Oregon Nonpoint Source Pollution Program 2014 Annual Report

As required by the Federal Clean Water Act

Submitted to: EPA Region 10

June 2015

State of Oregon
Department of Environmental Quality

DEQ Headquarters
Watershed Managment
811 SW 6th Avenue
Portland, OR 97204
Phone: 503-229-6850
800-452-4011
Fax: 503-229-6037
Contact: Don Yon
www.oregon.gov/DEQ

By: Watershed Management Section
5-19-15 - DEQ

This report prepared by:

Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
1-800-452-4011
www.oregon.gov/deq

Contact:
Don Yon
(503) 229-6850

Table of Contents

Executive Summary **1**
Background 1
General Description of Report 1
Major Accomplishments 2
Program Directions 2
1. Introduction **3**
1.1 General Description of Report 3
1.2 Highlights 3
1.3 State of Oregon Water Quality Program 5
1.4 Partners 7
2. Oregon's Water Resources **9**
3. Oregon's Nonpoint Source Program **10**
3.1 Description of NPS Program 10
3.2 Oregon NPS Management Program Plan 10
3.3 Oregon NPS Program Funding 11
3.4 Program Directions and Priorities in 2014 13
3.5 Oregon NPS Management Program Plan Key Actions 15
3.6 Prioritization of NPS Activities in 2014 24
4. NPS Activities and Accomplishments in 2014 ..... **27**
4.1 Programmatic – NPS Management and Administration 27
4.2 Use of 2014 319-Grant Allocation 38
4.3 Project Implementation (2014 Activities) 41
4.4 Land Uses 56
4.5 Progress of 319 Grant Funded Projects 66
5. Success Stories and Environmental Improvement **72**
5.1. WQ-10 and SP-12 Projects 72
APPENDIX 1: SUBBASIN BY SUBBASIN FUNDING **81**
APPENDIX 2. Progress of NPS 319 Funded Projects (Grant Performance Report) **205**
APPENDIX 3. Oregon 319 ..... **215**
Nonpoint Source **215**
Implementation Grants **215**
Section A: Request for Final Application 218
Section B: §319 Grant Final Application Form 222
Section C. Pre Proposal Project Priorities 225
Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation 225
Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.) 230
Eastern Region Project Priorities: Groundwater Management Areas (GWMAs) 231
Western Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation 232

Western Region Project Priorities: Groundwater Management Areas (GWMAs) 235
Western Region Project Priorities: Drinking Water Source Protection (DWSP)..... 236
Areas identified can be found at: http://www.deq.state.or.us/wq/dwp/results.htm..... 236
Northwest Region Project Priorities: TMDLs/303(d) Development and Implementation Watershed Approach Implementation..... 237
Northwest Region Project Priorities Drinking Water Source Protection (DWSP) 238
Headquarter Priorities..... 239
Statewide Drinking Water Priorities..... 240
APPENDIX 5: Proposed Projects Received from the 2014 RFP..... 241
APPENDIX 6: Acronyms..... 245

Tables

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 & 2014 Activities 16
Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. 28
Table 3. Breakdown of Oregon's 2014 Section 319 Grant Allocation from EPA..... 38
Table 4. 2014 Oregon's 319 Grant Allocation from EPA Use: Funded Positions / NPS Program Activities 38
Table 5. 2014 Oregon's 319 Grant Funded Positions 41
Table 7. SWCDs Outreach and Education Summary in 2014. In general, the number of events and attendance decreased from the previous year. The decrease is likely due to the fact that SWCDs began working with individual land owners in focus areas..... 63
Table 8.. Under scope of work agreements with ODA, Oregon's SWCDs provided technical assistance to approximately 7,000 landowners in 2014. Over 330,000 additional acres of agricultural lands are now managed under 375 approved conservation plans. 63
Table 9. Oregon 319 2014 Project List by Subbasin 68
Table 10. Estimates of NPS Load Reductions of One 2014 -- 319 Funded Projects..... 70
Table 12. Data analyses show that bacteria levels have dropped significantly in the Tillamook River subbasin. 78
Table 13: 319 Oregon Open Projects Status, 2011-2014..... 205

Figures

Figure 1. Waterbodies of Oregon.....9
Figure 2. In 2014, the majority of compliance cases were in the Northwestern part of the state. ODA does not take enforcement actions without a site visit. 59
Figure 3. In 2014, more compliance investigations were initiated due to issues related to riparian management than other water quality issues. 60
Figure 4. In the past 14 years, over half of the investigations were initiated due to complaints submitted by the public. In 2014, more than half of the investigations were initiated by ODA, and more than 2/3 were initiated by ODA or other agencies. 60
Figure 5.. ODA took 74 compliance actions in 2014. In some cases, it could take ODA more than 1 site visit to take compliance action..... 62
Figure 6. 2014 Funding Categories..... 67

Executive Summary

Background

This Nonpoint Source Pollution (NPS) program update report is to meet the requirements of section 319 (h) (8) and (11) of the Federal Clean Water Act (CWA) (33 USC 1329). The report documents the activities and accomplishments of the State of Oregon in general and the Oregon Department of Environmental Quality (DEQ) in particular regarding the administration of the State's NPS Program during the period January – December 2014. Oregon revised its NPS Control Program Plan following EPA's guidance that became available in 2014.

