-energy efficiency measures.

- Promoting the use of recycled content materials for building construction.
- Supporting environmental/ecological footprint improvements (e.g., energy efficiency, water conservation, habitat preservation, green alternatives, waste-to-energy, and lowering surface disturbance).
- Implementing new technologies, practices, and equipment to lower energy use for operation.
- Using renewable energy (wind, geothermal, solar, etc.), distributed energy (solar photovoltaic panels), or purchased green power.

Rate studies and fee ordinances

Ecology requires all applicants that receive Revolving Fund loan offers for facility construction have a rate study and an adopted fee ordinance. The rate study must include the proposed facility. The fee ordinance must be based on the rate study and be adequate to fund all annual financial obligations for the entity, including operation and maintenance costs, repair and replacement costs, and annual debt service including required reserve accounts.

Interim refinance

All applicants for interim refinance must comply with Davis-Bacon Act requirements for the entire project from the initial date of construction. Davis-Bacon Act requirements for the entire project also include those portions of the project that are not being funded by Ecology.

Public review and request for reconsideration

Applicants and the public receive notices from Ecology about the 30-day public comment period on the combined Draft Offer List and Intended Use Plan. During the 30-day public comment period, applicants may provide comment on the process or request reconsideration of a project proposal.

Official comments on the list and process or requests for reconsideration must be submitted to Ecology in writing within the 30-day comment period. Any request for reconsideration must be well defined and supported.

Ecology will provide a response to written comments in the combined Final Offer List and Intended Use Plan. Ecology publishes these documents following the final approval of the State's budget that provides appropriation authority for funding. This page purposely left blank

Chapter 5: When a Loan or Grant is Offered

Ecology makes formal funding offers at the time of the publication of the Final Offer List and Intended Use Plan (Final List). Ecology assigns a Project Management Team to each project receiving a funding offer. The Project Management Team consists of a Financial Manager from the headquarters office and a Project Manager from the regional office where the project is located. Ecology's Project Management Team contacts the applicant within four weeks of the loan or grant offer to schedule a time to discuss the funding offer and begin the process of developing a funding agreement.

The loan and grant development process

The Ecology Project Management Team uses information found in the funding proposal as the basis for developing the funding agreement. Funding agreements for clearly defined project proposals that include a detailed scope of work, measurable objectives, and accurate budgets take less time to develop. If the applicant makes significant changes to the scope of work after the award, Ecology may withdraw a funding offer.

To speed development and processing, Ecology standardizes much of the funding agreement language and includes general terms and conditions and other conditions that are required by state or federal law. Ecology incorporates many of these requirements as attachments.

After developing the agreement, the Project Management Team requests a funding program review. The Financial Manager then sends the funding agreement to the applicant for signature. The applicant will send the funding agreement back to the Financial Manager for the final signature by the Water Quality Program Manager or the authorized designee. The agreement effective date is negotiated between the applicant and Project Management Team. Once the agreement is signed by Ecology, a fully executed original will be returned to the recipient. The *applicant* becomes the *recipient* once the agreement is signed.

Incurring eligible costs

The applicant may incur project costs on and after the specified effective date and before Ecology's signature of the final agreement. Expenditures cannot be reimbursed until the agreement has been signed by Ecology's Water Quality Program Manager. While applicants can incur eligible costs before the effective date of the agreement, they do so at their own risk.

Investment grade audit

A condition in the state's 2011-13 biennial Capital Budget requires Ecology to add a contract condition for investment grade audits (IGAs) for Centennial grants and Revolving Fund loans. Funding recipients with wastewater treatment facilities projects may be required to conduct an IGA if this requirement is carried over into the state's 2013-15 Biennium.

Engrossed Substitute House Bill 1497 of the 62nd Legislature, Sec. 3024 and 3025 for the Department of Ecology reads:

"For projects involving repair, replacement, or improvement of a wastewater treatment plant or other public works facility for which an investment grade audit is obtainable, the department of ecology must require as a contract condition that the project sponsor undertake an investment grade audit. The project sponsor may finance the costs of the audit as part of its centennial clean water program grant/ water pollution control revolving fund program loan".

A publication from the Washington State Department of General Administration, *Energy Savings Performance Contracting*, may serve as a general reference guide for recipients required to conduct IGAs. The publication is located at: http://www.ga.wa.gov/EAS/epc/ESPCGuidelines.pdf.

Important dates

The time limits for starting and ending projects are based on the publication date of the Final List that identifies the project for funding. These time limits apply to Centennial and Revolving Fund funded projects only.

The funding agreement for the project must be signed by both parties no later than seven months after the publication date of the Final List.

Actual work on the project should begin no later than 10 months after the publication date of the combined Final List.

A Revolving Fund project must be completed within five years of the publication date of the Final List. After the five-year limit is reached, a time extension of no more than 12 months may be made with valid reasons supporting the time extension. Completion dates will be negotiated in the funding agreement. In no event can the project be extended beyond six years of the publication date of the Final List identifying the project.

A Centennial or Section 319 activities grant project must be completed within three years of the publication date of the Final List. After the three-year limit is reached, a time extension of no more than 12 months may be made with valid reasons supporting the time extension. The recipient and Ecology will negotiate the completion dates in the funding agreement.

The completion date or expiration date is the date that all tasks and project deliverables must be completed. The recipient and Ecology will negotiate a reasonable expiration date in the agreement.

The initiation of operation date (applies to facilities construction projects) is the actual date that a facility starts operation and is used for its intended purpose. This date may occur prior to final inspection. Ecology will determine the initiation of operation date after consultation with the recipient. This date may be the same as the date of project completion, or it may be earlier. The initiation of operation date triggers the start of the one-year loan repayment grace period. If the project completion date occurs before the initiation of operation date, the start of the one-year loan repayment grace period starts with the project completion date.

Financial capability assessment

Ecology will conduct financial capability assessments of public bodies receiving loans. These assessments may require Ecology staff to review current financial statements to determine the ability of applicants to repay debt. Ecology cannot sign loan agreements without a financial capability assessment. Financial data required may include:

- Accounting method used (cash basis or accrual).
- Financial ratios (past three years of operating ratio and debt/worth ratio).
- Date and type of last audit (indicating any audit findings).
- Date of last rate study (if using a user fee to secure the loan).

General loan elements

The following items are required conditions of recipients of a Revolving Fund loan.

Authorizing ordinance or resolution

Recipients must provide an authorizing ordinance or resolution that states that the recipient accepts its responsibility to repay the loan and abide by the provisions of the agreement. The resolution must be signed by the governing board or council and is included in the loan agreement as an attachment.

Insurance

Where applicable, recipients must maintain comprehensive insurance coverage on projects in amounts equal to the funds disbursed.

Interest accrual

Ecology disburses loan funds on a cost-reimbursable basis. An incurred cost is defined as a cost that has occurred and is eligible for payment. Interest begins to accrue on each disbursement at the time it is paid to the recipient.

Operation and maintenance of utility

The recipients must keep the utility in good working order and operate the utility efficiently.

Opinion of recipient's legal counsel

Recipients must provide a statement from legal counsel regarding the final draft of the loan agreement. The statement will be included in the loan agreement as an attachment. The statement can be found in <u>Appendix I</u>.

Pledge of net revenue or utility local improvement district assessments

If revenue from a utility local improvement district (ULID) is used to secure a loan, the recipient must irrevocably pledge to pay the net revenue of the ULID to cover the principal and interest

Repayments

Semi-annual loan repayment begins one year after the project completion date or initiation of operation date, whichever comes first. There is no restriction or penalty for early loan repayment.

Reserve requirement

For a loan that is a revenue-secured debt with a term greater than five years, Ecology requires the recipient to accumulate a reserve equivalent to at least the average annual debt service on the loan. The recipient must establish this reserve during the first five years of the repayment period of the loan.

Terms and interest rates

Ecology bases interest rates for non-hardship projects on the average market interest rate for taxexempt municipal bonds as published in the Bond Buyer's Index. Rates are based on the average daily market interest rate for the period 60 to 30 days before the start of the application cycle. Rates can be found at: <u>http://www.economagic.com/em-cgi/data.exe/fedbog/slbond</u>.

For a repayment period of up to five years, the rate is 30 percent of market rate for tax-exempt municipal bonds. For a repayment period of more than five years, but no more than 20 years, the rate is 60 percent of market rate for tax-exempt municipal bonds. Interest rates for hardship loans and on-site local loan funds vary.

Interest is compounded monthly.

Chapter 6: Terms and Conditions

The following are important terms and conditions that play a role in the day-to-day decisions made on loan or grant projects. A complete listing of the administrative requirements for all grants and loans administered by Ecology is contained in the *Administrative Requirements for Recipients of Ecology Grants and Loans – Yellow Book*. The "Yellow Book" can be found at: https://fortress.wa.gov/ecy/publications/publications/9118.pdf.

Accounting standards

Recipients must maintain accounting records in accordance with RCW 43.09.200 (Local government accounting--Uniform system of accounting).

Advisory committee time

Time spent by advisory councils to carry out projects is an eligible cost, including costs incurred by advisory councils or committees established according to federal or state requirements.

Amendment process

Modifications and changes to the funding agreement may become necessary. The recipient must negotiate changes and document the changes as an amendment to the funding agreement. All proposed project changes are subject to approval by Ecology.

The recipient initiates the amendment process. The recipient sends a written request to Ecology's Project Manager. If the Project Manager concurs with the request, the Financial Manager prepares the amendment.

Ecology sends three original copies of the formal amendment to the recipient for signature, and the recipient returns all three originals to Ecology. Ecology's Water Quality Program Manager or designee signs the amendment, at which time it becomes effective. Ecology sends one of the original copies of the signed amendment to the recipient contact.

Reasons for formal amendments could include:

- Budget increases or decreases.
- Scope of work changes.
- Changes to required performance.
- Time extensions.

A letter amendment is an amendment that is signed by Ecology's Financial Manager. The Financial Manager sends the original to the recipient with a copy to the Project Manager and places a copy in Ecology's fiscal file.

Ecology uses letter amendments for:

- Redistributing budget amounts among tasks in the budget provided the changes do not increase or decrease the total eligible costs.
- Allowing Ecology's fiscal office to track the total eligible costs instead of by budget element.

Appeals process

Loan or grant recipients may formally appeal a written decision by Ecology. A recipient cannot bring a lawsuit to Superior Court unless the aggrieved party follows the procedures listed below. The procedures are intended to encourage the informal resolution of disputes.

- 1. The recipient may seek review of the financial assistance program's initial decision within 30 days of the decision. The recipient makes the request for review in writing to the Water Quality Program Manager.
- 2. The Program Manager will consider the appeal information and will issue a written decision within 30 days from the time the appeal is received.
- 3. If the recipient is not satisfied with the Program Manager's decision, the recipient has 30 days to submit a written request to Ecology's Deputy Director of Ecology for a review of the decision.
- 4. The Deputy Director will consider the appeal information and will issue a written decision within 30 days from the time the request is received. The Deputy Director's decision will be the final decision of Ecology.
- 5. If the recipient is not satisfied with the Deputy Director's final decision, the recipient may appeal to the Thurston County Superior Court, pursuant to RCW 34.05.570(4) (*Judicial Review*), which pertains to the review of "other agency action".
- 6. Unless all parties to such appeal agree that a different time frame is appropriate, the parties shall attempt to bring the matter for a superior court determination within four months of the date in which the administrative record is filed with the court. This time frame is to ensure minimal disruptions to the program.

Budgets

All recipients must track the project budget by task. An object-based budget is not permitted. Object budget information provided in the application is used to evaluate if all costs were considered by the applicant at the time of application and to track requested purchases during project implementation.

The budget amount for Administration cannot exceed 15 percent of the Total Eligible Cost of the project.

Disbursements of loan and grant funds

Ecology disburses loan and grant funds to recipients on a cost-reimbursable basis. The recipient must incur eligible costs within the effective date and expiration date of the funding agreement unless prior authorization or interim refinancing is approved.

Equipment purchase and equipment fees

Equipment purchases are eligible if Ecology's Project Management Team approved them in advance or specified in the agreement. The recipient may charge an appropriate use fee for equipment it owns.

A use fee for equipment owned by the recipient or utilized through a valid interlocal agreement:

- Must be justifiable, fair, and reasonably attributed to the project.
- Must directly satisfy the project scope of work.
- Must be shown to be cost effective.

- Cannot exceed the acquisition cost of the equipment or facilities.
- Cannot exceed the rental rate or purchase price for comparable equipment or facilities in the recipient's market.

Extensions and project completion

Ecology can grant time extensions for valid and substantiated reasons if they occur during the three-year (activities grants) or five-year (loans) timeframe. Ecology can grant an extension of up to 12 months beyond the designated date under certain conditions, including but not limited to:

- Schedules included in water quality permits, consent decrees, or enforcement orders.
- Work that falls within an environmental window in a specific season of the year.

To ensure timely processing, the recipient must request extensions no less than three months before the funding agreement is due to expire.

Section 319 grants have limitations on contract extensions based on when the grant is awarded to the State.

Force accounts and staffing plans

Force account refers to a local government that uses its own staff to complete a facilities project. For activity-type projects, it may be considered a staffing plan. Force accounts and staffing plans may be eligible for funding if:

- The work is performed by qualified employees of the public body.
- The recipient complies with laws on discrimination, such as wages, job safety, insurance, licenses, and certifications.
- The work is accomplished more economically than if procured competitively.

The recipient must maintain separate and identifiable records for a force account or staffing plan to ensure eligible costs are charged to the project. Overtime differential is not allowed.

Indirect rate

The recipient can charge an indirect rate of up to 25 percent of salaries and benefits to cover overhead costs that benefit more than one activity of the recipient and that are not directly assignable to a particular objective of the project. Recipients may be required to submit documentation at any time listing what is included in the indirect rate.

Interlocal agreements

Interlocal agreements must be consistent with the terms of the loan or grant agreement and Chapter 39.34 RCW, *Interlocal Cooperation Act*. The statute can be found at: <u>http://apps.leg.wa.gov/rcw/default.aspx?cite=39.34&full=true</u>.

Light refreshments

Light refreshment costs for meetings or conferences are eligible as permitted by Ecology's travel policy. They must be approved by the Project Manager.

Coffee and any other non-alcoholic beverage, such as tea, soft drinks, juice or milk, and snacks served at meetings or conferences are considered light refreshments.

Payment holds or termination

If a recipient does not satisfy conditions in the funding agreement, Ecology may terminate the agreement and request that the recipient repay all of the funds disbursed, withhold a payment, or decrease the payment by the amount proportionate to the costs associated to the incomplete work.

Payment processing

To obtain payment, the recipient submits a completed A19-1A Invoice Voucher and all other required forms to Ecology's Financial Manager. The recipient's authorized signatory must sign the A19-1A Invoice Voucher, preferably in blue ink. If the costs are eligible and project progress is acceptable, Ecology's Financial Manager will approve the request. If not, the Financial Manager and Project Manager will work with the recipient to resolve the issue.

Payment requests forms

Payment requests must include the following forms:

| Any Match Combination | Cash Only Match | Where Applicable |
|-----------------------|----------------------|---------------------|
| Form A19-1A | Form A19-1A | Form E (ECY 060-12) |
| (original signature) | (original signature) | |
| Form B1 (ECY 060-3) | Form B2 (ECY 060-7) | Form F (ECY 060-13) |
| Form C1 (ECY 060-8) | Form C2 (ECY 060-9) | Form H (F-21) |
| Form D (ECY 060-11) | Form D (ECY 060-11) | Form I (ECY 060-15) |
| Form G (ECY 060-14) | Form G (ECY 060-14) | Form G (ECY 060-14) |

The forms listed above can be found at:

www.ecy.wa.gov/programs/wq/funding/GrantLoanMgmtDocs/GrantLoanMgmtTools.html

Ecology's Financial Manager may request additional documentation to support the costs reflected in a payment request at any time. Recipients must keep supportive documentation in project files for the duration of the project and for five years following project completion.

Permits

Recipients must secure any required permits and must provide documentation upon request. Work on the permit preparation is an eligible cost. Permit fees associated with completing a funded project are also eligible. Ecology considers annual permit fees a normal operating expense, so annual permit fees are not eligible for funding.

Procuring goods and services

The recipient is responsible for procuring professional, personal, and other services using sound business judgment and good administrative procedures consistent with applicable federal, state, and local laws, orders, regulations, and permits. This includes issuance of invitation of bids, requests for proposals, selection of contractors, award of sub-agreements, and other related procurement matters.

The Office of Minority and Women Owned Business Enterprises (OMWBE) has established voluntary goals for the participation of minority- and women-owned businesses in procurements made with Ecology funds. Each loan and grant agreement will contain a condition regarding OMWBE. While participation is voluntary, Ecology requires reporting the level of participation.

Progress reports

Recipients must submit progress reports on a regular basis. Reports are due 15 days following the end of the reporting period. Typically, the recipient submits progress reports quarterly of each year:

- January March.
- April June.
- July September.
- October December.

Progress reports should include a description of all progress made in the quarter to meet goals as well as any successes, problems, and delays that affect the project. If a problem exists, recipients must discuss the corrective actions taken or proposed and identify any Ecology assistance that may be needed.

Ecology may request an update on progress at any time in order to verify costs submitted on a payment request.