For this year's Oregon NPS Program Annual Report, the U.S. Environmental Protection Agency (EPA), Region 10 staff provided assistance in the development of the **Oregon Nonpoint Source Pollution Program 2014 Annual Report**. This included providing assistance in the development of the 2014 review of 319-grant work plans and processing Oregon's grant and GRTS technical assistance and training to develop pollutant load reduction estimates of the 2014 funded projects.

General Description of Report

Following EPA Section 319 Grant reporting guidelines, the report contains the following required elements:

- Description of Oregon's NPS Program.
- Description of Oregon's Baseline Regulatory Statutes and Non-Regulatory NPS Programs.
- Program Directions and Priorities in 2014.
- Nonpoint Source Management and Administration, Including a Description of Oregon's Performance Partnership Agreement (PPA) and Use of Incremental and Base Funds.
- Identification of the 2014 Project Implementation Activities, which Included the Following Programs/Projects:
    - Total Maximum Daily Loads
    - New Water Quality Standards
    - Watershed Plan Development
    - NPS Projects Funding by Basin/Subbasin
    - Toxic Chemicals
    - Water Quality Issues on Agricultural Lands
    - Pesticide Management
    - Water Quality Issues on State and Private Forest Lands
    - Water Quality Issues on Federal Forest Lands
    - Clean Water State Revolving Fund
    - Drinking Water Protection in Oregon
    - Coastal Zone NPS Program
    - Monitoring and Data
    - Groundwater Management Areas (GWMAs)
- Progress of 319 Grant Funded Projects, including Grant Performance Report Summary, Description of Geographic and Programmatic Priorities for 2014 319 Funding, and progress of 2014 – 319-Grant Funded Projects and Categories.
- Calculated Nitrogen, Phosphorus, and Sedimentation-Siltation Pollutant Load Reduction Estimates of 2014 Funded Projects.
- Description of DEQ's Watershed-Based Plans.
- Success Stories/Environmental Improvement (WQ-10) and (SP-12) Projects and Other.

Commented [A1]: Other what?

Major Accomplishments

Of the many nonpoint source activities accomplished every year by DEQ, the following is the list of the major accomplishments:

- Oregon's total 2014 319-Grant Allocation of $2,105,000 was distributed as follows: $764,463 or approximately 36% was directed to the thirty-one (31) 319 projects and the remainder, $1,340,537 or approximately 64%, was directed to the 2014 - 2016 Performance Partnership Agreement (PPA) water quality components to fund 9.73 FTE DEQ staff positions for the NPS program.
- The $764,463 total funds for 319 funded projects in 2014 were divided in four areas of emphasis, as follows: Best Management Practices (BMP) Implementation (22.4%), TMDL Implementation (57.2%), Pesticide Stewardship Program (11.1%), and Information and Education (9.3%). Note that "BMP Implementation" did not include implementation of BMPs identified in a TMDL Implementation Plan and "TMDL Implementation" primarily focused on effectiveness monitoring.
- DEQ completed pollutant load reductions estimates by pollutant for one 319 funded project are as follows: 39.7 Tons/Year Biological Oxygen Demand, 200.8 Tons/Year Nitrogen Reduction; 30.9 Tons/Year Phosphorous Reduction; and 65Tons/Year Sedimentation-Siltation Reduction. Load reduction estimates were included in the EPA database GRTS (Grants Reporting and Tracking System).
- DEQ began collecting information about investments made within 72 subbasins in Oregon related to watershed restoration, protection, and water quality enhancements for 2012 Annual Report and continue to work on it. DEQ has Year 2013 information from only OWRI data for this year's NPS Annual Report. The total cost for funded projects within the 72 subbasins is $521,289,422 or 521 million dollars.
- For the Coastal NPS Pollution Control Program (6217) NOAA and EPA received hundreds of comments, including comments from the State of Oregon submitted on March 20, 2014. Oregon's submittal included additional and revised measures addressing the perceived deficiencies cited in NOAA and EPA's December 2013 notice. On January 30, 2015, NOAA and EPA issued ~~indicated they intend to issue~~ a finding that Oregon had failed to submit a fully approvable Coastal Nonpoint Program.~~al determination by January 30, 2015~~
- Oregon's NPS Management Program Plan (NPS Plan) describes outcomes and key actions expected over the 5-Year plan period from 2014 to 2018. DEQ will report on the progress made on each of these actions through the Oregon DEQ NPS Annual Report that is submitted to USEPA Region 10 for approval each year. Each year the DEQ NPS Annual Report will identify the activities completed during the year in implementing the Oregon NPS Program Management Plan.
- In 2014 two success stories were written for the Kilchis River and Tillamook River; however these stories did not satisfy the requirements for . EPA's national measures ~~No~~ SP-12 or WQ-10. ~~Project success stories were written for 2014.~~

Program Directions

DEQ continues to implement the NPS Program and direct funding into basins impaired by NPS pollution. DEQ is working on prioritizing the work by continuing to develop watershed plans and implementation of the watershed approach. It should be noted that Oregon plans to revise the NPS Management Program Plan once EPA guidance becomes available. In addition, DEQ began developing Implementation-Ready TMDLs, which would incorporate the use of the EPA's key watershed planning components with the nine key NPS elements.

DEQ is committed to a continual improvement in coordination between the various DEQ Water Quality Programs including NPS, TMDLs, Integrated Report, Source Water Protection, Groundwater, Clean Water State Revolving Fund, and 319 Project Grants. DEQ has also been working with staff from the Oregon Water Enhancement Board (OWEB), Natural Resource Conservation Service (NRCS), and other funding entities to prioritize and coordinate our efforts to address nonpoint sources of pollution.

Commented [A2]: This is significantly lower than 50% requirement. Did they request an exemption?

Commented [A3]: Only one project included load reductions? Does this include projects from former years?

Commented [A4]: Why? What is the purpose of this information?

Commented [A5]: 2012 annual report for what program?

Commented [A6]: Other agencies within the State of Oregon?

Commented [A7]: Oregon to submit its final NPS management program plan to EPA for approval on 6/18/15.

Commented [A8]: This sentence makes no sense. EPA issued it guidance in 2013 and Oregon submitted a draft revised plan in 2014.

1. Introduction

1.1 General Description of Report

This NPS program annual report is to meet the requirements of section 319 (h) (8) and (11) of the Federal Clean Water Act (CWA) (33 USC 1329). The report documents the activities and accomplishments of the State of Oregon in general and the Oregon Department of Environmental Quality (DEQ) administration of the State's Nonpoint Source (NPS) Pollution Water Program.

The report covers an update on the NPS activities implemented by the State during the period January – December 2014. Like many other years in the Oregon program, this period was productive. As described below, Oregon is making progress toward meeting the substantial challenges presented by NPS water pollution.

1.2 Highlights

The State program continues to use innovative, cooperative, and community-based methods to improve water quality and enhance watersheds.

Some of the activities and accomplishments for 2014 were:

- Oregon's total 2014 319-Grant Allocation of $2,105,000 was distributed as follows: $764,463 as pass-through funds to support thirty-one (31) 319 projects grant and the remainder, $1,340,537 or approximately 64%, was directed to the 2014 - 2016 Performance Partnership Agreement (PPA) water quality components to fund 9.73 FTE DEQ staff positions for the NPS program.
    - Oregon's 2014 319 grant **9.73 FTE** funded positions are working on the following NPS program activities: NPS TMDL Modeling (0.89 FTE),
    - Regional NPS Implementation & NPS TMDL Development & Implementation (4.84 FTE),
    - Prorates and Management and Administrative Support (1.01 FTE),
    - 319 Grant Administration and Provision of Technical Assistance with Applicants,
    - DEQ Staff and Coordination with Other Funding Agencies (1.00 FTE), and
    - NPS Policy Development, Collaboration and Provision of Technical Assistance with Stakeholders and other Local, State, and Federal Agencies (2.00 FTE).
- The $764,463 total funds for 2014 were divided in six areas of emphasis, as follows:
    - BMP + TMDL Implementation (67%),
    - Watershed Study (16%),
    - Information and Education (7%),
    - Pesticide Stewardship Program (3.5%),
    - National Water Quality Initiative (NWQI) (3.5%), and
    - Groundwater Management Area Plan Implementation (3%).
- DEQ completed pollutant load reductions estimates by pollutant for one 319 funded project are as follows: 39.7 Tons/Year Biological Oxygen Demand, 200.8 Tons/Year Nitrogen Reduction; 30.9 Tons/Year Phosphorous Reduction; and 65Tons/Year Sedimentation-Siltation Reduction. Load reduction estimates were included in the EPA database GRTS (Grants Reporting and Tracking System).
- DEQ began collecting information about investments made within 72 subbasins in Oregon related to watershed restoration, protection, and water quality enhancements for 2012 Annual Report and continue to work on it. DEQ has Year 2013 information from only OWRI data for this year's NPS Annual Report. In this year's NPS Annual Report the total cost for funded projects within the 72 subbasins is $521,289,422 or 521 million dollars.
- DEQ, ODFW, ODF, and federal agencies assembled the scientific case for protecting natural thermal regimes, analyzed effects of landscape disturbance on thermal regimes, and presented this information to the Board of Forestry and Environmental Quality Commission. The Board of Forestry subsequently affirmed the need to continue the rule analysis for increased protections on fish-bearing streams and directed ODF to begin the process of constructing new rules.

Commented [A9]: ???

Commented [A10]: Missing FTE amount

Commented [A11]: Why? What is the purpose of collecting this information.

- The following Water Quality Status/Action Plan is nearly completed: Clackamas and Sandy River Basin. DEQ has begun working on Water Quality Status/Action Plans for the following: Umatilla Basin, Tualatin Subbasin, and Upper Willamette Area.

Commented [A12]: May want to include a sentence that describes or defines what this is/does.

Total Maximum Daily Load Program

2013 – 2015 accomplishments

Commented [A13]: I thought this report only covered 2014.

- Continued to develop the Deschutes, Coquille and Mid-Coast basin TMDLs. Continued working on TMDL implementation and implementation plan development in the Willamette, Rogue, Umpqua, Klamath, Tillamook, North Coast and other basins with issued TMDLs.
- Completed implementation plan reviews for submitted TMDL implementation plans for the John Day, Wallowa (Imnaha, Lower Grand Ronde) and Malheur basins. These plans guide management practices and pollutant controls to meet load allocations in TMDLs.
- Willamette TMDL 5-year review of DMA TMDL implementation progress.
- Tracked and reported on administrative and environmental outcomes from water quality restoration and protection efforts to meet TMDL allocations.