Ecology will withhold payments if the recipient has not submitted progress reports.

Project Management Team

Ecology assigns a grant or loan Project Management Team (the Team) to each project. The Team works to develop and negotiate funding agreements and monitor recipient performance. The Team consists of a Financial Manager from the Lacey headquarters office and a Project Manager from the regional office in which the recipient is located.

Ecology assigns a regional Project Engineer for most facilities projects to provide engineering technical assistance, conduct engineering review and approvals, and determine eligibility of project components. The Project Engineer may also serve as the Project Manager.

The Financial Manager reviews and approves payment requests and assists the Project Manager in the negotiation of agreements. The Financial Manager also administers the project, determines eligibility, and maintains project files.

The regional Project Manager is the primary contact for technical assistance and day-to-day questions. The Project Manager also works with the Financial Manager to resolve payment or eligibility issues if they arise. When in doubt, call any member of the Team for information.

Public awareness

Recipients must inform the public about the project and about Ecology and EPA participation for the following:

- Any site-specific project that is accessible to the public must have signs acknowledging state and federal participation. Logos are available from Ecology Financial Managers for use on signs.
- All publications must include acknowledgment of state and federal participation.

Risk-based approach for project management

Ecology uses a risk-based approach for project management that requires some loan and grant recipients to submit additional backup documentation on payment requests. In addition, Ecology's Project Management Team may conduct additional site visits to provide technical assistance and verify progress or payment information.

Ecology will usually notify the loan or grant recipient selected for increased oversight in the loan or grant offer letter or during the loan or grant agreement negotiations. Increased oversight or request for additional documentation can occur at any point during the life of a project based on specific project conditions.

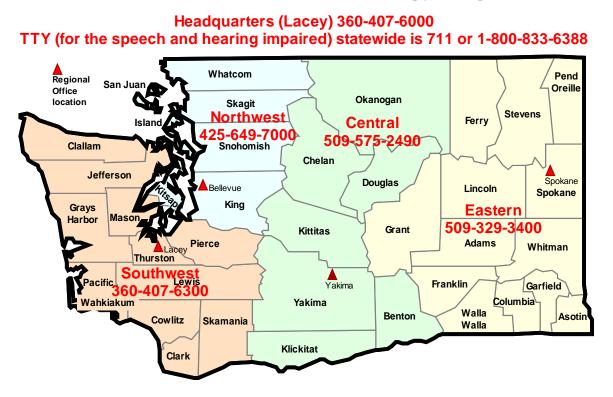
Transportation costs

The recipient can recover the cost of transportation through the state mileage rate, a use fee, or an indirect rate. The recipient may charge mileage to the project at the current state mileage rate. This mileage charge includes all vehicle-related needs, such as gas, tires, insurance, and maintenance.

Appendix A. Acronym, Abbreviation, and Contraction

| Acronym, Abbreviation, or Contraction | Program Name |
|--|---|
| ACS | American Community Survey |
| BMP | Best Management Practice |
| Centennial | Centennial Clean Water Fund |
| CDP | Census Designated Place |
| CSO | Combined Sewer Overflow |
| CPI-U | Consumer Price Index for Urban Areas |
| CWA | Clean Water Act |
| DAHP | Department of Archaeology and Historic Preservation |
| EAP | Ecology's Environmental Assistance Program |
| Ecology | Washington State Department of Ecology |
| EIM | Ecology Information Management System |
| EPA | Environmental Protection Agency |
| FOTG | Field Office Technical Guide |
| GMA | Washington State's Growth Management Act |
| GPR | Green Project Reserve |
| IACC | Infrastructure Assistance Coordinating Council |
| IGA | Investment-Grade Audit |
| 1/1 | Infiltration and Inflow |
| LID | Low Impact Development |
| N/A | Not applicable |
| NPDES | National Pollution Discharge Elimination System |
| NRCS | Natural Resource Conservation Service |
| OMWBE | Office of Minority and Women Owned Business Enterprises |
| QAPP | Quality Assurance Project Plan |
| RCW | Revised Code of Washington |
| SEA | Shorelands and Environmental Assistance Program |
| SEPA | State Environmental Policy Act |
| SERP | State Environmental Review Process |
| SFY | State Fiscal Year |
| Revolving Fund | Washington State Water Pollution Control Revolving Fund |
| Section 319 | The Clean Water Act Section 319 Nonpoint Source Grant Program |
| STAG | State and Tribal Assistance Grants |
| STEP | Small Town Environmental Process |
| TMDL | Total Maximum Daily Loads |
| ULID | Utility Local Improvement District |
| WAC | Washington State Administrative Code |

Appendix B. Department of Ecology Regional Offices



Appendix C. Comparison of Eligibility

Table C-1 compares the eligibility under the funding programs for various project types and components. Table C-2 compares the eligibility under the funding programs for various project components. Not all scenarios are covered. For clarification, contact Ecology staff about your proposed project. Staff contact information is found at the beginning of the guidelines on page viii.

The following abbreviations are used in the tables:

Y.....Yes, the facility or activity is eligible.
N.....No, the facility or activity is not eligible.
N*.....No, the facility or activity may be eligible for hardship applicants only.
SRF.....State Revolving Fund
FP.....Forgivable Principal

Table C-1—Eligibility of Project Types and Components

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF FP Loan | SRF Loan | Section 319 Grant |
|---|---------------------|--------------------|----------------|----------|----------------------|
| WASTEWATER FACILITY | | | | | |
| Combined sewer overflow abatement | N* | Y | N* | Υ | Ν |
| Construction administration and inspection services | N* | Y | N* | Υ | Ν |
| Engineering reports including environmental review requirements | Ν | Y | N* | Υ | Ν |
| Facilities for the control, storage, treatment, disposal, or recycling of domestic wastewater | N* | Y | N* | Y | Ν |
| Facilities located on private property | N* | Y | N* | Ν | Ν |
| Facilities to meet existing need | N* | Y | N* | Υ | Ν |
| Facilities with reserve capacities to accommodate flows associated with 20- year projected growth | N* | Ν | N* | Y | N |
| General Sewer Plans, including project specific engineering and environmental review requirements | Ν | Y | Ν | Y | Ν |
| Planning, including feasibility studies, value engineering, and rate studies | Ν | Y | Ν | Υ | Ν |
| Plans and specifications (facility design) | Ν | Y | N* | Υ | Ν |
| Reclaimed water distribution infrastructure for transportation to reuse site. | N* | Y | N* | Υ | Ν |
| Refinancing: Interim for any project eligible for an SRF loan or Standard for water pollution control facilities begun after March 7, 1985 | Ν | Ν | Ν | Y | Ν |
| Sewer laterals, individual pump stations, other appurtenances on private residential property, where the facilities are not owned and maintained by a public body | N* | Y | N | N | N |
| Sewer laterals, individual pump stations, other appurtenances on private residential property, where the facilities are owned and maintained by a public body | N* | Y | N* | Y | Ν |
| Sewer laterals, individual pump stations, other appurtenances on private residential property, where the project addresses a source of nonpoint pollution | N* | Y | N* | Y | Ν |
| Sewers and side sewer laterals on public property for infiltration and inflow correction projects | N* | Y | Ν | Y | N |
| NONPOINT SOURCE ACTIVITY | | | | | |

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF FP Loan | SRF Loan | Section 319 Grant |
|--|---------------------|--------------------|----------------|----------|----------------------|
| Agricultural BMP implementation on private property at concentrated animal feeding operations (CAFOs) (only CAFOs in areas covered by federally designated National Estuaries are eligible for SRF loans) | Ν | Y | N | Y | N |
| Agricultural BMP implementation on private property for the following: riparian re-vegetation or fence construction; livestock feeding BMPs including heavy use area protection, waste storage facilities, and windbreaks; certain activities that contribute to converting conventional tillage practices to direct seed practices; new innovative/alternative technology if they have not yet been demonstrated in the Ecology Region in which they are proposed; new BMPs approved by Ecology that are environmentally sound, effective, and consistent with the funding program goals and objectives | Y | Y | Z | Y | Y |
| Agricultural BMP implementation on public property other than state or federal | Y | Y | Ν | Υ | Y |
| property (e.g. city, county property) Agricultural BMPs on most federal and state owned property | N | N | N | Ν | N |
| Aquatic plant control when it has been established that water quality degradation is due to the presence of aquatic plants, and sources of pollution | Y | Y | N | Y | Y |
| have been addressed sufficiently | V | V | N | V | X |
| Comprehensive planning for basin, watershed, and area-wide water quality | Y | Y | N | Y | Y |
| Education and stewardship programs | Y | Y | N | Y | Y |
| Farm planning | Y | Y | N | Y | Y |
| Groundwater and source water protection | Y | Y | N | Y | Y |
| Irrigation canal efficiency measures (such as lining or piping existing canals) | Ν | Y | Ν | Υ | Ν |
| Irrigation efficiency implementation (such as drip, mist, or low delivery systems) | Ν | Y | Ν | Υ | Ν |
| Lake implementation projects with facilities elements or including alum treatments | Ν | Ν | Y | Ν | Ν |
| Lake restoration implementation | Y | Y | Ν | Υ | Y |
| Lake water quality planning | Y | Y | Ν | Υ | Y |
| NPDES permit activities | Ν | Y | Ν | Υ | Ν |
| Riparian and wetlands habitat restoration and enhancement | Y | Y | Ν | Υ | Y |
| Stream restoration projects for water quality purposes | Y | Y | Ν | Υ | Y |
| TMDL plan development and implementation | Y | Y | Ν | Υ | Y |
| Water quality monitoring | Y | Y | Ν | Υ | Y |
| Wellhead protection | Y | Y | Ν | Υ | Y |
| ON-SITE SEWAGE SYSTEM | | | | | |
| Community wastewater systems | N* | Y | Ν | Υ | Ν |
| Community wastewater systems through a local loan fund | Υ | Y | Ν | Υ | Ν |
| Local loan fund for on-site sewage system repair and replacement programs | Υ | Y | Υ | Υ | Ν |
| Local loan fund other than on-site sewage system repair/replacement | Ν | Y | Ν | Υ | Ν |
| On-site sewage system education, information, and technical assistance programs | Y | Y | N | Y | Y |
| STORMWATER PROJECTS | | | | | |
| Comprehensive stormwater planning examining facilities needs (such as conveyance and treatment) | N* | Y | Ν | Y | N |
| Stormwater facility, retrofit, or low impact development projects not required by stormwater permits | Ν | Y | Y | Y | N |
| Stormwater outreach and education projects not required by stormwater | Y | Y | Ν | Υ | Y |

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF FP Loan | SRF Loan | Section 319 Grant |
|--|---------------------|--------------------|----------------|----------|----------------------|
| permits | | | | | |
| Stormwater planning projects not required by stormwater permits | Y | Y | Ν | Υ | Y |
| Stormwater projects required by stormwater permits | Ν | Y | Ν | Υ | Ν |
| GREEN PROJECT RESERVE | | | | | |
| Energy efficiency | Ν | Ν | Y | Υ | Ν |
| Environmentally innovative activities | Ν | Ν | Y | Υ | Ν |
| Green infrastructure | Ν | Ν | Y | Υ | Ν |
| Water efficiency | Ν | Ν | Y | Υ | Ν |
| INELIGIBLE PROJECTS | | | | | |
| Aquatic plant control for aesthetic reasons, navigational improvements, or other purposes unrelated to water quality | Ν | Ν | Ν | Ν | Ν |
| Engineering reports that do not include SERP | Ν | Ν | Ν | Ν | Ν |
| Facilities designed solely to provide primary treatment | Ν | Ν | Ν | Ν | Ν |
| Facilities or portions of facilities that are solely intended to control transport, treat, dispose or otherwise manage commercial, institutional, or industrial wastewater | Ν | Ν | Ν | N | Ν |
| Lake restoration implementation where there is no public access | Ν | Ν | Ν | Ν | Ν |
| Previously funded objectives | Ν | Ν | Ν | Ν | Ν |
| Projects related to acts of nature that alter the natural environment, thereby causing water quality problems | Ν | N | Ν | Ν | Ν |
| Projects solely for flood control | Ν | Ν | Ν | Ν | Ν |
| Reclamation of abandoned mines | Ν | Ν | Ν | Ν | Ν |
| Scientific research unrelated to a specific activity or facility | Ν | Ν | Ν | Ν | Ν |
| Solid and hazardous waste cleanup | Ν | Ν | Ν | Ν | Ν |
| State and federal agency facilities and other duties and responsibilities | Ν | Ν | Ν | Ν | Ν |
| Water supply and conveyance | Ν | Ν | Ν | Ν | Ν |

Table C-1—Eligibility of Project Components

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF FP Loan | SRF Loan | Section 319 Grant |
|---|---------------------|--------------------|----------------|----------|----------------------|
| ELIGIBLE COMPONENTS | | | | | |
| Computer equipment specific to a funded project | Y | Y | Y | Υ | Y |
| Diagnostic studies to assess current water quality | Y | Y | Ν | Υ | Y |
| Equipment and/or tools pre approved for a funded project | Y | Y | Υ | Υ | Y |
| Indirect rate (up to 25% of salaries and benefits) | Y | Y | Y | Υ | Y |
| Land acquisition as an integral part of the treatment process (e.g., land application) or for prevention of water pollution | Ν | Y | Ν | Y | Ν |
| Land acquisition for siting of wastewater treatment plants, sewer rights-of-way and easements, and associated costs | Ν | Y | Ν | Ν | Ν |
| Land acquisition for wetland habitat preservation | Ν | Y | Ν | Υ | Ν |
| Landscaping for erosion control directly related to a project | Y | Y | Y | Υ | Y |

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF FP Loan | SRF Loan | Section 319 Grant |
|---|---------------------|--------------------|----------------|----------|----------------------|
| Legal expenses associated with development of local ordinances for water quality protection | Y | Y | Ν | Y | Y |
| Legal expenses associated with use of a bond counsel in developing a loan agreement | Ν | Y | Ν | Y | Ν |
| Light refreshments for meetings if pre approved | Y | Y | Y | Υ | Y |
| Mitigation to comply with requirements in SEPA/NEPA or other environmental review directly related to a project | Y | Y | Y | Y | Y |
| Model ordinances to prevent or reduce pollution from nonpoint sources development/dissemination of | Y | Y | Ν | Y | Y |
| Monitoring equipment used for water quality assessment | Y | Y | Ν | Υ | Y |
| Permits required for project implementation | N* | Υ | N* | Υ | Y |
| INELIGIBLE COMPONENTS | | | | | |
| Annual permit fees | Ν | Ν | Ν | Ν | Ν |
| Application preparation (grant or loan) | Ν | Ν | Ν | Ν | Ν |
| Bond costs for debt issuance | Ν | Ν | Ν | Ν | Ν |
| Bonus or acceleration payments to contractors to meet contractual completion dates for construction | Ν | Ν | Ν | Ν | Ν |
| Cost-plus-a-percentage-of-cost contracts (also known as multiplier contracts), time and materials contracts, and percent-of-construction contracts | Ν | Ν | Ν | Ν | Ν |
| Culvert repair or replacement | Ν | Ν | Ν | Ν | Ν |
| Fines and penalties due to violations of or failures to comply with federal, state, or local laws | Ν | Ν | Ν | Ν | Ν |
| Landscaping for aesthetic reasons | Ν | Ν | Ν | Ν | Ν |
| Lobbying or expenses associated with lobbying | Ν | Ν | Ν | Ν | Ν |
| Monitoring equipment used by an industry for sampling and analyses of industrial discharges to municipal water pollution control facilities | Ν | Ν | Ν | Ν | Ν |
| Operating expenses of local government, such as the salaries and expenses of a mayor, city council member, city attorney, etc. | Ν | Ν | Ν | Ν | Ν |
| Operation and maintenance expenses | Ν | Ν | Ν | Ν | Ν |
| Overtime differential paid to employees of local government to complete administrative or force account work | Ν | Ν | Ν | Ν | Ν |
| Removal of existing structures or demolition of structures that are not interfering with proposed construction | Ν | Ν | Ν | Ν | Ν |
| Vehicle purchase, except where Ecology has determined that a specialized vehicle is essential to directly satisfy the project scope of work and to achieve the project water quality goals and outcomes | Ν | Ν | Ν | Ν | Ν |

Appendix D. Nonpoint Source Activities Eligibility Matrix

Introduction

Best management practices (BMPs) are defined as, "*Structural or non-structural method(s)*, *recommended through a planning process, that have a demonstrated success for addressing or preventing water quality degradation.*"

BMPs that address or correct water quality degradation through facility or activity focused projects may be funded using Ecology's Water Quality Program financial assistance. The implementation of BMPs refers to the use of established approaches or practices to address water quality problems.

Projects such as agricultural BMPs on property owned by Washington state and federal governments are largely ineligible, regardless of the eligibility of the applicant. However, in recognition of the complexity of watersheds and the benefits of cooperative efforts, Ecology can provide financial assistance to an eligible public body to participate with other state and federal agencies in comprehensive watershed planning and large scale monitoring programs that extend substantially beyond federal and state lands.

The three major funding programs that Ecology's Water Quality Program administers (Centennial, Section 319, and Revolving Fund) originate from federal or state funds, which are used to address water quality problems on publicly owned lands or lands with public access.

More specific BMP provisions are discussed in Appendices J, K, and L.