Commented [A14]: Can EPA have a copy of this report?

2015 – 2017 expected results

- Submit Coquille, Deschutes, MidCoast, Coos, and Powder/Burnt TMDLs to EPA for approval. Continue working on TMDL implementation and implementation plan reviews in the Willamette, Rogue, Umpqua, Klamath, Deschutes, John Day, Tillamook, North Coast and other basins with issued TMDLs.
- Continue to focus 319 grant activities in priority basins for TMDL implementation to address nonpoint sources of pollution.
- Track and report on administrative and environmental outcomes from water quality restoration and protection efforts to meet TMDL allocations.

Nonpoint Source program

2013 – 2015 accomplishments

Commented [A15]: I thought this report only covered 2014.

- Distributed $2.35 million in 319 grants to fund projects in Oregon's priority basins and groundwater management areas.
- Updated Oregon's Nonpoint Source Management Program Plan.
- Prepared the 2013 Annual Report of Nonpoint Source Program accomplishments.
- Worked collaboratively with the Oregon Department of Agriculture, Oregon Department of Forestry, and other Designated Management Agencies to address nonpoint source issues associated with agriculture, forest, or urban land uses.

Commented [A16]: This is misleading and implies that the plan is completed and approved by EPA. ODEQ submitted the plan to EPA for approval on 6/18/15.

2015 – 2017 expected results

- Distribute $1.7 to $1.9 million in 319 grants to fund projects in Oregon's priority basins and groundwater management areas.
- Prepare an annual report of Nonpoint Source Program accomplishments.
- Track and report on administrative and environmental outcomes from water quality restoration and protection efforts.
- Continue to work with the Oregon Department of Agriculture, Oregon Department of Forestry, and other Designated Management Agencies to address nonpoint source issues associated with agriculture, forest, or urban land uses.

1.3 State of Oregon Water Quality Program

State programs to protect or improve Oregon's water quality date back to 1938. Oregon's point source permit program was the second approved state program in the Country (September 26, 1973). More recently, the state also adopted another landmark program: in 1996, the state adopted the Oregon Plan for Salmon and Watersheds to focus work on watershed restoration and recovery of endangered salmonid populations.

The water quality program's mission is to protect and improve Oregon's water quality. Protecting Oregon's rivers, streams, lakes, estuaries and groundwater quality keeps these waters safe for multiple beneficial uses such as drinking water, fish and aquatic wildlife habitat, recreation and irrigation. This is accomplished by developing and implementing water quality standards and clean water plans, regulating wastewater treatment systems and industrial dischargers, collecting and evaluating water quality data, providing grants and technical assistance to reduce nonpoint pollution sources, and providing loans to communities to prevent or mitigate water pollution. The availability of clean and healthy water is critical to Oregon's environment and economy. In recent years, state and federal funding for DEQ's clean water work has declined – both in real dollars and in what those dollars buy.

The state water quality program can be divided into the ten interdependent program elements listed below:

1. Water quality standards that establish beneficial uses for the waterbody as well as maximum levels of pollutants that can be in the waterbody without adversely affecting the designated use.
2. Permits for point sources, including stormwater, discharging pollutants to waters of the state.
3. Water Quality 401-Certifications for hydroelectric projects, dredge, and fill activities.
4. NPS TMDLs specifically developed for forestry, agriculture, and urban activities.
5. Biennial assessment of State waters to identify those waters that are not meeting water quality standards.
6. Pretreatment, Sewage Sludge Management, and On-Site System programs to ensure that water quality is not compromised by other land-based activities.
7. Development of TMDLs, which are limits on pollution intended to bring rivers, lakes, and streams into compliance with water quality standards.
8. Cost-share grants and low interest loan programs to address municipal sewage treatment and disposal needs, and activities to reduce or eliminate nonpoint sources of pollution.
9. Information and education outreach activities to create awareness by the public about the importance of NPS pollution and its impact groundwater and surface water quality.
10. Facility or activity-specific compliance assessment, a pilot NPS effectiveness monitoring effort, technical assistance, and enforcement as warranted ensuring State water quality requirements are met.

The water quality program has an increased emphasis on the "watershed approach" as a way to better identify and address high priority water quality issues in a basin or region. The watershed approach combines the expertise of DEQ's 17 water quality sub-programs to produce basin-based assessments that are data-driven and contain quantitative elements that describe water quality conditions and include recommendations for actions that DEQ and others can take to improve water quality. DEQ uses these assessments to work with local stakeholders, such as communities, watershed councils and conservation districts, as well as local, state and federal agencies, to find smart solutions to local water quality issues. This effort aligns with EPA's national strategy to Improve Water Quality on a Watershed Basis in the 2012 National Program Manager's guidance.

DEQ's current Water Quality Program priorities include the following:

Working with state, local and national partners on water quality, water quantity and ecosystem protection.

DEQ is committed to developing and leveraging partnerships with other agencies and organizations to achieve desired environmental outcomes in the most cost-effective manner. Examples of this include many of the NPS Success Stories that resulted from the coordinated efforts of various agencies, communities, watershed councils and landowners. Water quality trading is another example, such as the City of Medford's wastewater permit, that relies upon the coordinated efforts of The Freshwater Trust and the Willamette Partnership to ensure compliance with permit requirements and costs half as much as a traditional, engineered approach. These types of partnerships are evident throughout this PPA, including several new or expanded initiatives such as the following:

Commented [A17]: Oregon develops TMDLs for mixed PS and NPS.

Commented [A18]: Not currently being conducted biennially.

Commented [A19]: How does this differ from #4?

Commented [A20]: Still a pilot?

Commented [A21]: Tribes too?

Commented [A22]: ???? This is not a PPA but the annual report.

- Development of the Implementation Ready Mid-Coast TMDLs requires a significantly higher level of stakeholder engagement to develop enforceable implementation plans that will be incorporated into the TMDLs.
- EPA directed the states in 2013 to conduct effectiveness monitoring using 319 funds in National Water Quality Initiative (NWQI) watersheds where the Natural Resources Conservation Service (NRCS) identified to improve water quality by focusing its investments. In 2013, EPA awarded technical assistance grant for Oregon to develop monitoring plan for Fifteenmile and Willow Creeks NWQI effectiveness monitoring projects. DEQ and its partners will be developing and implementing the effectiveness monitoring projects in those watersheds during 2014-2019.
- Working with the Conservation Effectiveness Partnership in 2014, DEQ continued to meet with USDA-NRCS, Oregon Water Enhancement Board (OWEB), and ODA to evaluate the impacts of grant investments on water quality and watershed health. Although the partner agencies did not finalize the reports on two "pilot watersheds," the Wilson River in Tillamook Bay and Wychus Creek along the Upper Deschutes River, they committed to work on NWQI monitoring projects in 2014 as resources allow.
- Conducting a regional monitoring summit to coordinate and capture data collected by external groups in order to cost-effectively fulfill the data needs of multiple parties.
- Developing and using Watershed Approach Basin Reports as a platform to engage local stakeholders, such as communities, watershed councils and conservation districts, to find smart solutions to local water quality issues.

Supporting and encouraging implementation of clean water action plans (TMDL implementation).

In addition to the development of Implementation Ready TMDLs, DEQ is stepping up its efforts in other ways to ensure TMDL implementation measures result in effective implementation of TMDL implementation plans such as:

- A TMDL Implementation Plan development guidance document for urban and rural residential areas within the Coastal Nonpoint Management Area boundary that will address TMDL responsibilities and new development urban management measures as required by the Coastal Zone Management Act.
- Working with Oregon Department of Agriculture to develop a comprehensive monitoring and evaluation strategy plan for the Agricultural Water Quality Management Program.
- During the biennial review of Agriculture Water Quality Management Area plans and rules, working with ODA and the Local Advisory Committee to incorporate meaningful metrics and benchmarks for meeting load allocations into the plans.

Monitoring Oregon's water quality to support water quality program needs, identify emerging issues, understand water quality status and trends, and to inform management activities targeted at restoring Oregon's water quality and beneficial uses.

DEQ continues to implement elements of the Strategy for Monitoring Oregon's Waters. Monitoring summits with DEQ staff and external partners were held to communicate DEQ's water quality monitoring activities and to gather input on regional and external monitoring priorities DEQ's current water monitoring activities are collecting data across Oregon.

- DEQ toxics monitoring program completed a 5 years screen for toxic contaminants in Oregon's rivers, streams and lakes. Locations were targeted to identify contaminants in water but may include contaminants in streambed sediment and fish tissue. A report, summarizing the findings is nearing completion, will be used to select locations and toxic pollutants for ongoing monitoring.
- Long-term ambient water quality monitoring of conventional pollutants at fixed stations around the state will continue to identify important trends in water quality. The results are communicated to legislators and land use managers to provide important insights into water quality changes and the factors that are contributing to those changes.
- TMDL monitoring continues to provide data targeted at TMDL development and some effectiveness monitoring.
- Groundwater monitoring continues in groundwater management areas with nitrate concentrations of concern. Additional groundwater screening is beginning in the spring of 2015 and will rotate to two new areas each year. Sampling will include nitrates, arsenic and pesticides of concern.

Commented [A23]: Still true?

Commented [A24]: Any updates for 2014?

Commented [A25]: Tribes too?

Commented [A26]: When do you anticipate conducting these activities?

- Beach bacteria monitoring is currently ongoing along the Oregon coast to provide data for beach advisories to protect contact recreation. DEQ continues to participate in the data collection for the National Aquatic Resource surveys for the nation's waters. In 2014, DEQ completed the Oregon portion of the National Rivers and Streams Assessment. Sites for the rivers and streams survey were supplemented to generate a statistically valid sample for an Oregon assessment.
- DEQ continues to participate in the data collection for the National Aquatic Resource surveys for the nation's waters. In 2014, DEQ completed the Oregon portion of the National Rivers and Streams Assessment. Sites for the rivers and streams survey were supplemented to generate a statistically valid sample for an Oregon assessment.
- In 2014, DEQ continued to support monitoring analysis of current use pesticides in eight (8) watersheds for the Pesticide Stewardship Partnership. In addition, DEQ did pilot work in two new watersheds in 2014 to investigate areas where ongoing pesticide monitoring may be needed.
- In 2015, DEQ will participate in the National Coastal Conditions Assessment by collecting biological and chemical samples at 22 locations in Oregon.
- Facilitated volunteer monitoring activities through trainings, monitoring plan development, quality control checks, and data integration. DEQ is working on the acquisition of a new data repository to house environmental monitoring data including volunteer data.
- In 2014 DEQ collected macroinvertebrate samples at approximately 60 locations in the Tillamook and Umatilla watersheds to interpret watershed health. In 2015, approximately 50 macro invertebrates' samples will be collected in two new watersheds as part of an ongoing basin rotation around the state.