Eligible BMPs

Eligible BMPs include, but are not limited to, those that:

- Are recommended through a multi-agency watershed management planning process and approved by Ecology as an effective technique to reduce nonpoint source pollution.
- Are required in order to meet a National Pollution Discharge Elimination System (NPDES) permit (loans only).
- Provide public benefits through improved water quality.
- Are based on water quality improvements and not on production needs.
- Target the most critical areas and structural and non-structural practices that, if properly managed, will provide the greatest protection or improvement in water quality.

Ecology limits its financial assistance to public bodies. However, the public body that receives a grant or a loan can provide financial assistance to a private landowner.

BMPs on private property limitations

BMPs on private property are limited to those that involve the following:

- Implementation of BMPs in the riparian zone on private property consisting of revegetation or fence construction and where a landowner agreement is signed by the landowner.
- Implementation of no-till BMPs on private property where a landowner agreement is in place in areas where sedimentation and erosion affect water quality in streams and rivers.
- Implementation of livestock feeding BMPs on private property where:
 - A landowner agreement is in place.
 - Activity from livestock is contributing to fecal coliform or sedimentation problems and/or other degradation to the riparian area, stream, and water quality.
 - The installation meets all of Ecology's prerequisites for eligibility.
- Implementation of BMPs on private property where:
 - The practice consists of a demonstration of new, innovative, or alternative technology not yet demonstrated in the Ecology region in which they are proposed
 - A public easement, conservation easement, or landowner agreement is granted by the landowner.
 - Demonstration projects are approved by Ecology on a case-by-case basis for grant eligibility.

Agricultural BMPs must comply with the Natural Resource Conservation Service (NRCS) Field Office Technical Guide (FOTG) construction specifications. If NRCS specifications are not available, the structural design of the proposed BMP must be designed by a licensed engineer. For further information, see Section IV at the following Web address: http://efotg.nrcs.usda.gov/treemenuFS.aspx?Fips=53077&MenuName=menuWA.zip.

Stormwater BMPs in Western Washington must comply with the Western Washington Stormwater Management Manual (Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001, Ecology Publication Numbers 99-11; 99-12; 99-13; 99-14; 99-15). Eastern Washington projects must comply with the Stormwater Management Manual for Eastern Washington, Ecology Publication Number 04-10-076). The stormwater manuals can be found at:

www.ecy.wa.gov/programs/wq/stormwater/municipal/StrmwtrMan.html.

Stream restoration and stabilization projects and techniques must meet the standards established in the Washington State Aquatic Guideline Program's *Stream Habitat Restoration Guidelines*. These guidelines are currently under revision. The most up-to-date version of this guidance can be found at: <u>http://wdfw.wa.gov/publications/01374/</u>.

Table D-1 compares the eligibility under the funding programs for various nonpoint projects. Not all scenarios are covered. For clarification, contact Ecology staff about your proposed project. Staff contact information is found at the beginning of the guidelines on page viii.

The following abbreviations are used in the table:

Y.....Yes, the facility or activity is eligible.

N.....No, the facility or activity is not eligible.

SRF.....State Revolving Fund

Table D-1—Nonpoint Source Activities Eligibility Matrix

| DESCRIPTION | Centennial Grant | Centennial Loan | SRF Loan | Section 319 Grant |
|---|---------------------|--------------------|----------|----------------------|
| BEST MANAGEMENT PRACTICES (BMPs) | | | | |
| BMP implementation on public property other than state or federal property (e.g. city, county property) | Y | Y | Y | Y |
| BMPs that affect upland areas or that are production oriented | Ν | Ν | Ν | Ν |
| Cultural resources review for BMP implementation | Y | Y | Υ | Y |
| Most BMPs on federal and state owned property | Ν | Ν | Ν | Ν |
| EROSION AND SEDIMENT CONTROL, BANK STABILIZATION, RIPARIAN, LAKE SHORE & WETLAND RESTORATION | | | | |
| Acquisition/installation of native plant material | Y | Y | Y | Y |
| Acquisition/installation of plant material stabilizer | Y | Y | Υ | Y |
| Armoring of the toe ^f | Y | Y | Y | Υ |
| Channel re-establishment or naturalization/meander reconstruction/ re-sloping | Y | Y | Y | Y |
| Conservation plans (site-specific) and targeted BMP plans | Y | Y | Υ | Y |
| Grass filter strips ^a | Y | Y | Y | Y |
| Installation of log structures | Y | Y | Y | Y |
| Installation of rip rap, boulders, and retaining walls ^a | Ν | Ν | Ν | Ν |
| Installation of root wads | Y | Y | Υ | Y |
| Installation of siphons | Ν | Y | Υ | Ν |
| Installation of tide or flood gates | Ν | Y | Υ | Ν |
| Lakeshore riparian installation ^a | Y | Y | Υ | Y |
| Land acquisition for wetlands protection, restoration, and construction | Ν | Y | Υ | Ν |
| Planting trees for future harvesting ^a | Ν | Ν | Υ | Ν |
| Residue management via no till, direct seeding ^{a, b} | Υ | Υ | Υ | Υ |
| Riparian forest buffers (not for future harvest) | Y | Y | Υ | Y |
| Sediment control basins | Ν | Y | Υ | Ν |
| Site monitoring and follow-up maintenance | Y | Y | Υ | Y |
| Site preparation work (e.g., weed removal) | Υ | Y | Υ | Υ |
| Stream bank revegetation | Υ | Y | Υ | Y |
| Use of sediment settlers (e.g., Polyacrylamide) ^a | Ν | Y | Υ | Ν |
| Watering riparian plantings $^{\circ}$ | Υ | Y | Υ | Υ |
| Weed control associated with riparian revegetation | Y | Y | Υ | Y |
| Wetland creation | Ν | Y | Υ | Ν |
| Wetlands restoration | Y | Y | Υ | Y |
| Wetlands restoration ^a | Υ | Y | Υ | Υ |
| FARM & LIVESTOCK MANAGEMENT | | | | |
| Acquisition/installation of fencing along stream ^e | Υ | Y | Υ | Y |
| Acquisition/installation of side/cross fencing | Ν | Ν | Ν | Ν |
| Bridges (livestock only) – up to 6 ft wide ^e | Υ | Y | Y | Y |
| Bridges (vehicle) | Ν | Ν | Ν | Ν |

| DESCRIPTION | Centennial Grant | ပိ | SF | Section 319 Grant |
|---|---------------------|--------|--------|----------------------|
| Direct seed custom application fee reimbursement ^a | Y | Y | Y | Y |
| Direct seed equipment purchase by public body for rental purposes ^a | Y | Y | Y | Y |
| Direct seed equipment purchase for private landowner use | Ν | Y | Y | Ν |
| Fencing on private property ^{a, b} | Y | Y | Y | Y |
| Fencing on public property ^{a, c} | Y | Y | Y | Y |
| Hardened stream crossings for livestock ^{a, b, c, e, f} | Y | Y | Y | Y |
| Installation of livestock exclusion fencing | Y | Y | Y | Y |
| Livestock feeding BMPs including heavy use area protection, waste storage facilities, and windbreaks ^{a, b, e, f} | Y | Y | Y | Υ |
| Off-stream watering provisions ^{a, b, c, e} | Y | Y | Y | Y |
| Reimbursement for direct seed equipment rental by private landowner ^a | Y | Y | Y | Y |
| Spring development ^{a, b, c, e, f} | Y | Y | Y | Y |
| ON-SITE SEWAGE SYSTEMS | 1 | | | |
| Community systems (planning, design, and construction) | Ν | Y | Y | Ν |
| On-site Sewage system repair/replacement ^a | Ν | Y | Y | Ν |
| On-site Sewage system surveys | Y | Y | Y | Y |
| PUBLIC INFORMATION AND EDUCATION | | | | |
| Education, outreach, information | Y | Y | Y | Y |
| Educational programs and materials not relating to water quality issues | N | N | N | N |
| Educational signage | Y | Y | Y | Y |
| Pledge programs | Y | Y | Ŷ | Y |
| School programs ^{a, d} | Ý | Ý | Ŷ | Ý |
| STRUCTURAL PROTECTION OR RECONSTRUCTION | | | | <u> </u> |
| Culvert construction, reconstruction, or replacement | N | N | Ν | N |
| Culvert removal for improved water quality and riparian restoration ^f | Y | Y | Y | Y |
| Well decommissioning | N | Ý | Ŷ | N |
| STORMWATER PROJECTS | | · · | | <u> </u> |
| Detention facilities, (ponds, tanks, or vaults, et. al.) | Ν | Y | Y | N |
| Establishment of stormwater utilities not required by permit | Y | Ŷ | Ŷ | Y |
| Establishment of stormwater utilities required by permit | N | Ý | Ŷ | N |
| Implementation of educational activities | Y | Y | Ŷ | Y |
| Individual residential stormwater infiltration treatment and collection systems, such as rain gardens or biofiltration swales on private property | N | N | N | N |
| Infiltration systems (dry wells, swales, trench, pond) | N | Y | Y | N |
| LID site-specific planning and technical assistance | Y | Y | Y | Y |
| Low-impact development (LID) BMPs implementation | N | Y | Y | N |
| Pet waste management signs | Y | Y | Y | Y |
| Stormwater inventories | Y | Y | Y | Y |
| Stormwater related land use planning not required by permit | Y | Y | Y | Y |
| Stormwater related land use planning not required by permit | r N | Y Y | Y Y | r N |
| | | | r Y | |
| Stormwater treatment facilities (constructed wetlands, bioretention, etc.) IRRIGATION WATER MANAGEMENT | N | Y | ř | N |
| Irrigation water management (such as drip, mist, or low delivery systems) | N | Y | Y | N |
| Technical assistance for irrigation water management such as planning and soil | v | | v | |
| testing | Y | Y | Y | Y |

Footnotes:

- a. Specific criteria or guidelines apply.
- b. Work on private property requires landowner agreement.
- c. May have Ecology's Water Resources or Shorelands and Environmental Assistance Program issues. Applicants, recipients, and Ecology staff may need to inquire as to specific project limitations.
- d. School Districts are not eligible for funding.
- e. Requires exclusion fencing with a 35-foot minimum setback from the ordinary high water mark in order to be eligible.
- f. Requires prior review and approval from the Project Manager before implementation to be eligible.

Appendix E. Green Project Reserve Guidance

Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs. 4/21/2010

PART A – CWSRF GPR SPECIFIC GUIDANCE

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

1.0 GREEN INFRASTRUCTURE

- 1.1 Definition: Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements, and cisterns.
- 1.2 Categorical Projects
 - 1.2-1 Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment or retrofits including: permeable pavement2, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
 - 1.2-2 Wet weather management systems for parking areas including: permeable pavement¹, bioretention, trees, green roofs, and other practices such as constructed wetlands that can be designed to mimic natural hydrology and reduce effective imperviousness at one or more scales. Vactor trucks and other capital equipment necessary to maintain green infrastructure projects.
 - 1.2-3 Implementation of comprehensive street tree or urban forestry programs, including expansion of tree boxes to manage additional stormwater and enhance tree health.
 - 1.2-4 Stormwater harvesting and reuse projects, such as cisterns and the systems that allow for utilization of harvested stormwater, including pipes to distribute stormwater for reuse.

¹ The total capital cost of permeable pavement is eligible, not just the incremental additional cost when compared to impervious pavement.

- 1.2-5 Downspout disconnection to remove stormwater from sanitary, combined sewers and separate storm sewers and manage runoff onsite.
- 1.2-6 Comprehensive retrofit programs designed to keep wet weather discharges out of all types of sewer systems using green infrastructure technologies and approaches such as green roofs, green walls, trees and urban reforestation, permeable pavements and bioretention cells, and turf removal and replacement with native vegetation or trees that improve permeability.
- 1.2-7 Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks. This includes stream day lighting that removes natural streams from artificial pipes and restores a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. In highly urbanized watersheds, this may not be the original hydrology.
- 1.2-8 Projects that involve the management of wetlands to improve water quality and/or support green infrastructure efforts (e.g., flood attenuation).²
 - 1.2-8a Includes constructed wetlands.
 - 1.2-8b May include natural or restored wetlands if the wetland and its multiple functions are not degraded and all permit requirements are met.
- 1.2-9 The water quality portion of projects that employ development and redevelopment practices that preserve or restore site hydrologic processes through sustainable landscaping and site design.
- 1.2-10 Fee simple purchase of land or easements on land that has a direct benefit to water quality, such as riparian and wetland protection or restoration.
- 1.3 Projects That Do Not Meet the Definition of Green Infrastructure
 - 1.3-1 Stormwater controls that have impervious or semi-impervious liners and provide no compensatory evapotranspirative or harvesting function for stormwater retention.
 - 1.3-2 Stormwater ponds that serve an extended detention function and/or extended filtration. This includes dirt lined detention basins.
 - 1.3-3 In-line and end-of-pipe treatment systems that only filter or detain stormwater.
 - 1.3-4 Underground stormwater control and treatment devices such as swirl concentrators, hydrodynamic separators, baffle systems for grit, trash removal/floatables, oil and grease, inflatable booms and dams for in-line underground storage and diversion of flows.
 - 1.3-5 Stormwater conveyance systems that are not soil/vegetation based (swales) such as pipes and concrete channels. Green infrastructure projects that include pipes to collect stormwater may be justified as innovative environmental projects pursuant to Section 4.4 of this guidance.
 - 1.3-6 Hardening, channelizing, or straightening streams and/or stream banks.

² Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, vernal pools, and similar areas.

- 1.3-7 Street sweepers, sewer cleaners, and vactor trucks unless they support green infrastructure projects.
- 1.4 Decision Criteria for Business Cases
 - 1.4-1 Green infrastructure projects are designed to mimic the natural hydrologic conditions of the site or watershed.
 - 1.4-2 Projects that capture, treat, infiltrate, or evapotranspire water on the parcels where it falls and does not result in interbasin transfers of water.
 - 1.4-3 GPR project is in lieu of or to supplement municipal hard/gray infrastructure.
 - 1.4-4 Projects considering both landscape and site scale will be most successful at protecting water quality.
 - 1.4-5 Design criteria are available at: <u>http://cfpub.epa.gov/npdes/greeninfrastructure/munichandbook.cfm</u> and <u>http://cfpub.epa.gov/npdes/greeninfrastructure/technology.cfm</u> and
- 1.5 Examples of Projects Requiring a Business Case
 - 1.5-1 Fencing to keep livestock out of streams and stream buffers. Fencing must allow buffer vegetation to grow undisturbed and be placed a sufficient distance from the riparian edge for the buffer to function as a filter for sediment, nutrients, and other pollutants.

2.0 WATER EFFICIENCY

- 2.1 Definition: EPA's WaterSense program defines water efficiency as the use of improved technologies and practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.
- 2.2 Categorical Projects
 - 2.2-1 Installing or retrofitting water efficient devices, such as plumbing fixtures and appliances
 - 2.2-1a For example -- shower heads, toilets, urinals and other plumbing devices
 - 2.2-1b Where specifications exist, WaterSense labeled products should be the preferred choice (http://www.epa.gov/watersense/index.html).
 - 2.2-1c Implementation of incentive programs to conserve water such as rebates.
 - 2.2-2 Installing any type of water meter in previously unmetered areas
 - 2.2-2a If rate structures are based on metered use
 - 2.2-2b Can include backflow prevention devices if installed in conjunction with water meter
 - 2.2-3 Replacing existing broken/malfunctioning water meters, or upgrading existing meters, with:
 - 2.2-3a Automatic meter reading systems (AMR), for example:
 - 2.2-3a(i) Advanced metering infrastructure (AMI)
 - 2.2-3a(ii) Smart meters
 - 2.2-3b Meters with built in leak detection

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

3.0 ENERGY EFFICIENCY

- 3.1 Definition: Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.
- 3.2 Categorical Projects
 - 3.2-1 Renewable energy projects such as wind, solar, geothermal, micro-hydroelectric, and biogas combined heat and power systems (CHP) that provide power to a POTW. (http:///www.epa.gov/cleanenergy). Micro-hydroelectric projects involve capturing the energy from pipe flow.
 - 3.2-1a POTW owned renewable energy projects can be located onsite or offsite.
 - 3.2-1b Includes the portion of a publicly owned renewable energy project that serves POTWs energy needs.
 - 3.2-1c Must feed into the grid that the utility draws from and/or there is a direct connection.
 - 3.2-2 Projects that achieve a 20% reduction in energy consumption are categorically eligible for GPR³. Retrofit projects should compare energy used by the existing system or unit process⁴ to the proposed project. The energy used by the existing system should be based on name plate data when the system was first installed, recognizing that the old system is currently operating at a lower overall efficiency than at the time of installation. New POTW projects or capacity expansion projects should be designed to maximize energy efficiency and should select high efficiency premium motors and equipment where cost effective. Estimation of the energy efficiency is necessary for the project to be counted toward GPR. If a project achieves less than a 20% reduction in energy efficiency, then it may be justified using a business case.
 - 3.2-3 Collection system Infiltration/Inflow (I/I) detection equipment
 - 3.2-4 POTW energy management planning, including energy assessments, energy audits, optimization studies, and sub-metering of individual processes to determine high energy use areas, which are reasonably expected to result in a capital project are eligible. Guidance to help POTWs develop energy management programs, including assessments and audits is available at http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf.
- 3.3 Projects That Do Not Meet the Definition of Energy Efficiency
 - 3.3-1 Renewable energy generation that is privately owned or the portion of a publicly owned renewable energy facility that does not provide power to a POTW, either through a connection to the grid that the utility draws from and/or a direct connection to the POTW.
 - 3.3-2 Simply replacing a pump, or other piece of equipment, because it is at the end of its useful life, with something of average efficiency.