1.4 Partners

The cornerstone of the Oregon water quality program is, to the maximum extent practical, to identify solutions at the local community level. Watershed Councils, Soil and Water Conservation and Irrigation Districts, cities and counties all play an important part in the state's strategy.

Oregon has relied on longstanding partnerships to address various activities and sources of nonpoint source pollution. Many of the state's departments, boards, and commissions are now actively involved in addressing nonpoint source pollution and other watershed concerns. In addition, federal agencies are also partners.

1.4.1 Local Partners

- Cities (League of Oregon Cities) http://www.orcities.org/
- Counties (Association of Oregon Counties) http://www.aocweb.org/aoc/default.aspx
- Watershed Councils (Network of Oregon Watershed Councils) http://oregonwatersheds.org/

1.4.2 State Agencies

- Oregon Department of Agriculture (ODA) www.oda.state.or.us
- Oregon Department of Forestry (ODF) www.odf.state.or.us
- Oregon Health Authority (OHA) http://www.oregon.gov/oha/Pages/index.aspx
- Oregon Parks and Recreation Department (OPRD) http://egov.oregon.gov/OPRD/index.shtml
- Oregon Department of State Lands (DSL) http://www.oregon.gov/DSL/index.shtml
- Oregon Department of Geology and Mineral Industries (DOGAMI) http://egov.oregon.gov/DOGAMI/index.shtml
- Oregon State Marine Board (OSMB) (Boat Ramps and Other Access Points) (Marine Board) http://www.boatoregon.com/
- Oregon Watershed Enhancement Board (OWEB) www.oweb.state.or.us
- Department of Fish and Wildlife (ODFW) www.dfw.state.or.us
- Department of Land, Conservation and Development (DLCD) www.lcd.state.or.us
- Department of Oregon Business Development (OBD) http://www.oregon.gov/OBDD/index.shtml
- Department of Transportation (ODOT) http://egov.oregon.gov/ODOT/index.shtml

1.4.3 Federal Agencies

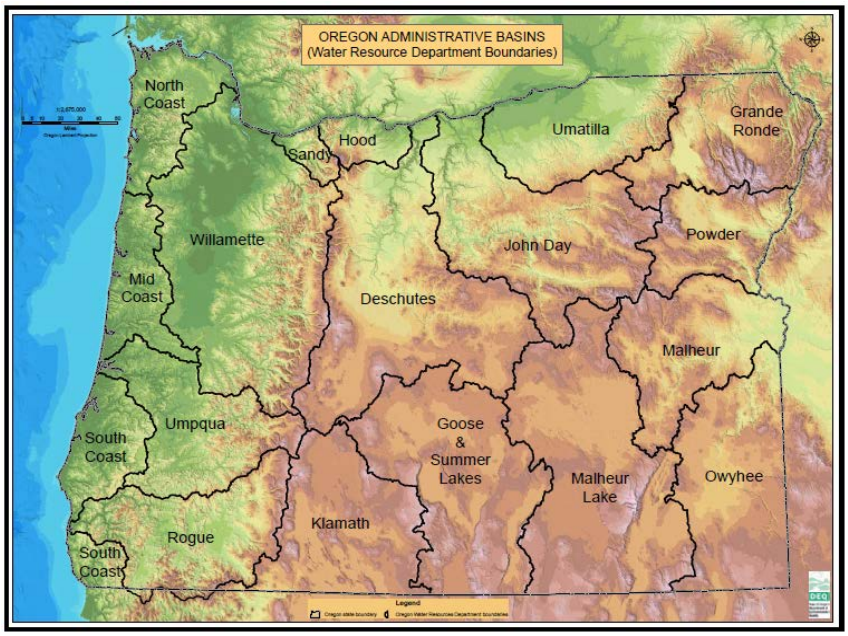
- Soil and Water Conservation Districts (Oregon Association of Conservation Districts) http://oacd.org/
- U.S. Environmental Protection Agency (EPA) http://www2.epa.gov/aboutepa/epa-oregon
- U.S. Forest Service (USFS) http://www.fs.fed.us/r6/water/
- U.S. Bureau of Land Management (BLM) http://www.blm.gov/or/st/en.html
- U.S. Fish and Wildlife Service (USFWS) http://www.fws.gov/oregonfwo/
- U.S. National Marine Fisheries Service (NMFS) http://www.westcoast.fisheries.noaa.gov/index.html
- US Army Corps of Engineers (USACE) http://www.nwp.usace.army.mil/
- U.S. Bureau of Reclamation (USBR) http://www.usbr.gov/pn/
- U.S. National Resource Conservation Services (NRCS) http://www.nrcs.usda.gov/wps/portal/nrcs/site/or/home/
- U.S. Farm Service Agency (FSA) http://www.fsa.usda.gov/FSA/stateoffapp?mystate=or&area=home&subject=landing&topic=landing

1.4.4 Tribes

- Burns Paiute Tribe http://www.burnspaiute-nsn.gov/
- Confederated Tribes of Coos, Lower Umpqua, and Siuslaw http://ctclusi.org/
- Confederated Tribes of the Grand Ronde Community of Oregon http://www.grandronde.org/ /
- Confederated Tribes of Siletz Indians of Oregon http://ctsi.nsn.us/
- Confederated Tribes of the Umatilla Indian Reservation http://ctuir.org/
- Confederated Tribes of Warm Springs Reservation of Oregon http://www.warmsprings.com/
- Coquille Indian Tribe http://www.coquilletribe.org/
- Cow Creek Band of the Umpqua Tribe http://www.cowcreek.com/
- Klamath Tribes http://www.klamathtribes.org/

2. Oregon's Water Resources

Figure 1. Waterbodies of Oregon



Oregon ranks as the tenth largest state in the nation with its nearly 97,000 square miles. The Oregon landscape is diverse and surface water resources are a major feature of Oregon. The state has over 6,200 lakes, 9 major estuaries, over 360 miles of coastline, and 111,619 miles of rivers. End to end; Oregon's rivers could circle the Earth four and a half times.

At present, responsibility for managing its water resources is divided between several state agencies that work in an active and effective partnership to protect state waters.

Commented [A27]: Can you include the names of the agencies?

3. Oregon's Nonpoint Source Program

3.1 Description of NPS Program

Oregon's NPS Program intends to control or prevent nonpoint source pollution to attain water quality standards and thereby protect the beneficial uses of all state waters. Nonpoint source pollution comes from numerous diffuse sources such as runoff from roads, forestry operations, on-site disposal, farms and construction sites. This type of pollution is understood to be the largest source of water quality impairment in Oregon, as well as the rest of the United States.

Oregon will promote and support programs and activities that are guided by best available science and implemented through an adaptive management approach. In addition, Oregon will realize these goals by striving for broad community acceptance and involvement.

Oregon's strategy for improving state waters is on a geographic basis. The state has 21 river basins and 91 sub-basins. The state's National Pollutant Discharge Elimination System (NPDES) permitting, assessment, and TMDL work has been aligned and prioritized according to these sub-basins.

Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA)
http://coastalmanagement.noaa.gov/about/czma.html#section6217
Requires states to develop Coastal Nonpoint Pollution Control Programs (CNPCP) within the coastal zone area of the state. CZARA requires states and territories to develop management measures to reduce polluted runoff into coastal waters within the coastal management area. CZARA is jointly administered by the National Oceanic and Atmospheric Administration (NOAA) and the EPA.

Commented [A28]: Not required if the state decides not to participate in the program.

There are Ground Water Management Area (GWMA) and basin coordinators assigned to each GWMA and basin/subbasin. They take the lead role as GWMAs and TMDLs are developed and implemented. The types and extent of water quality impairments, as well as available resources and impediments, vary geographically. It is therefore critical to consider GWMA/basin specific conditions and develop local priorities and solution for local problems to achieve water quality improvements.

3.2 Oregon NPS Management Program Plan

Section 319 of the federal Clean Water Act requires states to have a nonpoint source management program based on assessments of the amounts and origins of NPS pollution in the state. Oregon's Nonpoint Source Program Plan describes the goals, priorities, objectives, and strategies of the Oregon NPS Management Program used to achieve the mission to prevent, control, and eliminate water pollution from nonpoint sources in waters of the state to meet water quality standards and Total Maximum Daily Load (TMDL) allocations.

The state's long-term goals reflect a strategically focused state NPS management program designed to achieve and maintain water quality standards and to maximize water quality benefits. The shorter-term objectives consist of activities, with annual milestones, designed to demonstrate reasonable progress toward accomplishing long-term goals as expeditiously as possible.

Since the NPS Management Program Plan is a longer-term planning document, the annual milestones may be more general than are expected in an annual section 319 grant work plan, but are specific enough for the state to track progress and for EPA to determine satisfactory progress in accordance with section 319(h)(8) of the federal CWA. Annual milestones in a state's NPS management program describe outcomes and key actions expected each year, e.g., delivering a certain number of WQ-10 success stories or implementing projects in a certain number of high priority impaired watersheds.

Oregon's current Nonpoint Source Program Plan was approved by EPA in 2000 http://www.deq.state.or.us/wq/nonpoint/plan.htm following EPA's 1996 guidance for updating state NPS program plans. The Oregon Nonpoint Source Program Plan meets the requirements of the federal Clean Water Act (federal CWA) (33 USC 1329) and the U.S. Environmental Protection Agency's (EPA) Section 319(b) of the federal CWA.

In 2012, EPA issued guidance *Section 319 Program Guidance: Key Components of an Effective State Nonpoint Source Management Program November 2012* http://water.epa.gov/polwaste/nps/upload/key_components_2012.pdf requiring Oregon to revise and submit to EPA for approval of Oregon's updated plan. EPA requires plans to be updated every 5 years; therefore, Oregon's plan covers the 5 years of 2014 to 2018.

During 2014, Oregon DEQ developed a draft plan with plans to submit a public review final draft plan in 2014. A final plan will be submitted to EPA in 2015.

Commented [A29]: Need to update with dates for the public review etc.