³ The 20% threshold for categorically eligible CWSRF energy efficiency projects was derived from a 2002 Department of Energy study entitled *United States Industrial Electric Motor Systems Market Opportunities Assessment, December 2002* and adopted by the Consortium for Energy Efficiency. Further field studies conducted by Wisconsin Focus on Energy and other States programs support the threshold.

⁴ A unit process is a portion of the wastewater system such as the collection system, pumping stations, aeration system, or solids handling, etc.

- 3.3-3 Facultative lagoons, even if integral to an innovative treatment process.
- 3.3-4 Hydroelectric facilities, except micro-hydroelectric projects. Micro-hydroelectric projects involve capturing the energy from pipe flow.
- 3.4 Decision Criteria for Business Cases
 - 3.4-1 Project must be cost effective. An evaluation must identify energy savings and payback on capital and operation and maintenance costs that does not exceed the useful life of the asset.

http://www.epa.gov/waterinfrastructure/pdfs/guidebook_si_energymanagement.pdf

- 3.4-2 The business case must describe how the project maximizes energy saving opportunities for the POTW or unit process.
- 3.4-3 Using existing tools such as Energy Star's Portfolio Manager (http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanage r) or Check Up Program for Small Systems (CUPSS) (http://www.epa/cupss) to document current energy usage and track anticipated savings.
- 3.5 Examples of Projects Requiring a Business Case
 - 3.5-1 POTW projects or unit process projects that achieve less than a 20% energy efficiency improvement.
 - 3.5-2 Projects implementing recommendations from an energy audit that are not otherwise designated as categorical.
 - 3.5-3 Projects that cost effectively eliminate pumps or pumping stations.
 - 3.5-4 Infiltration/Inflow (I/I) correction projects that save energy from pumping and reduced treatment costs and are cost effective.
 - 3.5-4a Projects that count toward GPR cannot build new structural capacity. These projects may, however, recover existing capacity by reducing flow from I/I.
 - 3.5-5 I/I correction projects where excessive groundwater infiltration is contaminating the influent requiring otherwise unnecessary treatment processes (i.e. arsenic laden groundwater) and I/I correction is cost effective.
 - 3.5-6 Replacing pre-Energy Policy Act of 1992 motors with National Electric Manufacturers Association (NEMA) premium energy efficiency motors.

3.5-5a NEMA is a standards setting association for the electrical manufacturing industry (http://www.nema.org/gov/energy/efficiency/premium/).

- 3.5-7 Upgrade of POTW lighting to energy efficient sources such as metal halide pulse start technologies, compact fluorescent, light emitting diode (LED).
- 3.5-8 SCADA systems can be justified based upon substantial energy savings.
- 3.5-9 Variable Frequency Drive can be justified based upon substantial energy savings.

4.0 ENVIRONMENTALLY INNOVATIVE

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

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

http://www.epa.gov/owm/septic/pubs/septic_guidelines.pdf

4.2-6b Treatment and Collection Options: A variety of treatment and collection options are available when implementing decentralized wastewater systems. They typically include a septic tank, although many configurations include additional treatment components following or in place of the septic tank, which provide for advanced treatment solutions. Most disperse treated effluent to the soil where further treatment occurs, utilizing either conventional soil absorption fields or alternative soil dispersal methods which provide advanced treatment. Those that discharge to streams, lakes, tributaries, and other water bodies require federal or state discharge permits (see below). Some systems promote water reuse/recycling, evaporation or wastewater uptake by plants. Some decentralized systems, particularly cluster or community systems, often utilize alternative methods of collection with small diameter pipes which can flow via gravity, pump, or siphon, including pressure sewers, vacuum sewers and small diameter gravity sewers. Alternative collection systems generally utilize piping that is less than 8 inches in diameter, or the minimum diameter allowed by the state if greater than 8 inches, with shallow burial and do not require manholes or lift stations. Septic tanks are typically installed at each building served or another location upstream of the final treatment and dispersal site. Collection systems can transport raw sewage or septic tank effluent. Another popular dispersal option used today is subsurface drip infiltration. Package plants that discharge to the soil are generally considered decentralized, depending on the situation in which they are used. While not entirely inclusive, information on treatment and collection processes is described, in detail, in the "Onsite Wastewater Treatment Technology Fact Sheets" section of the EPA Onsite Manual http://www.epa.gov/owm/septic/pubs/septic_2002_osdm_all.pdf and on EPA's septic system website under Technology Fact Sheets. http://cfpub.epa.gov/owm/septic/septic.cfm?page_id=283

- 4.3 Projects That Do Not Meet the Definition of Environmentally Innovative
 - 4.3-1 Air scrubbers to prevent nonpoint source deposition.
 - 4.3-2 Facultative lagoons, even if integral to an innovative treatment processes.
 - 4.3-3 Surface discharging decentralized wastewater systems where there are cost effective soil-based alternatives.
 - 4.3-4 Higher sea walls to protect POTW from sea level rise.
 - 4.3-5 Reflective roofs at POTW to combat heat island effect.
- 4.4 Decision Criteria for Business Cases
 - 4.4-1 State programs are allowed flexibility in determining what projects qualify as innovative in their state based on unique geographical or climatological conditions.
 - 4.4-1a Technology or approach whose performance is expected to address water quality but the actual performance has not been demonstrated in the state;
 - 4.4-1b Technology or approach that is not widely used in the State, but does perform as well or better than conventional technology/approaches at lower cost; or
 - 4.4-1c Conventional technology or approaches that are used in a new application in the State.
- 4.5 Examples of Projects Requiring a Business Case
 - 4.5-1 Constructed wetlands projects used for municipal wastewater treatment, polishing, and/or effluent disposal.
 - 4.5-1a Natural wetlands, as well as the restoration/enhancement of degraded wetlands, may not be used for wastewater treatment purposes and must comply with all regulatory/permitting requirements.
 - 4.5-1b Projects may not (further) degrade natural wetlands.
 - 4.5-2 Projects or components of projects that result from total/integrated water resource management planning consistent with the decision criteria for environmentally innovative projects and that are Clean Water SRF eligible.

- 4.5-3 Projects that facilitate adaptation of POTWs to climate change identified by a carbon footprint assessment or climate adaptation study.
- 4.5-4 POTW upgrades or retrofits that remove phosphorus for beneficial use, such as biofuel production with algae.
- 4.5-5 Application of innovative treatment technologies or systems that improve environmental conditions and are consistent with the Decision Criteria for environmentally innovative projects such as:
 - 4.5-5a Projects that significantly reduce or eliminate the use of chemicals in wastewater treatment;
 - 4.5-5b Treatment technologies or approaches that significantly reduce the volume of residuals, minimize the generation of residuals, or lower the amount of chemicals in the residuals. (National Biosolids Partnership, 2010; Advances in Solids Reduction Processes at Wastewater Treatment Facilities Webinar; <u>http://www.e-wef.org/timssnet/meetings/tnt_meetings.cfm?primary_id=10WCAP2&Action=LO_NG&subsystem=ORD%3cbr</u>).
 - 4.5-5b(i) Includes composting, class A and other sustainable biosolids management approaches.
- 4.5-6 Educational activities and demonstration projects for water or energy efficiency.
- 4.5-7 Projects that achieve the goals/objectives of utility asset management plans (<u>http://www.epa.gov/safewater/smallsystems/pdfs/guide_smallsystems_assetmanagement_bestpractices.pdf; http://www.epa.gov/owm/assetmanage/index.htm</u>).
- 4.5-8 Sub-surface land application of effluent and other means for groundwater recharge, such as spray irrigation and overland flow.
 - 4.5-8a Spray irrigation and overland flow of effluent is not eligible for GPR where there is no other cost effective alternative.

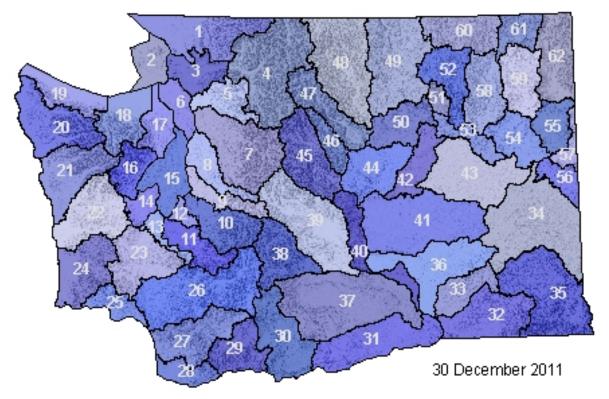
Business Case Development

This guidance is intended to be comprehensive: however, EPA understands our examples projects requiring a business case may not be all inclusive. A business case is a due diligence document. For those projects, or portions of projects, which are not included in the categorical projects lists provided above, a business case will be required to demonstrate that an assistance recipient has thoroughly researched anticipated 'green' benefits of a project. Business cases will be approved by the State (see section III.A. in the *Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2010 Appropriation Affecting the Clean Water and Drinking Water State Revolving Fund Programs*). An approved business case must be included in the State's project files and contain clear documentation that the project achieves identifiable and substantial benefits. The following sections provide guidelines for business case development.

- 5.0 Length of a Business Case
 - 5.0-1 Business cases must address the decision criteria for the category of project
 - 5.0-2 Business cases should be adequate, but not exhaustive.
 - 5.0-2a There are many formats and approaches. EPA does not require any specific one.

- 5.0-2b Some projects will require detailed analysis and calculations, while others many not require more than one page.
- 5.0-2c Limit the information contained in the business case to only the pertinent 'green' information needed to justify the project.
- 5.0-3 A business case can simply summarize results from, and then cite, existing documentation such as engineering reports, water or energy audits, results of water system tests, etc.
- 5.1 Content of a Business Case
 - 5.1-1 Quantifiable water and/or energy savings or water loss reduction for water and energy efficiency projects should be included.
 - 5.1-2 The cost and financial benefit of the project should be included, along with the payback time period where applicable. (NOTE: Clean Water SRF requires energy efficiency projects to be cost effective.)
- 5.2 Items Which Strengthen Business Case, but Are Not Required
 - 5.2-1 Showing that the project was designed to enable equipment to operate most efficiently.
 - 5.2-2 Demonstrating that equipment will meet or exceed standards set by professional associations.
 - 5.2-3 Including operator training or committing to utilizing existing tools such as Energy Star's Portfolio Manager or CUPSS for energy efficiency projects.
- 5.3 Example Business Cases Are Available at http://www.srfbusinesscases.net/.

Appendix F. Map of Water Resource Inventory Areas (WRIAS) in Washington



Appendix G. Median Household Income Table

The U.S. Census Bureau provides median household income (MHI) data through the American Community Survey (ACS). Community profiles, including MHI estimates, are released on an annual basis. MHI estimates for cities, towns, and census designated places (CDP) are included in the five-year data series produced by ACS.

MHI surveys

Ecology uses the MHI data in Table G-1 when making hardship determinations. If an applicant disputes the MHI estimate used by Ecology, the applicant may conduct a scientific survey to determine the MHI for the project area. If an applicant chooses to conduct a MHI survey, they must adhere to the Infrastructure Assistance Coordinating Council (IACC) Income Survey Guide. Ecology will use the survey results for hardship determination for the applicant until new MHI estimates are produced by ACS. The IACC Income Survey Guide can be found at: http://www.infrafunding.wa.gov/2012%20IACC%20Income%20Survey%20Guidance.pdf.

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|------------------------|-------------------|-----------|--------------|
| Aberdeen City | \$39,193 | \$784 | \$65.32 |
| Aberdeen Gardens CDP | \$50,357 | \$1,007 | \$83.93 |
| Acme CDP | \$100,268 | \$2,005 | \$167.11 |
| Addy CDP | \$44,145 | \$883 | \$73.58 |
| Ahtanum CDP | \$49,792 | \$996 | \$82.99 |
| Airway Heights City | \$36,823 | \$736 | \$61.37 |
| Albion Town | \$58,750 | \$1,175 | \$97.92 |
| Alder CDP | \$38,050 | \$761 | \$63.42 |
| Alderton CDP | \$70,924 | \$1,418 | \$118.21 |
| Alderwood Manor CDP | \$76,777 | \$1,536 | \$127.96 |
| Alger CDP | \$67,009 | \$1,340 | \$111.68 |
| Algona City | \$63,942 | \$1,279 | \$106.57 |
| Allyn CDP | \$54,519 | \$1,090 | \$90.87 |
| Almira Town | \$37,143 | \$743 | \$61.91 |
| Amanda Park CDP | \$27,875 | \$558 | \$46.46 |
| Amboy CDP | \$75,521 | \$1,510 | \$125.87 |
| Ames Lake CDP | \$105,417 | \$2,108 | \$175.70 |
| Anacortes City | \$57,444 | \$1,149 | \$95.74 |
| Anderson Island CDP | \$44,943 | \$899 | \$74.91 |
| Arlington City | \$58,577 | \$1,172 | \$97.63 |
| Arlington Heights CDP | \$77,548 | \$1,551 | \$129.25 |
| Artondale CDP | \$88,964 | \$1,779 | \$148.27 |
| Ashford CDP | \$16,940 | \$339 | \$28.23 |
| Asotin City | \$48,021 | \$960 | \$80.04 |
| Auburn City | \$54,613 | \$1,092 | \$91.02 |
| Bainbridge Island City | \$93,556 | \$1,871 | \$155.93 |
| Bangor Base CDP | \$39,601 | \$792 | \$66.00 |

| Table G-1—American Community Survey 5-Year Estimates of Median Household Incomes for |
|--|
| Communities in Washington |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|-------------------------|-------------------|-----------|--------------|
| Banks Lake South CDP | \$36,528 | \$731 | \$60.88 |
| Barberton CDP | \$76,349 | \$1,527 | \$127.25 |
| Baring CDP | \$37,054 | \$741 | \$61.76 |
| Barney's Junction CDP | \$35,139 | \$703 | \$58.57 |
| Basin City CDP | \$29,947 | \$599 | \$49.91 |
| Battle Ground City | \$57,134 | \$1,143 | \$95.22 |
| Bay Center CDP | \$31,625 | \$633 | \$52.71 |
| Bay View CDP | \$68,221 | \$1,364 | \$113.70 |
| Beaux Arts Village Town | \$122,083 | \$2,442 | \$203.47 |
| Belfair CDP | \$47,344 | \$947 | \$78.91 |
| Bell Hill CDP | \$66,648 | \$1,333 | \$111.08 |
| Bellevue City | \$81,912 | \$1,638 | \$136.52 |
| Bellingham City | \$38,136 | \$763 | \$63.56 |
| Benton City City | \$45,412 | \$908 | \$75.69 |
| Bethel CDP | \$69,735 | \$1,395 | \$116.23 |
| Bickleton CDP | \$56,500 | \$1,130 | \$94.17 |
| Big Lake CDP | \$78,162 | \$1,563 | \$130.27 |
| Bingen City | \$37,560 | \$751 | \$62.60 |
| Birch Bay CDP | \$49,579 | \$992 | \$82.63 |
| Black Diamond City | \$82,802 | \$1,656 | \$138.00 |
| Blaine City | \$54,201 | \$1,084 | \$90.34 |
| Blyn CDP | \$16,453 | \$329 | \$27.42 |
| Bonney Lake City | \$78,103 | \$1,562 | \$130.17 |
| Bothell City | \$69,697 | \$1,394 | \$116.16 |
| Bothell East CDP | \$89,081 | \$1,782 | \$148.47 |
| Bothell West CDP | \$82,027 | \$1,641 | \$136.71 |
| Boulevard Park CDP | \$41,435 | \$829 | \$69.06 |
| Brady CDP | \$65,332 | \$1,307 | \$108.89 |
| Bremerton City | \$38,531 | \$771 | \$64.22 |
| Brewster City | \$29,828 | \$597 | \$49.71 |
| Bridgeport City | \$30,431 | \$609 | \$50.72 |
| Brier City | \$92,934 | \$1,859 | \$154.89 |
| Brinnon CDP | \$29,306 | \$586 | \$48.84 |
| Browns Point CDP | \$80,893 | \$1,618 | \$134.82 |
| Brush Prairie CDP | \$60,308 | \$1,206 | \$100.51 |
| Bryant CDP | \$79,861 | \$1,597 | \$133.10 |
| Bryn Mawr-Skyway CDP | \$53,579 | \$1,072 | \$89.30 |
| Buckley City | \$61,757 | \$1,235 | \$102.93 |
| Bucoda Town | \$53,929 | \$1,079 | \$89.88 |
| Buena CDP | \$16,607 | \$332 | \$27.68 |
| Bunk Foss CDP | \$91,759 | \$1,835 | \$152.93 |
| Burbank CDP | \$62,500 | \$1,250 | \$104.17 |
| Burien City | \$51,995 | \$1,040 | \$86.66 |
| Burley CDP | \$42,950 | \$859 | \$71.58 |
| Burlington City | \$47,266 | \$945 | \$78.78 |
| Camas City | \$77,334 | \$1,547 | \$128.89 |
| Canterwood CDP | \$106,406 | \$2,128 | \$177.34 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|--------------------------------|-------------------|-----------|--------------|
| Canyon Creek CDP | \$64,760 | \$1,295 | \$107.93 |
| Carbonado Town | \$73,654 | \$1,473 | \$122.76 |
| Carlsborg CDP | \$35,144 | \$703 | \$58.57 |
| Carnation City | \$70,769 | \$1,415 | \$117.95 |
| Carson CDP | \$44,440 | \$889 | \$74.07 |
| Cascade Valley CDP | \$53,026 | \$1,061 | \$88.38 |
| Cashmere City | \$40,926 | \$819 | \$68.21 |
| Castle Rock City | \$39,583 | \$792 | \$65.97 |
| Cathcart CDP | \$101,310 | \$2,026 | \$168.85 |
| Cathlamet Town | \$34,896 | \$698 | \$58.16 |
| Cavalero CDP | \$91,465 | \$1,829 | \$152.44 |
| Centerville CDP | \$36,071 | \$721 | \$60.12 |
| Central Park CDP | \$48,942 | \$979 | \$81.57 |
| Centralia City | \$33,033 | \$661 | \$55.06 |
| Chain Lake CDP | \$82,423 | \$1,648 | \$137.37 |
| Chehalis City | \$42,721 | \$854 | \$71.20 |
| Chelan City | \$43,833 | \$877 | \$73.06 |
| Chelan Falls CDP | \$42,742 | \$855 | \$71.24 |
| Cheney City | \$30,276 | \$606 | \$50.46 |
| Cherry Grove CDP | \$59,464 | \$1,189 | \$99.11 |
| Chewelah City | \$27,273 | \$545 | \$45.46 |
| Chico CDP | \$102,692 | \$2,054 | \$171.15 |
| Chinook CDP | \$26,731 | \$535 | \$44.55 |
| Clallam Bay CDP | \$33,676 | \$674 | \$56.13 |
| Clarkston City | \$29,495 | \$590 | \$49.16 |
| Clarkston Heights-Vineland CDP | \$56,324 | \$1,126 | \$93.87 |
| Clayton CDP | \$31,628 | \$633 | \$52.71 |
| Cle Elum City | \$36,756 | \$735 | \$61.26 |
| Clear Lake CDP (Pierce County) | \$56,300 | \$1,126 | \$93.83 |
| Clear Lake CDP (Skagit County) | \$58,929 | \$1,179 | \$98.22 |
| Clearview CDP | \$94,886 | \$1,898 | \$158.14 |
| Cliffdell CDP | \$14,659 | \$293 | \$24.43 |
| Clinton CDP | \$70,789 | \$1,416 | \$117.98 |
| Clover Creek CDP | \$54,750 | \$1,095 | \$91.25 |
| Clyde Hill City | \$204,375 | \$4,088 | \$340.63 |
| Cohassett Beach CDP | \$24,356 | \$487 | \$40.59 |
| Colfax City | \$45,577 | \$912 | \$75.96 |
| College Place City | \$40,137 | \$803 | \$66.90 |
| Colton Town | \$79,500 | \$1,590 | \$132.50 |
| Colville City | \$32,286 | \$646 | \$53.81 |
| Conconully Town | \$48,214 | \$964 | \$80.36 |
| Concrete Town | \$32,404 | \$648 | \$54.01 |
| Connell City | \$49,625 | \$993 | \$82.71 |
| Conway CDP | \$42,734 | \$855 | \$71.22 |
| Copalis Beach CDP | \$31,516 | \$630 | \$52.53 |
| Cosmopolis City | \$44,357 | \$887 | \$73.93 |
| Cottage Lake CDP | \$127,172 | \$2,543 | \$211.95 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|---------------------------|-------------------|-----------|--------------|
| Coulee City Town | \$38,000 | \$760 | \$63.33 |
| Coulee Dam Town | \$49,063 | \$981 | \$81.77 |
| Country Homes CDP | \$39,620 | \$792 | \$66.03 |
| Coupeville Town | \$39,777 | \$796 | \$66.30 |
| Covington City | \$84,323 | \$1,686 | \$140.54 |
| Cowiche CDP | \$57,212 | \$1,144 | \$95.35 |
| Creston Town | \$34,911 | \$698 | \$58.19 |
| Crocker CDP | \$71,932 | \$1,439 | \$119.89 |
| Curlew CDP | \$42,639 | \$853 | \$71.07 |
| Curlew Lake CDP | \$35,893 | \$718 | \$59.82 |
| Cusick Town | \$39,531 | \$791 | \$65.89 |
| Custer CDP | \$36,279 | \$726 | \$60.47 |
| Dallesport CDP | \$43,451 | \$869 | \$72.42 |
| Danville CDP | \$78,000 | \$1,560 | \$130.00 |
| Darrington Town | \$35,469 | \$709 | \$59.12 |
| Dash Point CDP | \$98,125 | \$1,963 | \$163.54 |
| Davenport City | \$44,784 | \$896 | \$74.64 |
| Dayton City | \$39,861 | \$797 | \$66.44 |
| Deep River CDP | \$48,750 | \$975 | \$81.25 |
| Deer Park City | \$33,094 | \$662 | \$55.16 |
| Deming CDP | \$32,188 | \$644 | \$53.65 |
| Des Moines City | \$59,577 | \$1,192 | \$99.30 |
| Desert Aire CDP | \$49,653 | \$993 | \$82.76 |
| Dixie CDP | \$45,833 | \$917 | \$76.39 |
| Dollars Corner CDP | \$72,583 | \$1,452 | \$120.97 |
| Donald CDP | \$17,188 | \$344 | \$28.65 |
| Duluth CDP | \$70,000 | \$1,400 | \$116.67 |
| DuPont City | \$82,317 | \$1,646 | \$137.20 |
| Duvall City | \$105,763 | \$2,115 | \$176.27 |
| East Cathlamet CDP | \$40,403 | \$808 | \$67.34 |
| East Hill-Meridian CDP | \$72,481 | \$1,450 | \$120.80 |
| East Port Orchard CDP | \$48,625 | \$973 | \$81.04 |
| East Renton Highlands CDP | \$84,810 | \$1,696 | \$141.35 |
| East Wenatchee City | \$43,143 | \$863 | \$71.91 |
| Eastgate CDP | \$84,931 | \$1,699 | \$141.55 |
| Eastmont CDP | \$90,691 | \$1,814 | \$151.15 |
| Easton CDP | \$53,875 | \$1,078 | \$89.79 |
| Eatonville Town | \$59,267 | \$1,185 | \$98.78 |
| Edgewood City | \$74,857 | \$1,497 | \$124.76 |
| Edison CDP | \$101,324 | \$2,026 | \$168.87 |
| Edmonds City | \$69,125 | \$1,383 | \$115.21 |
| Electric City City | \$42,031 | \$841 | \$70.05 |
| Elk Plain CDP | \$65,248 | \$1,305 | \$108.75 |
| Ellensburg City | \$26,954 | \$539 | \$44.92 |
| Elma City | \$38,781 | \$776 | \$64.64 |
| Elmer City Town | \$49,853 | \$997 | \$83.09 |
| Endicott Town | \$36,250 | \$725 | \$60.42 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|-------------------------------|-------------------|-----------|--------------|
| Enetai CDP | \$51,473 | \$1,029 | \$85.79 |
| Entiat City | \$44,667 | \$893 | \$74.45 |
| Enumclaw City | \$56,494 | \$1,130 | \$94.16 |
| Ephrata City | \$37,604 | \$752 | \$62.67 |
| Erlands Point-Kitsap Lake CDP | \$54,457 | \$1,089 | \$90.76 |
| Eschbach CDP | \$18,924 | \$378 | \$31.54 |
| Esperance CDP | \$62,141 | \$1,243 | \$103.57 |
| Everett City | \$47,552 | \$951 | \$79.25 |
| Everson City | \$49,904 | \$998 | \$83.17 |
| Fairchild AFB CDP | \$41,563 | \$831 | \$69.27 |
| Fairfield Town | \$42,292 | \$846 | \$70.49 |
| Fairwood CDP (King County) | \$85,839 | \$1,717 | \$143.07 |
| Fairwood CDP (Spokane County) | \$66,106 | \$1,322 | \$110.18 |
| Fall City CDP | \$72,019 | \$1,440 | \$120.03 |
| Farmington Town | \$59,375 | \$1,188 | \$98.96 |
| Federal Way City | \$56,509 | \$1,130 | \$94.18 |
| Felida CDP | \$103,824 | \$2,076 | \$173.04 |
| Fern Prairie CDP | \$74,000 | \$1,480 | \$123.33 |
| Ferndale City | \$56,210 | \$1,124 | \$93.68 |
| Fife City | \$52,294 | \$1,046 | \$87.16 |
| Fife Heights CDP | \$80,250 | \$1,605 | \$133.75 |
| Finley CDP | \$57,938 | \$1,159 | \$96.56 |
| Fircrest City | \$64,069 | \$1,281 | \$106.78 |
| Five Corners CDP | \$61,888 | \$1,238 | \$103.15 |
| Fobes Hill CDP | \$76,184 | \$1,524 | \$126.97 |
| Fords Prairie CDP | \$39,432 | \$789 | \$65.72 |
| Forks City | \$42,903 | \$858 | \$71.51 |
| Fort Lewis CDP | \$38,762 | \$775 | \$64.60 |
| Four Lakes CDP | \$48,542 | \$971 | \$80.90 |
| Fox Island CDP | \$93,517 | \$1,870 | \$155.86 |
| Frederickson CDP | \$67,669 | \$1,353 | \$112.78 |
| Freeland CDP | \$56,157 | \$1,123 | \$93.60 |
| Friday Harbor Town | \$37,184 | \$744 | \$61.97 |
| Garfield Town | \$45,000 | \$900 | \$75.00 |
| Garrett CDP | \$53,958 | \$1,079 | \$89.93 |
| Geneva CDP | \$86,000 | \$1,720 | \$143.33 |
| George City | \$34,803 | \$696 | \$58.01 |
| Gig Harbor City | \$60,837 | \$1,217 | \$101.40 |
| Gleed CDP | \$56,296 | \$1,126 | \$93.83 |
| Gold Bar City | \$54,884 | \$1,098 | \$91.47 |
| Goldendale City | \$28,529 | \$571 | \$47.55 |
| Gorst CDP | \$47,396 | \$948 | \$78.99 |
| Graham CDP | \$70,597 | \$1,412 | \$117.66 |
| Grand Coulee City | \$30,962 | \$619 | \$51.60 |
| Grand Mound CDP | \$41,750 | \$835 | \$69.58 |
| Grandview City | \$35,321 | \$706 | \$58.87 |
| Granger City | \$34,386 | \$688 | \$57.31 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|-------------------------|-------------------|-----------|--------------|
| Granite Falls City | \$57,917 | \$1,158 | \$96.53 |
| Grapeview CDP | \$60,707 | \$1,214 | \$101.18 |
| Grayland CDP | \$49,063 | \$981 | \$81.77 |
| Grays River CDP | \$22,460 | \$449 | \$37.43 |
| Green Bluff CDP | \$99,853 | \$1,997 | \$166.42 |
| Greenwater CDP | \$11,985 | \$240 | \$19.98 |
| Hamilton Town | \$45,313 | \$906 | \$75.52 |
| Hansville CDP | \$58,704 | \$1,174 | \$97.84 |
| Harrah Town | \$48,542 | \$971 | \$80.90 |
| Harrington City | \$44,188 | \$884 | \$73.65 |
| Hartline Town | \$36,250 | \$725 | \$60.42 |
| Hatton Town | \$4,750 | \$95 | \$7.92 |
| Hazel Dell CDP | \$48,313 | \$966 | \$80.52 |
| Herron Island CDP | \$17,188 | \$344 | \$28.65 |
| High Bridge CDP | \$108,235 | \$2,165 | \$180.39 |
| Hobart CDP | \$95,709 | \$1,914 | \$159.52 |
| Hockinson CDP | \$80,789 | \$1,616 | \$134.65 |
| Home CDP | \$49,716 | \$994 | \$82.86 |
| Hoodsport CDP | \$45,078 | \$902 | \$75.13 |
| Hoquiam City | \$32,366 | \$647 | \$53.94 |
| Humptulips CDP | \$32,500 | \$650 | \$54.17 |
| Hunts Point Town | \$179,792 | \$3,596 | \$299.65 |
| Ilwaco City | \$48,636 | \$973 | \$81.06 |
| Inchelium CDP | \$37,574 | \$751 | \$62.62 |
| Index Town | \$51,719 | \$1,034 | \$86.20 |
| Indianola CDP | \$67,000 | \$1,340 | \$111.67 |
| Inglewood-Finn Hill CDP | \$90,281 | \$1,806 | \$150.47 |
| Ione Town | \$32,656 | \$653 | \$54.43 |
| Issaquah City | \$84,001 | \$1,680 | \$140.00 |
| JamesTown CDP | \$75,135 | \$1,503 | \$125.23 |
| Kahlotus City | \$27,083 | \$542 | \$45.14 |
| Kalama City | \$45,439 | \$909 | \$75.73 |
| Kapowsin CDP | \$51,402 | \$1,028 | \$85.67 |
| Keller CDP | \$33,646 | \$673 | \$56.08 |
| Kelso City | \$36,008 | \$720 | \$60.01 |
| Kendall CDP | \$29,397 | \$588 | \$49.00 |
| Kenmore City | \$80,658 | \$1,613 | \$134.43 |
| Kennewick City | \$48,512 | \$970 | \$80.85 |
| Kent City | \$53,711 | \$1,074 | \$89.52 |
| Kettle Falls City | \$33,300 | \$666 | \$55.50 |
| Key Center CDP | \$71,149 | \$1,423 | \$118.58 |
| Keyport CDP | \$86,169 | \$1,723 | \$143.62 |
| Kingsgate CDP | \$73,799 | \$1,476 | \$123.00 |
| Kingston CDP | \$52,725 | \$1,055 | \$87.88 |
| Kirkland City | \$84,955 | \$1,699 | \$141.59 |
| Kittitas City | \$39,957 | \$799 | \$66.60 |
| Klahanie CDP | \$108,000 | \$2,160 | \$180.00 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|----------------------------|-------------------|-----------|--------------|
| Klickitat CDP | \$47,321 | \$946 | \$78.87 |
| Krupp Town | \$28,750 | \$575 | \$47.92 |
| La Center City | \$71,522 | \$1,430 | \$119.20 |
| La Conner Town | \$35,682 | \$714 | \$59.47 |
| La Grande CDP | \$52,692 | \$1,054 | \$87.82 |
| Lacey City | \$57,304 | \$1,146 | \$95.51 |
| LaCrosse Town | \$24,107 | \$482 | \$40.18 |
| Lake Bosworth CDP | \$57,885 | \$1,158 | \$96.48 |
| Lake Cassidy CDP | \$68,403 | \$1,368 | \$114.01 |
| Lake Cavanaugh CDP | \$65,313 | \$1,306 | \$108.86 |
| Lake Forest Park City | \$95,221 | \$1,904 | \$158.70 |
| Lake Holm CDP | \$95,146 | \$1,903 | \$158.58 |
| Lake Ketchum CDP | \$71,154 | \$1,423 | \$118.59 |
| Lake Marcel-Stillwater CDP | \$94,438 | \$1,889 | \$157.40 |
| Lake McMurray CDP | \$65,208 | \$1,304 | \$108.68 |
| Lake Morton-Berrydale CDP | \$93,789 | \$1,876 | \$156.32 |
| Lake Roesiger CDP | \$68,167 | \$1,363 | \$113.61 |
| Lake Shore CDP | \$72,143 | \$1,443 | \$120.24 |
| Lake Stevens City | \$68,053 | \$1,361 | \$113.42 |
| Lake Stickney CDP | \$58,427 | \$1,169 | \$97.38 |
| Lake Tapps CDP | \$97,600 | \$1,952 | \$162.67 |
| Lakeland North CDP | \$78,059 | \$1,561 | \$130.10 |
| Lakeland South CDP | \$70,470 | \$1,409 | \$117.45 |
| Lakeview CDP | \$39,063 | \$781 | \$65.11 |
| Lakewood City | \$42,476 | \$850 | \$70.79 |
| Lamont Town | \$42,000 | \$840 | \$70.00 |
| Langley City | \$39,868 | \$797 | \$66.45 |
| Larch Way CDP | \$91,700 | \$1,834 | \$152.83 |
| Latah Town | \$29,167 | \$583 | \$48.61 |
| Leavenworth City | \$44,426 | \$889 | \$74.04 |
| Lebam CDP | \$43,906 | \$878 | \$73.18 |
| Lewisville CDP | \$94,176 | \$1,884 | \$156.96 |
| Liberty Lake City | \$79,746 | \$1,595 | \$132.91 |
| Lind Town | \$40,469 | \$809 | \$67.45 |
| Lochsloy CDP | \$74,611 | \$1,492 | \$124.35 |
| Lofall CDP | \$67,094 | \$1,342 | \$111.82 |
| Long Beach City | \$36,908 | \$738 | \$61.51 |
| Longbranch CDP | \$45,319 | \$906 | \$75.53 |
| Longview City | \$39,368 | \$787 | \$65.61 |
| Longview Heights CDP | \$56,667 | \$1,133 | \$94.45 |
| Loomis CDP | \$41,083 | \$822 | \$68.47 |
| Loon Lake CDP | \$41,705 | \$834 | \$69.51 |
| Lower Elochoman CDP | \$51,607 | \$1,032 | \$86.01 |
| Lyle CDP | \$30,349 | \$607 | \$50.58 |
| Lyman Town | \$30,917 | \$618 | \$51.53 |
| Lynden City | \$51,780 | \$1,036 | \$86.30 |
| Lynnwood City | \$47,920 | \$958 | \$79.87 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|-------------------------------|-------------------|-----------|--------------|
| Mabton City | \$33,654 | \$673 | \$56.09 |
| Machias CDP | \$86,667 | \$1,733 | \$144.45 |
| Malden Town | \$31,250 | \$625 | \$52.08 |
| Malo CDP | \$21,442 | \$429 | \$35.74 |
| Malone CDP | \$77,212 | \$1,544 | \$128.69 |
| Malott CDP | \$28,537 | \$571 | \$47.56 |
| Maltby CDP | \$105,147 | \$2,103 | \$175.25 |
| Manchester CDP | \$61,385 | \$1,228 | \$102.31 |
| Mansfield Town | \$26,563 | \$531 | \$44.27 |
| Manson CDP | \$41,406 | \$828 | \$69.01 |
| Maple Falls CDP | \$29,542 | \$591 | \$49.24 |
| Maple Heights-Lake Desire CDP | \$111,011 | \$2,220 | \$185.02 |
| Maple Valley City | \$93,142 | \$1,863 | \$155.24 |
| Maplewood CDP | \$90,393 | \$1,808 | \$150.66 |
| Marblemount CDP | \$59,000 | \$1,180 | \$98.33 |
| Marcus Town | \$38,750 | \$775 | \$64.58 |
| Marietta-Alderwood CDP | \$41,126 | \$823 | \$68.54 |
| Markham CDP | \$36,250 | \$725 | \$60.42 |
| Marrowstone CDP | \$50,909 | \$1,018 | \$84.85 |
| Martha Lake CDP | \$77,592 | \$1,552 | \$129.32 |
| Marysville City | \$64,399 | \$1,288 | \$107.33 |
| Mattawa Town | \$29,141 | \$583 | \$48.57 |
| May Creek CDP | \$53,125 | \$1,063 | \$88.54 |
| McChord AFB CDP | \$44,219 | \$884 | \$73.70 |
| McCleary City | \$44,408 | \$888 | \$74.01 |
| McKenna CDP | \$39,519 | \$790 | \$65.87 |
| McMillin CDP | \$93,333 | \$1,867 | \$155.56 |
| Mead CDP | \$57,500 | \$1,150 | \$95.83 |
| Meadow Glade CDP | \$79,450 | \$1,589 | \$132.42 |
| Meadowdale CDP | \$86,373 | \$1,727 | \$143.96 |
| Medical Lake City | \$57,326 | \$1,147 | \$95.54 |
| Medina City | \$175,250 | \$3,505 | \$292.08 |
| Mercer Island City | \$120,994 | \$2,420 | \$201.66 |
| Mesa City | \$32,031 | \$641 | \$53.39 |
| Metaline Falls Town | \$30,938 | \$619 | \$51.56 |
| Metaline Town | \$32,250 | \$645 | \$53.75 |
| Methow CDP | \$69,063 | \$1,381 | \$115.11 |
| Midland CDP | \$45,770 | \$915 | \$76.28 |
| Mill Creek City | \$86,461 | \$1,729 | \$144.10 |
| Mill Creek East CDP | \$90,753 | \$1,815 | \$151.26 |
| Millwood Town | \$48,654 | \$973 | \$81.09 |
| Milton City | \$60,924 | \$1,218 | \$101.54 |
| Mineral CDP | \$29,219 | \$584 | \$48.70 |
| Minnehaha CDP | \$55,642 | \$1,113 | \$92.74 |
| Mirrormont CDP | \$103,156 | \$2,063 | \$171.93 |
| Moclips CDP | \$36,442 | \$729 | \$60.74 |
| Monroe City | \$67,988 | \$1,360 | \$113.31 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|--------------------------------|-------------------|-----------|--------------|
| Monroe North CDP | \$92,277 | \$1,846 | \$153.80 |
| Montesano City | \$41,895 | \$838 | \$69.83 |
| Morton City | \$35,417 | \$708 | \$59.03 |
| Moses Lake City | \$45,448 | \$909 | \$75.75 |
| Moses Lake North CDP | \$29,179 | \$584 | \$48.63 |
| Mossyrock City | \$26,354 | \$527 | \$43.92 |
| Mount Vernon City | \$45,986 | \$920 | \$76.64 |
| Mount Vista CDP | \$74,243 | \$1,485 | \$123.74 |
| Mountlake Terrace City | \$53,910 | \$1,078 | \$89.85 |
| Moxee City | \$53,125 | \$1,063 | \$88.54 |
| Mukilteo City | \$91,683 | \$1,834 | \$152.81 |
| Naches Town | \$44,271 | \$885 | \$73.79 |
| Napavine City | \$50,303 | \$1,006 | \$83.84 |
| Naselle CDP | \$47,863 | \$957 | \$79.77 |
| Navy Yard City CDP | \$48,322 | \$966 | \$80.54 |
| Neah Bay CDP | \$38,188 | \$764 | \$63.65 |
| Neilton CDP | \$50,417 | \$1,008 | \$84.03 |
| Nespelem Community CDP | \$36,875 | \$738 | \$61.46 |
| Nespelem Town | \$29,028 | \$581 | \$48.38 |
| Newcastle City | \$95,926 | \$1,919 | \$159.88 |
| Newport City | \$22,639 | \$453 | \$37.73 |
| Nile CDP | \$31,429 | \$629 | \$52.38 |
| Nisqually Indian Community CDP | \$57,917 | \$1,158 | \$96.53 |
| Nooksack City | \$53,594 | \$1,072 | \$89.32 |
| Normandy Park City | \$73,333 | \$1,467 | \$122.22 |
| North Bend City | \$77,462 | \$1,549 | \$129.10 |
| North Bonneville City | \$40,052 | \$801 | \$66.75 |
| North Fort Lewis CDP | \$45,000 | \$900 | \$75.00 |
| North Lynnwood CDP | \$55,018 | \$1,100 | \$91.70 |
| North Marysville CDP | \$69,659 | \$1,393 | \$116.10 |
| North Omak CDP | \$6,414 | \$128 | \$10.69 |
| North Puyallup CDP | \$34,710 | \$694 | \$57.85 |
| North Sultan CDP | \$75,074 | \$1,501 | \$125.12 |
| North Yelm CDP | \$50,361 | \$1,007 | \$83.94 |
| Northport Town | \$33,036 | \$661 | \$55.06 |
| Northwest Stanwood CDP | \$33,750 | \$675 | \$56.25 |
| Oak Harbor City | \$48,656 | \$973 | \$81.09 |
| Oakesdale Town | \$55,625 | \$1,113 | \$92.71 |
| Oakville City | \$43,500 | \$870 | \$72.50 |
| Ocean City CDP | \$22,212 | \$444 | \$37.02 |
| Ocean Park CDP | \$27,241 | \$545 | \$45.40 |
| Ocean Shores City | \$43,984 | \$880 | \$73.31 |
| Odessa Town | \$37,574 | \$751 | \$62.62 |
| Okanogan City | \$36,394 | \$728 | \$60.66 |
| Olympia City | \$49,461 | \$989 | \$82.44 |
| Omak City | \$30,393 | \$608 | \$50.66 |
| Onalaska CDP | \$39,868 | \$797 | \$66.45 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|----------------------------------|-------------------|-----------|--------------|
| Orchards CDP | \$61,035 | \$1,221 | \$101.73 |
| Orient CDP | \$17,083 | \$342 | \$28.47 |
| Oroville City | \$26,490 | \$530 | \$44.15 |
| Orting City | \$70,556 | \$1,411 | \$117.59 |
| Oso CDP | \$34,896 | \$698 | \$58.16 |
| Othello City | \$38,285 | \$766 | \$63.81 |
| Otis Orchards-East Farms CDP | \$57,802 | \$1,156 | \$96.34 |
| Outlook CDP | \$26,125 | \$523 | \$43.54 |
| Oyehut CDP | \$37,596 | \$752 | \$62.66 |
| Pacific Beach CDP | \$61,000 | \$1,220 | \$101.67 |
| Pacific City | \$49,402 | \$988 | \$82.34 |
| Packwood CDP | \$56,337 | \$1,127 | \$93.90 |
| Palouse City | \$42,188 | \$844 | \$70.31 |
| Parker CDP | \$34,457 | \$689 | \$57.43 |
| Parkland CDP | \$42,860 | \$857 | \$71.43 |
| Parkwood CDP | \$50,000 | \$1,000 | \$83.33 |
| Pasco City | \$44,659 | \$893 | \$74.43 |
| Pateros City | \$31,250 | \$625 | \$52.08 |
| Pe Ell Town | \$31,563 | \$631 | \$52.61 |
| Peaceful Valley CDP | \$28,883 | \$578 | \$48.14 |
| Picnic Point CDP | \$75,350 | \$1,507 | \$125.58 |
| Pine Grove CDP | \$21,349 | \$427 | \$35.58 |
| Point Roberts CDP | \$55,388 | \$1,108 | \$92.31 |
| Pomeroy City | \$34,698 | \$694 | \$57.83 |
| Port Angeles City | \$38,938 | \$779 | \$64.90 |
| Port Angeles East CDP | \$45,694 | \$914 | \$76.16 |
| Port Gamble Tribal Community CDP | \$62,772 | \$1,255 | \$104.62 |
| Port Hadlock-Irondale CDP | \$33,795 | \$676 | \$56.33 |
| Port Ludlow CDP | \$69,000 | \$1,380 | \$115.00 |
| Port Orchard City | \$50,275 | \$1,006 | \$83.79 |
| Port Townsend City | \$43,597 | \$872 | \$72.66 |
| Porter CDP | \$35,833 | \$717 | \$59.72 |
| Poulsbo City | \$59,464 | \$1,189 | \$99.11 |
| Prairie Heights CDP | \$73,417 | \$1,468 | \$122.36 |
| Prairie Ridge CDP | \$68,877 | \$1,378 | \$114.80 |
| Prescott City | \$41,667 | \$833 | \$69.45 |
| Prosser City | \$40,526 | \$811 | \$67.54 |
| Puget Island CDP | \$53,462 | \$1,069 | \$89.10 |
| Pullman City | \$25,609 | \$512 | \$42.68 |
| Purdy CDP | \$56,786 | \$1,136 | \$94.64 |
| Puyallup City | \$56,984 | \$1,140 | \$94.97 |
| Queets CDP | \$29,583 | \$592 | \$49.31 |
| Quilcene CDP | \$36,700 | \$734 | \$61.17 |
| Quincy City | \$34,518 | \$690 | \$57.53 |
| Raft Island CDP | \$80,750 | \$1,615 | \$134.58 |
| Rainier City | \$57,000 | \$1,140 | \$95.00 |
| Ravensdale CDP | \$72,292 | \$1,446 | \$120.49 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|----------------------|-------------------|-----------|--------------|
| Raymond City | \$30,208 | \$604 | \$50.35 |
| Reardan Town | \$37,708 | \$754 | \$62.85 |
| Redmond City | \$88,194 | \$1,764 | \$146.99 |
| Renton City | \$61,592 | \$1,232 | \$102.65 |
| Republic City | \$34,688 | \$694 | \$57.81 |
| Richland City | \$65,502 | \$1,310 | \$109.17 |
| Ridgefield City | \$76,295 | \$1,526 | \$127.16 |
| Ritzville City | \$40,122 | \$802 | \$66.87 |
| River Road CDP | \$45,250 | \$905 | \$75.42 |
| Riverbend CDP | \$105,721 | \$2,114 | \$176.20 |
| Riverside Town | \$34,934 | \$699 | \$58.22 |
| Riverton CDP | \$45,139 | \$903 | \$75.23 |
| Rochester CDP | \$63,365 | \$1,267 | \$105.61 |
| Rock Island City | \$36,810 | \$736 | \$61.35 |
| Rockford Town | \$47,321 | \$946 | \$78.87 |
| Rockport CDP | \$51,375 | \$1,028 | \$85.63 |
| Rocky Point CDP | \$59,808 | \$1,196 | \$99.68 |
| Ronald CDP | \$32,931 | \$659 | \$54.89 |
| Roosevelt CDP | \$59,000 | \$1,180 | \$98.33 |
| Rosalia Town | \$30,284 | \$606 | \$50.47 |
| Rosburg CDP | \$35,625 | \$713 | \$59.38 |
| Rosedale CDP | \$86,923 | \$1,738 | \$144.87 |
| Roslyn City | \$60,600 | \$1,212 | \$101.00 |
| Roy City | \$63,068 | \$1,261 | \$105.11 |
| Royal City City | \$25,451 | \$509 | \$42.42 |
| Ruston Town | \$77,917 | \$1,558 | \$129.86 |
| Ryderwood CDP | \$29,648 | \$593 | \$49.41 |
| Salmon Creek CDP | \$61,292 | \$1,226 | \$102.15 |
| Sammamish City | \$134,616 | \$2,692 | \$224.36 |
| Santiago CDP | \$160,313 | \$3,206 | \$267.19 |
| Satsop CDP | \$53,750 | \$1,075 | \$89.58 |
| Seabeck CDP | \$65,893 | \$1,318 | \$109.82 |
| SeaTac City | \$48,341 | \$967 | \$80.57 |
| Seattle City | \$60,665 | \$1,213 | \$101.11 |
| Sedro-Woolley City | \$51,733 | \$1,035 | \$86.22 |
| Selah City | \$52,706 | \$1,054 | \$87.84 |
| Sequim City | \$34,750 | \$695 | \$57.92 |
| Shadow Lake CDP | \$89,583 | \$1,792 | \$149.31 |
| Shelton City | \$32,927 | \$659 | \$54.88 |
| Shoreline City | \$67,076 | \$1,342 | \$111.79 |
| Silvana CDP | \$42,308 | \$846 | \$70.51 |
| Silver Firs CDP | \$106,040 | \$2,121 | \$176.73 |
| Silverdale CDP | \$60,699 | \$1,214 | \$101.17 |
| Sisco Heights CDP | \$94,896 | \$1,898 | \$158.16 |
| Skamokawa Valley CDP | \$28,173 | \$563 | \$46.96 |
| Skokomish CDP | \$29,554 | \$591 | \$49.26 |
| Skykomish Town | \$23,333 | \$467 | \$38.89 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|---------------------|-------------------|-----------|--------------|
| Snohomish City | \$54,431 | \$1,089 | \$90.72 |
| Snoqualmie City | \$116,020 | \$2,320 | \$193.37 |
| Snoqualmie Pass CDP | \$77,750 | \$1,555 | \$129.58 |
| Soap Lake City | \$27,965 | \$559 | \$46.61 |
| South Bend City | \$31,176 | \$624 | \$51.96 |
| South Cle Elum Town | \$47,750 | \$955 | \$79.58 |
| South Creek CDP | \$59,750 | \$1,195 | \$99.58 |
| South Hill CDP | \$74,323 | \$1,486 | \$123.87 |
| South Prairie Town | \$57,917 | \$1,158 | \$96.53 |
| South Wenatchee CDP | \$29,795 | \$596 | \$49.66 |
| Southworth CDP | \$88,500 | \$1,770 | \$147.50 |
| Spanaway CDP | \$61,090 | \$1,222 | \$101.82 |
| Spangle City | \$21,250 | \$425 | \$35.42 |
| Spokane City | \$40,367 | \$807 | \$67.28 |
| Spokane Valley City | \$45,819 | \$916 | \$76.37 |
| Sprague City | \$46,696 | \$934 | \$77.83 |
| Springdale Town | \$29,432 | \$589 | \$49.05 |
| St. John Town | \$36,625 | \$733 | \$61.04 |
| Stansberry Lake CDP | \$65,057 | \$1,301 | \$108.43 |
| Stanwood City | \$60,596 | \$1,212 | \$100.99 |
| Starbuck Town | \$23,750 | \$475 | \$39.58 |
| Startup CDP | \$79,141 | \$1,583 | \$131.90 |
| Steilacoom Town | \$63,690 | \$1,274 | \$106.15 |
| Steptoe CDP | \$53,750 | \$1,075 | \$89.58 |
| Stevenson City | \$39,315 | \$786 | \$65.53 |
| Sudden Valley CDP | \$70,458 | \$1,409 | \$117.43 |
| Sultan City | \$62,424 | \$1,248 | \$104.04 |
| Sumas City | \$42,411 | \$848 | \$70.69 |
| Summit CDP | \$66,630 | \$1,333 | \$111.05 |
| Summit View CDP | \$57,973 | \$1,159 | \$96.62 |
| Summitview CDP | \$60,500 | \$1,210 | \$100.83 |
| Sumner City | \$50,943 | \$1,019 | \$84.91 |
| Sunday Lake CDP | \$62,083 | \$1,242 | \$103.47 |
| Sunnyside City | \$34,761 | \$695 | \$57.94 |
| Sunnyslope CDP | \$92,971 | \$1,859 | \$154.95 |
| Suquamish CDP | \$58,659 | \$1,173 | \$97.77 |
| Swede Heaven CDP | \$51,786 | \$1,036 | \$86.31 |
| Tacoma City | \$47,862 | \$957 | \$79.77 |
| Taholah CDP | \$49,732 | \$995 | \$82.89 |
| Tampico CDP | \$40,870 | \$817 | \$68.12 |
| Tanglewilde CDP | \$60,076 | \$1,202 | \$100.13 |
| Tanner CDP | \$128,667 | \$2,573 | \$214.45 |
| Tekoa City | \$37,143 | \$743 | \$61.91 |
| Tenino City | \$45,898 | \$918 | \$76.50 |
| Terrace Heights CDP | \$64,590 | \$1,292 | \$107.65 |
| Thorp CDP | \$55,521 | \$1,110 | \$92.54 |
| Three Lakes CDP | \$89,313 | \$1,786 | \$148.86 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|-----------------------------|-------------------|-----------|--------------|
| Tieton Town | \$32,056 | \$641 | \$53.43 |
| Tokeland CDP | \$130,156 | \$2,603 | \$216.93 |
| Toledo City | \$35,625 | \$713 | \$59.38 |
| Tonasket City | \$18,984 | \$380 | \$31.64 |
| Toppenish City | \$28,896 | \$578 | \$48.16 |
| Touchet CDP | \$46,750 | \$935 | \$77.92 |
| Town and Country CDP | \$52,375 | \$1,048 | \$87.29 |
| Tracyton CDP | \$61,220 | \$1,224 | \$102.03 |
| Trout Lake CDP | \$53,250 | \$1,065 | \$88.75 |
| Tukwila City | \$44,271 | \$885 | \$73.79 |
| Tumwater City | \$60,585 | \$1,212 | \$100.98 |
| Twin Lakes CDP | \$46,667 | \$933 | \$77.78 |
| Twisp Town | \$22,292 | \$446 | \$37.15 |
| Union CDP | \$35,938 | \$719 | \$59.90 |
| Union Gap City | \$35,067 | \$701 | \$58.45 |
| Union Hill-Novelty Hill CDP | \$113,457 | \$2,269 | \$189.10 |
| UnionTown Town | \$50,313 | \$1,006 | \$83.86 |
| University Place City | \$56,792 | \$1,136 | \$94.65 |
| Upper Elochoman CDP | \$48,750 | \$975 | \$81.25 |
| Vader City | \$46,000 | \$920 | \$76.67 |
| Valley CDP | \$29,688 | \$594 | \$49.48 |
| Vancouver City | \$48,875 | \$978 | \$81.46 |
| Vashon CDP | \$80,000 | \$1,600 | \$133.33 |
| Vaughn CDP | \$63,409 | \$1,268 | \$105.68 |
| Venersborg CDP | \$85,595 | \$1,712 | \$142.66 |
| Verlot CDP | \$58,571 | \$1,171 | \$97.62 |
| Waitsburg City | \$45,568 | \$911 | \$75.95 |
| Walla Walla City | \$39,397 | \$788 | \$65.66 |
| Walla Walla East CDP | \$66,875 | \$1,338 | \$111.46 |
| Waller CDP | \$58,613 | \$1,172 | \$97.69 |
| Wallula CDP | \$7,039 | \$141 | \$11.73 |
| Walnut Grove CDP | \$52,473 | \$1,049 | \$87.46 |
| Wapato City | \$29,130 | \$583 | \$48.55 |
| Warden City | \$29,050 | \$581 | \$48.42 |
| Warm Beach CDP | \$76,250 | \$1,525 | \$127.08 |
| Washougal City | \$61,121 | \$1,222 | \$101.87 |
| Washtucna Town | \$40,833 | \$817 | \$68.06 |
| Waterville Town | \$40,078 | \$802 | \$66.80 |
| Wauna CDP | \$78,140 | \$1,563 | \$130.23 |
| Waverly Town | \$67,292 | \$1,346 | \$112.15 |
| Wenatchee City | \$44,156 | \$883 | \$73.59 |
| West Clarkston-Highland CDP | \$40,772 | \$815 | \$67.95 |
| West Pasco CDP | \$71,410 | \$1,428 | \$119.02 |
| West Richland City | \$76,117 | \$1,522 | \$126.86 |
| West Side Highway CDP | \$51,385 | \$1,028 | \$85.64 |
| Westport City | \$31,290 | \$626 | \$52.15 |
| Whidbey Island Station CDP | \$39,712 | \$794 | \$66.19 |

| Community | ACS Estimated MHI | 2% of MHI | 2% of MHI÷12 |
|--------------------|-------------------|-----------|--------------|
| White Center CDP | \$42,448 | \$849 | \$70.75 |
| White Salmon City | \$33,505 | \$670 | \$55.84 |
| White Swan CDP | \$35,461 | \$709 | \$59.10 |
| Wilbur Town | \$39,398 | \$788 | \$65.66 |
| Wilderness Rim CDP | \$82,143 | \$1,643 | \$136.91 |
| Wilkeson Town | \$60,278 | \$1,206 | \$100.46 |
| Willapa CDP | \$66,118 | \$1,322 | \$110.20 |
| Wilson Creek Town | \$42,813 | \$856 | \$71.36 |
| Winlock City | \$32,419 | \$648 | \$54.03 |
| Winthrop Town | \$33,438 | \$669 | \$55.73 |
| Wishram CDP | \$23,214 | \$464 | \$38.69 |
| Wollochet CDP | \$80,403 | \$1,608 | \$134.01 |
| Woodinville City | \$88,221 | \$1,764 | \$147.04 |
| Woodland City | \$48,288 | \$966 | \$80.48 |
| Woods Creek CDP | \$85,284 | \$1,706 | \$142.14 |
| Woodway City | \$144,028 | \$2,881 | \$240.05 |
| Yacolt Town | \$53,452 | \$1,069 | \$89.09 |
| Yakima City | \$39,706 | \$794 | \$66.18 |
| Yarrow Point Town | \$166,250 | \$3,325 | \$277.08 |
| Yelm City | \$55,227 | \$1,105 | \$92.05 |
| Zillah City | \$51,199 | \$1,024 | \$85.33 |

Appendix H. Developing Public Communication and Education Project Proposals

Following is a checklist that applicants can refer to in developing public communication and education project proposals. The goal of the checklist is to help in the design of projects that are effective at changing behaviors and achieving environmental results.

Project Background

- Consider the water quality problem that is the focus of the project; target population; geographic area; socio-economic status of targeted population; predominant land uses; and the behavioral change you seek to achieve for each target identified (source of the water quality problem or issue one target could be responsible for several problems).
- What knowledge, attitude, and skills do you desire in the targeted population?
- Be careful to use one or two primary objectives and be realistic about what you can accomplish during the grant period.
- If this is a continuing attitude or behavior change that you wish to affect, how do you propose to sustain it?

Project Design

- Agree on the optimal way to identify and reach your audiences.
- Identify common needs in participants and how the project can fulfill these needs.
- Identify conflicting needs (associated with barriers analysis).
- Identify the specific barriers, both internal to the person or organization as well as external, such as lack of knowledge or conditions, and practical barriers to desired change (no place local to change oil properly). Tell us how your project will remove these barriers.
- Identify the project team and their qualifications.
- Will you use volunteers and if so, how? How will you recruit and retain them?
- Identify community leaders, decision makers, and trusted peers and leaders within business, non-profit, and community groups that have similar interests in environmental change/ sustainability. These are the people and organizations that will help you advance your project and its objectives. Please explain how you will leverage their influence to amplify your results.
- Determine resources you will use, including training materials, facilities, media and corresponding distribution strategy.
- Also consider: (a) regular reminders of the desired behavior; (b) trusted and credible sources for communication; (c) communication that is direct, simple, personal and vivid; (d) leaders, described above, to model and promote the behavior you seek (what kind of changes do you want people to make in the way they make decisions?); (e) personal commitments from groups and individuals.
- Plan to pilot and field test your materials or activities with a small segment of your intended audience before "going big" and final.

- Make sure that your plan can be adjusted during the project to accommodate lessons learned. (Can it be changed in mid-course?)
- Design your project with evaluation tools and methodologies in mind and don't make it an afterthought.

Education Plan

- State measurable objectives and goals of the project.
- List the performance measures you will use to assess how effective your project was. Success is defined as progress towards meeting your goals and objectives.
- List your specific actions, implementing entities and both timetable and cost per action.
- List media and promotions to be utilized (including the use of music and art).
- For Public Participation, record the number of participants at events, number of one-onone contacts, and number of groups interested.

Monitoring and Post-Project Evaluation

- What kind of assessment and evaluation tools will you use to evaluate the effectiveness of your program? Examples include customer feedback surveys (telephone tends to work better), interviews, focus groups, observations, and, before and at least after six months, "records" that can infer change.
- How will you measure the participant's knowledge, skill, attitudes, and actions?
- How is the evaluation strategy linked to the stated goals and objectives?
- How will you evaluate presenter activities and materials?
- How will you monitor or evaluate the relationship between the educational activities and changes in behavior and water quality changes?

Suggested Resources

- Visual Tools for Watershed Education; see: <u>http://www.neefusa.org/pdf/watershedfinal.pdf</u>.
- "Fostering Sustainable Behavior" by Doug McKenzie-Mohr and William Smith.
- "Targeting Outcomes of Programs" by Claude Bennett and Kay Rockwell.

Appendix I. Opinion of Recipient's Legal Counsel

I am an attorney at law admitted to practice in the state of Washington and the duly appointed attorney of ______ (the "RECIPIENT"); and I have examined any and all documents and records pertinent to the AGREEMENT.

Based on the foregoing, it is my opinion that:

- A. The RECIPIENT is a duly organized and legally existing municipal corporation or political subdivision under the laws of the state of Washington or a federally recognized Indian tribe;
- B. The RECIPIENT has the power and authority to execute and deliver, and to perform its obligations under, the AGREEMENT;
- C. The AGREEMENT has been duly authorized and executed by the RECIPIENT's authorized representatives and, to my best knowledge and after reasonable investigation, all other necessary actions have been taken to make the AGREEMENT valid, binding, and enforceable against the RECIPIENT in accordance with its terms, except as such enforcement is affected by bankruptcy, insolvency, moratorium, or other laws affecting creditors' rights and principles of equity if equitable remedies are sought;
- D. To my best knowledge and after reasonable investigation, the AGREEMENT does not violate any other agreement, statute, court order, or law to which the RECIPIENT is a party or by which it or its properties is bound; and
- E. There is currently no litigation seeking to enjoin the commencement or completion of the PROJECT or to enjoin the RECIPIENT from entering into the AGREEMENT or from accepting or repaying the LOAN. The RECIPIENT is not a party to litigation which will materially affect its ability to repay such loan on the terms contained in the AGREEMENT.
- [F. The AGREEMENT constitutes a valid general obligation of the RECIPIENT payable from annual ad valorem taxes to be levied within the constitutional and statutory tax limitations provided by law without a vote of the electors of the RECIPIENT on all of the taxable property within the boundaries of the RECIPIENT.]
- [F. The AGREEMENT constitutes a valid obligation of the RECIPIENT payable from the Net Revenues of the Utility [and ULID Assessments in the ULID]].

Capitalized terms used herein shall have the meanings ascribed thereto in the AGREEMENT between the RECIPIENT and the DEPARTMENT.

RECIPIENT'S Legal Counsel

Date

Appendix J. Direct Seed Systems

Direct seed systems are eligible for Water Quality Program financial assistance. Direct seed systems plant and fertilize into undisturbed soil and eliminate full width tillage for seedbed preparation. Implements used for direct seed disturb only a narrow strip of soil and retain a majority of residue from the previous crop. Direct seed systems significantly reduce erosion, improve soil quality, reduce fuel consumption, and are a viable alternative to traditional, full tillage systems.

Required Eligibility Conditions for All Activities

- Cropland acres currently planted with a single pass, low disturbance direct seed are not eligible.
- Rental and custom application cost reimbursement will be provided to only those producers or landowners that have not previously implemented a single pass, direct seeding system.
- A landowner or producer that owns a single pass, low disturbance direct seed drill is not eligible for rental or custom application cost reimbursement.
- The landowner and producer must use a direct seed system or plan for three full years.
- A single pass, low-disturbance direct seed drill must be used for all planting.
- Crop residue cannot be burned.
- Grant recipients must offer educational opportunities in conjunction with direct seed programs. Examples of such opportunities include a mentoring program, workshops, or referrals to direct seed organizations. Grant recipients may coordinate with other Conservation Districts, organizations or associations to fill this need.
- Cropland acres with any post-harvest or pre-planting tillage are not eligible. This includes the use of inversion tillage equipment such as moldboard plows, chisel plow, rod weeders and disks. Conventional summer fallow is not eligible.
- To be eligible for reimbursement, the public entity recipient and the landowner and producer must sign a landowner agreement prior to renting direct seed equipment or contracting with a custom applicator to plant with a single pass, low disturbance direct seed drill. The agreement must allow inspection by the grant recipient staff and by Ecology staff.
- The landowner agreement must include, but is not limited to:
 - Commitment from the landowner and producer to implement a full three year crop rotation.
- The grant recipient must report on the following information (additional requirements may be added as part of any grant contract):
 - Number of acres enrolled in program.
 - o Number of landowners/producers enrolled.
 - Location of acres enrolled including information such as county, farm number, tract number, and field number. GIS layers and other relevant spatial reference information may also be required.

Eligible Direct Seed Activities

Equipment Rental Cost Reimbursement

- Producers may be reimbursed for a portion of the cost of renting a single pass, low-disturbance direct seed drill.
 - Producers may be reimbursed from the grant for a portion of the cost to rent a single pass, low disturbance drill.
 - Producers must agree to try the practice for a full three year direct seed rotation.
 - Cost share is available for only a first-time, full three year direct seed rotation. Reimbursement payments will be made for eligible expenses during the initial three year rotation only.
 - If a three year direct seed rotation is not completed, the producer is not eligible for any future direct seed reimbursements.
 - Cost share must not exceed \$25 dollar per acre, up to 200 acres, per producer. Total eligible cost shall not exceed \$5,000 per producer, per year for up to three years.
 - The grant recipient must verify the number of acres planted with a single pass, low disturbance direct seed drill before reimbursement is provided.

Cost of Custom Application Fee Reimbursement

- Producers may be reimbursed for a portion of the cost of hiring a custom applicator to plant with a single pass, low disturbance direct seed drill.
 - Producers may be reimbursed from the grant for a portion of the cost to have a custom applicator seed a section of the producer's land with a single pass, low disturbance drill.
 - Producers must agree to try the practice for a full three year direct seed rotation.
 - Cost share is available for only a first-time, full three year direct seed rotation. Reimbursement payments will be made for eligible expenses during the initial three year rotation only.
 - If a three year direct seed rotation is not completed, the producer is not eligible for any future direct seed reimbursements.
 - Cost share most not exceed \$25 dollar per acre, up to 200 acres, per producer. Total cost shall not exceed 5,000 per producer, per year for up to three years.
 - The grant recipient must verify the number of acres planted with a single pass, low disturbance direct seed drill before reimbursement of is provided.

Direct Seed Equipment Purchase

• Public entities are eligible to receive a one-time grant to purchase a single pass, low disturbance direct seed drill for the purpose of providing regional access to direct seed equipment and facilitating education, outreach, and technical assistance to promote the benefits of direct seeding systems.

- Grant recipients must sign a 10-year maintenance agreement to keep the drill in best condition.
- The drill must be a low disturbance, one pass drill.
- The cost share for equipment shall not exceed \$150,000 per grantee.
- Producers may not receive rental reimbursement or custom application reimbursement payments from an Ecology funded program when using a seed drill purchased with an Ecology grant.
- Grant recipients may charge a fee for the use of the Ecology funded drill to cover the cost of maintenance and storage. However, the fees should be set to encourage broad participation and must not be set to gain a profit.
- Grant recipients must provide staff with knowledge of direct seed systems or equivalent experience.

Appendix K. Livestock Off-stream Watering Facilities

Off-stream watering is used to provide an alternative source of watering where fencing or other method(s) are used to exclude livestock from streams in order to protect water quality. If livestock exclusion fencing is installed as part of a riparian protection/restoration project and meets the minimum standards for that BMP, grant dollars may be used to install an off-stream watering facility. Off-stream watering facilities (including well construction) are conditionally eligible for Water Quality Program financial assistance for projects that include privately owned livestock operations.

The following conditions must be met for off-stream watering facilities to be considered for a Water Quality program grant:

- 1. Land use must currently be dedicated to livestock or milk production.
- 2. A landowner agreement must be signed between the property owner and the public entity recipient before the off-stream watering facility is installed. The agreement must allow inspection by the recipient and by Ecology staff, and may provide for public and educational tours to be arranged between the recipient and the landowner. The landowner agreement will include, but not be limited to:
 - a. A 10-year maintenance agreement that is transferred with the ownership of the land.
 - b. Provisions to ensure that water supplied is for livestock use only.
 - i. Per Ecology Water Resources Program Policy 1025, facilities provided must serve no greater number of livestock than historically range that parcel of property. The quantity of water consumed by livestock as a result of the funded off-site watering facility should not exceed the quantity consumed if the stock were to drink directly from the stream.
 - ii. If land use is changed from livestock management to residential, commercial, or industrial development during the 10-year landowner/recipient agreement period, all financial assistance issued for the off-stream watering facilities must be immediately repaid by the loan or grant recipient to Ecology.
- 3. Livestock exclusion fencing or another equally effective exclusionary BMP installed must provide at least a 35-foot buffer from the high water mark in the riparian area.
- 4. Riparian revegetation, as needed, will be installed to provide controlled overland flow filtering of pollutants (in accordance with, but not limited to, all applicable Natural Resources Conservation Services Field Operating Technical Guide (FOTG) Practices).
- 5. Off-stream water facilities (not including well construction) may be provided for less than 20 Animal Units.
- 6. For wells to be eligible, operations must have (on or before the beginning of the funding cycle) at least 20 "Animal Units" (see Animal Units Chart in No. 8 of this section). A cost-effective analysis for wells must be completed in accordance with the following criteria:
 - a. Gravity feeding or pumping from existing surface and groundwater sources and water hauling are to be considered as first choices. If these alternatives are not feasible, dug or drilled wells may be considered.

- b. Wells must be either less costly or demonstrably more cost-effective (may include analysis of such issues as hydraulic flow, sediment clogging, freezing).
- c. The practice chosen must be in accordance with the conservation plan (or more focused plan involving livestock exclusion and off-stream water provisions).
- d. Plan(s) must be completed and approved by at least the respective conservation district before off-stream watering is installed.
- 7. Financial Assistance Limits and Other Provisions.
 - a. Off-stream livestock water provisions are eligible only where permanent and continuous exclusion from waters of the state is provided.
 - b. Off-stream livestock water provisions are eligible for financial assistance based on the continuous linear distance of riparian exclusion per land owner. Financial assistance is limited to 75% of the total eligible costs. See Table K-1 below for limits. Maximum of \$30,000 per landowner.
 - c. Off-stream water developments must be located a distance away from surface waters that will prevent water quality impacts.
 - d. Loans may be issued to cover up to 100 percent of eligible project cost.
 - e. Pumps, pipes, water troughs, and wells, as needed, are eligible.
 - f. Neither electrical nor mechanical power provisions are eligible. All components of solar powered pumps are project eligible.
 - g. Heavy use area protection at watering facilities is eligible as needed. The cost of heavy use area protection is included in the final cost of the off-stream watering facility and is included in the funding limitations.
 - h. The loan or grant will not reimburse recipients for costs associated with unsuccessful well drilling.
 - i. Cross fencing is currently ineligible.
 - j. Third party contributions above the eligible financial costs are eligible to be counted toward match.

Table K-1—Miles of Livestock Riparian Exclusion and Financial Assistance Limits

| Miles of Livestock Riparian Exclusion | Financial Assistance Limit (per project) | |
|--|---|--|
| Less than 1/2 mile | 75% of total eligible cost or \$6,000 (whichever is less) | |
| Greater than or equal to 1/2 mile and less than 1 mile | 75% of total eligible cost or \$9,000 (whichever is less) | |
| Greater than or equal to 1 mile and less than 1.5 miles | 75% of total eligible cost or \$12,000 (whichever is less) | |
| Greater than or equal to 1.5 miles and less than 2 miles | 75% of total eligible cost or \$18,000 (whichever is less) | |
| Greater than or equal to 2 miles and less than 2.5 miles | 75% of total eligible cost or \$24,000 (whichever is less) | |
| Greater than or equal to 2.5 miles | 75% of total eligible cost or \$30,000 (whichever is less) | |

8. Animal Units as defined in WAC 173-224-030:

Table K-2—Animal Units

| Animal Type | Number of Animal Units per Animal |
|----------------------------------|-----------------------------------|
| Dairy Cows | |
| Jersey Breed | |
| Milking Cow | 0.900 |
| Dry Cow | 0.900 |
| Heifer | 0.220 |
| Calf | 0.220 |
| Other Breeds | |
| Milking Cow | 1.400 |
| Dry Cow | 1.000 |
| Heifer | 0.800 |
| Calf | 0.500 |
| Feedlot Beef | 0.877 |
| Horses | 0.500 |
| Sheep | 0.100 |
| Swine for breeding | 0.375 |
| Swine for slaughter | 0.110 |
| Laying hens & pullets > 3 months | 0.004 |
| Broilers & pullets < 3 months | 0.002 |

Example Calculation: 23 Feedlot Beef x 0.877 = 20 Animal Units.

Appendix L. Livestock Feeding BMPs

Introduction

The following BMPs are intended to support the relocation of livestock feeding areas that threaten water quality, or enhance existing feeding areas distanced from surface waters. A combination of these BMPs may be installed when appropriate. Funding for the following BMPs only applies to projects that will improve existing water quality problems and may not be used to rebuild feeding facilities where the primary purpose is to repair existing structures. All projects must be approved by Ecology's Project Management Team before installation.

Conditions for All Livestock Feeding BMPs

- Operations meeting the definition of the Concentrated Animal Feeding Operation Permit are not eligible for funding.
- When BMPs are installed, new feeding areas must be located, or pre-existing areas must be relocated so that the presence of livestock will no longer threaten to impact surface water quality. Grant recipients must provide assurances to the Ecology Project Manager that the location or relocation of the new or existing feeding area optimizes water quality protection. Ecology will not fund projects that are located too close to waters of the state. BMPs are eligible only when livestock presence currently occurs within or adjacent to riparian areas and can be an assumed threat to the integrity of the riparian area and water quality.
- All BMPs must be built and located according to NRCS specifications.
- The producer must exclude livestock from all waters of the state, with a minimum 35-foot setback from the ordinary high water mark.
- The owner or operator must have a plan in place to manage manure.
- The landowner must sign a landowner agreement.

Eligible Livestock Feeding BMPs

Heavy Use Area Protection

- Heavy use area protection is eligible only to protect critical areas directly surrounding feeding and watering locations.
- Building permanent feed lots where livestock will be confined continuously throughout the year is not eligible for Heavy Use Area Protection funding.
- Heavy use area protection is eligible for 50% of the total eligible cost, up to a maximum of \$3,000 per landowner.
- Concrete and other cement based materials, rock aggregate, and other appropriate materials are eligible for funding.
- Heavy use area protection must prevent erosion and polluted runoff at feeding and watering facilities.

- Heavy use area protection areas must be designed and constructed according to NRCS standards.
- The producer must use a waste storage facility meeting the criteria below to be eligible for heavy use area protection.

Waste Storage Facilities

- Waste storage facilities, waste storage covers, and roof runoff structures are eligible.
- The total package of waste storage BMPs is eligible for 50% of the total eligible cost, up to a maximum of \$6,000 per land owner.
- Waste storage facilities must include covers and roof runoff structures.
- Waste storage facilities must be part of a manure management plan.

Windbreaks

- Windbreaks are planted tree rows used to shelter livestock from summer sun and winter wind, and therefore encourage the congregation of livestock and utilization of pasture or rangeland away from the riparian area.
- Windbreaks are eligible to support the relocation of winter feeding operations upland, away for riparian areas, and to prevent water quality impacts.
- Windbreaks are eligible for 50% of the total eligible cost, up to a maximum of \$1,000 per landowner.

Appendix M. Riparian Restoration and Planting

The following are requirements when implementing a riparian restoration or riparian planting project. These requirements are terms in the final activities project funding agreement.

Conditions of the Funding Agreement

If the recipient installs BMPs that are not approved by Ecology prior to installation, the recipient assumes the risk that part or all of the reimbursement for that activity may be delayed or ineligible.

Technical assistance for eligible water quality-related agriculture activities provided under the terms of this agreement must be consistent with current U.S. Natural Resources Conservation Service (NRCS) standards and Technical Guide. Technical assistance, proposed practices, or project designs that do not meet these standards may be accepted if approved in writing by the NRCS and Ecology.

All restoration activities must be consistent with the <u>Stream Habitat Restoration Guidelines</u>, available at <u>http://wdfw.wa.gov/publications/01374/wdfw01374.pdf</u>, and the requirements below. If the recipient wishes to design a riparian buffer not consistent with the following requirements, the recipient must submit an adequate justification as to why these cannot be met and an alternate plan to Ecology's Project Manager for review and approval.

Riparian Buffers

- The minimum buffer size for streams will be 35 feet (on both sides of the stream) measured from the top of the stream bank. For those streams which provide habitat for endangered or threatened aquatic species, the minimum buffer size will be two active stream channel widths (but not less than 35 feet on both sides). To maintain fully functional riparian ecosystems and provide sufficient habitat to meet the needs of fish and wildlife, it is recommended that the recipient use Washington Department of Fish and Wildlife buffer widths table whenever possible.
- When buffers are to be created in forested areas, buffer width must also be consistent with Forest Practices Rules.
- The recipient must obtain a conservation easement or a landowner agreement signed by the landowner prior to the establishment of a riparian buffer on private property. The conservation easement must be consistent with <u>Funding Guidelines FY 2014</u>. The easement or a landowner agreement must be effective for a minimum of ten years unless otherwise authorized by Ecology.
- The recipient must develop a written and signed three-year maintenance plan prior to establishing all riparian buffers. This plan will detail responsibilities for both the landowner and the recipient and must include details concerning, but not limited to, watering plants, replacing dead plants, controlling noxious weeds, and repairing and maintaining buffer fencing.

• Buffers established as part of this grant may not violate county Critical Area Ordinances, county Shoreline Rules, or other state and local regulations.

Riparian Plantings

- The recipient must develop plans for all riparian buffers prior to establishment which include plant locations and species. The plan must be based on an assessment of native plant associations and community types.
- The recipient must only plant species that are riparian in nature and indigenous to the primary watershed where the buffer is being established. (Ask the question, "Would this plant historically have occurred at this site?")
- The recipient must use, to the greatest extent possible, genetically appropriate plant materials collected from the primary or secondary watershed where the buffer is to be established.
- The recipient must utilize, to the greatest extent possible, plant species that are early successional within the primary watershed. Early successional species are those whose characteristics are such that they are first to colonize after a disturbance.

Streambank Protection

- Streambank protection projects must not stand alone, but be part of a larger riparian buffer project. The project must include the buffer and planting requirements listed above.
- Rock should not be used to armor a bank against the erosive forces of a stream or river unless a bridge, road, or other manmade structure cannot be protected by any other means. In any situation where rock is to be used, the RECIPIENT must submit the design to Ecology's Project Manager for an evaluation.
- Streambank protection designs must be consistent with the Aquatic Habitat Guidelines: Integrated Streambank Protection Guidelines document provided by Ecology upon request.

Livestock Watering

- If the recipient proposes to convey water from a stream or river to a stock tank, the project must be consistent with the Policy for Conveying Stockwater Away From Streams to Protect Water Quality (Water Resources Program Policy POL-1025) and the requirements specified in the associated program funding guidelines. This policy allows small amounts of water consistent with historic practice to be diverted to stockwater tanks for consumption by livestock.
- Off-stream watering systems will be the priority above designs that include water gaps in fencing for livestock access. If the RECIPIENT wishes to design water gaps, a plan must be submitted to Ecology's Project Manager which details the design and a description of why off-stream systems cannot be utilized as well as detailing how potential impacts to water quality resulting from water gaps will be minimized.

• The recipient must install livestock exclusion fencing at a minimum 35 feet from the top of the stream bank in order for livestock watering systems to be eligible for reimbursement.

Appendix N. Cultural and Historic Resources Review Guidance

This guidance provides information for projects funded by the Department of Ecology's (Ecology) Revolving Fund, Centennial, and Section 319 programs to meet Executive Order 05-05 and Section 106 of the National Historic Preservation Act requirements.

Please note that the cultural resources review process is for government-to-government communication. Requirements of this process will not be met until Ecology has provided information to the Tribes about project activity.

This process must be followed even if the recipient has been working with Tribes on the project.

- The recipient must complete DAHP's EZ-1 form or conduct a site specific survey. A site specific survey is only required for areas where there is a high sensitivity and potential to discover cultural resources. If the project will impact a building that is 50 years or older, the recipient must complete an EZ-2 Form. The EZ forms and Survey Coversheet can be downloaded from DAHP's website: <u>http://www.dahp.wa.gov/governors-executive-order-05-05</u>.
- The recipient must write an inadvertent (IDP). An IDP does not need to be site-specific, however it can be a general procedure for all projects implemented by the organization. IDP must be distributed and reviewed by all participating parties prior to any on-theground work so they are fully informed of the appropriate procedures.
- 3. The recipient will send one hard copy and one electronic .pdf version of the EZ Form, any tribal communication, and identify the potentially interested Tribes to Ecology's Project Manager. The Project Manager will forward the electronic copies of the paperwork to Ecology's SERP Coordinator.
- 4. Ecology will send out letters with the EZ Form or survey to Tribes and DAHP. The Tribes have a 30 day comment period to initiate a more in-depth discussion about the project, submit any comments, or make a determination of impact on the project. After the 30 day comment period, if there has not been a determination of impact by a Tribe, Department of Archaeology and Historic Preservation (DAHP), or other interested party, the project may proceed as planned.

Figure N-1 provides a flowchart outlining the review process and additional information for cultural resources review.

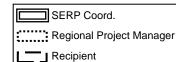
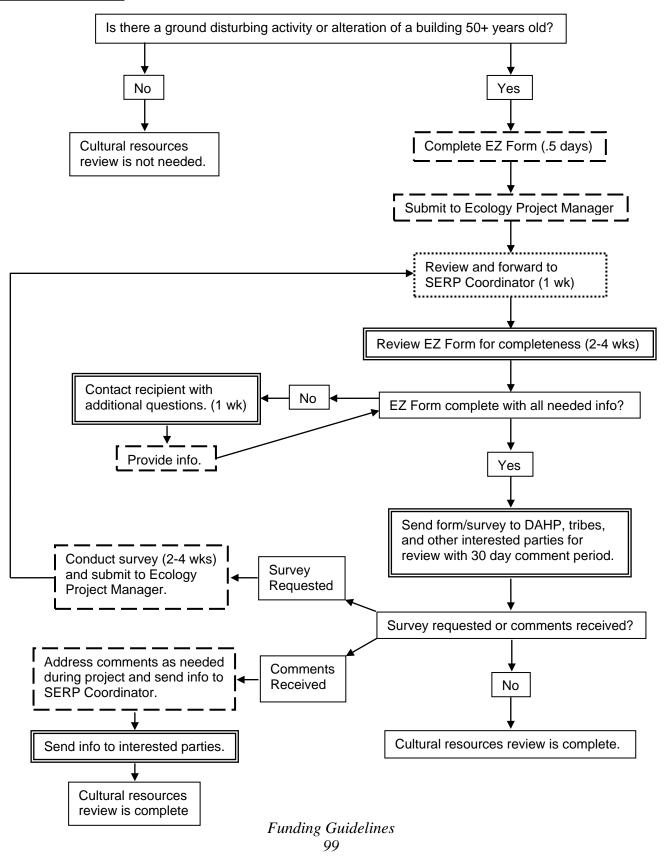


Figure N-1—Cultural Resources Review Flowchart

Cultural Resources Review Process



Section 106 versus Executive Order 05-05

- Section 106 of the National Historic Preservation Act is applied to actions funded by federal agencies. Section 106 applies to the Water Quality Program's State Revolving Fund Loan Program and Section 319 Grant Program.
 - If Section 106 has been conducted for a project by another federal agency, it may be adopted by Ecology for either state or federally funded projects. Please contact your Project Manager the make sure a review can be adopted.
- Governor's Executive Order 05-05 is required for all state funded capital projects. This includes projects funded by the Centennial Clean Water Program, Stormwater Retrofit and Low Impact Development Grant Program, Stormwater GROSS Grants, and others.
 - Executive Order 05-05 cannot be adopted to meet Section 106 requirements for federally funded projects.
 - Ecology can adopt another state agency's 05-05 process to meet cultural resources review requirements. Please contact your Project Manager the make sure a review can be adopted.

<u>Correspondence</u>: Ecology is responsible, as the funding agency, for contacting the Department of Archaeology and Historic Preservation (DAHP), tribes, and other interested parties to meet cultural resource review requirements. Previous approval from DAHP does not fulfill these requirements.

EZ Forms: found at bottom of page http://www.dahp.wa.gov/governors-executive-order-05-05.

- EZ-1: This form is to provide information about ground disturbing activities.
- EZ-2: This form is to provide information about alterations to buildings 50 years or older.

<u>Ground Disturbing Activities</u>: This refers to any work that impacts the soil or ground from its current conditions. There is no threshold for this criterion. If the activity requires any work that goes below the surface of the ground, it requires a cultural resources review.

<u>Changes to Project Design or Project Area</u>: If there are any changes made to the project area or design after cultural resources review has been completed, review will have to be reinitiated in order to capture the changes. It is suggested that cultural resources review begin only after the final design is complete to expedite the process.

<u>Timing</u>: The time period it takes for cultural resources review occurs cannot change. Please plan ahead to ensure enough time is permitted prior to implementation.

<u>Eligibility</u>

- All activities associated with cultural resources review are grant and loan eligible.
- Construction or BMP implementation that occurs prior to cultural resources review will not be eligible for reimbursement.

<u>Questions?</u> Contact your Project Manager.