3.3 Oregon NPS Program Funding

Federal grants cover the majority of cost for Oregon's NPS program, which protects and restores both surface water and groundwater. During each biennium (even years), DEQ in recent times has provided a couple million dollars to local organizations for nonpoint source projects such as public education and watershed restoration.

DEQ began collecting information about investments made within 71 subbasins in Oregon related to watershed restoration, protection, and water quality enhancements for the 2012 Annual Report and continue to work on it. DEQ has Year 2013 information from only OWRI data for this year's NPS Annual Report. The total cost for funded projects within the 72 subbasins is $521,289,422 or 521 million dollars.

Commented [A30]: What is the purpose of this action? Has the information been updated to include 2014?

Information on the funded projects with Section 319(h) grants by the DEQ in watersheds across Oregon can be found through the EPA's Nonpoint Source Grants Reporting and Tracking System (GRTS). GRTS is the primary tool for management and oversight of state Nonpoint Source (NPS) Management Programs under Section 319 of the Clean Water Act. The Oregon DEQ uploads information into GRTS as it becomes available.

The U.S. EPA recently added new tools to the GRTS database to enable the public to search for information about NPS pollution control projects.

3.3.1. Clean Water State Revolving Fund

In 2014, DEQ made no Clean Water State Revolving Fund (CWSRF) loans to nonpoint source projects. This is very unusual. Almost every year nonpoint source project(s) are funded by CWSRF. The number of nonpoint source projects funded by DEQ's Clean Water State Revolving Fund (CWSRF) program continues to grow. Since the loan program's inception in 1989, DEQ has provided $75 million for various nonpoint source projects.

Commented [A31]: Do you have any reason for this?

DEQ's CWSRF loan program continues to provide funding across the state for projects that improve water quality. The NPS projects that applied to the program in 2014 are still in process, awaiting funding approval.

Commented [A32]: I am confused as I thought that DEQ made no loans in 2014 for NPS projects under this programs.

For almost two decades, DEQ's CWSRF staff has administered Oregon's implementation of EPA's Clean Watershed Needs Survey. This national survey and other recent studies consistently indicate nonpoint sources of pollution continue to be an important source of water impairment. DEQ's CWSRF loan program continues to scrutinize effective avenues to financial support projects addressing nonpoint source pollution.

3.3.2. Drinking Water Revolving Loan Fund

In Oregon, the Drinking Water Revolving Loan Fund (DWRLF) is administered by the Oregon Health Authority (OHA), the state agency that regulates drinking water under state law and the Safe Drinking Water Act. OHA works cooperatively with DEQ on source water protection efforts. Money from the DWRLF is used to fund:

- Source Water Protection Grants (up to $30,000) to fund source water protection activities, monitoring, and planning in Drinking Water Source Areas (DWSAs);
- Loans for improving drinking water treatment, source water protection activities, or land acquisition in DWSAs; and
- DWRLF set-asides for administration fund five Drinking Water Protection positions at Oregon DEQ, which delineate DWSAs, integrate Clean Water Act programs (including the NPS Program) with source water protection needs, provide technical assistance to public water systems, and research NPS impacts on surface and ground drinking water sources.

In 2014, eight DWRLF projects were recommended for funding with funding awards totaling $276,638. The objective of the projects is to reduce the risks from septic systems, private wells, stormwater, recreation and boating activities, agricultural and forestry herbicide applications, and land uses near riparian areas. Projects recommended for funding that address NPS activities include an herbicide study, clean boater outreach and education, riparian plantings, drinking water source monitoring, public outreach and technical assistance focusing on private septic systems, wetland enhancement for stormwater treatment, and an emergency DWRLF grant to fund seeding and mulching in a municipal watershed following a fire.

3.3.3. Oregon Watershed Enhancement Board (OWEB)

The Oregon Watershed Enhancement Board (OWEB) is a state agency that provides grants to help Oregonians take care of local streams, rivers, wetlands and natural areas. OWEB grants are funded from the Oregon Lottery, federal dollars, and salmon license plate revenue. OWEB offers a variety of grant types and programs http://www.oregon.gov/OWEB/GRANTS/pages/grant_faq.aspx. The OWEB mission of helping to protect and restore healthy watersheds and natural habitats that support thriving communities and strong economies implicitly recognizes that specific goals for improvement will vary between watersheds.

OWEB grants fund a variety of activities that local partners have identified as priorities in watershed assessments, action plans, or regional plans such as ESA Recovery Plans, Groundwater Management Areas, or TMDLs and Water Quality Basin Status and Action Plans. Restoration actions address watershed process and functions necessary to support natural processes that are indicative of healthy watersheds. This includes, but is not limited to improving water quality, water quantify, habitat complexity, flood plain interaction, vegetation structure, and species diversity.

Accomplishments under the Oregon Plan

OWEB provides information about activities implemented under the Oregon Plan for Salmon and Watersheds (Oregon Plan) through OWEB and various partners, including DEQ. The 2013-2015 Biennial Report http://www.oregon.gov/OWEB/Pages/BiennialReport1315/OPSWBR_13-15_Executive_Summary.pdf includes information about each region of the state, more detailed information about the activities and accomplishments by partners and online resources and tools http://www.oregon.gov/OWEB/Pages/BiennialReport1315/OPBR13-15.aspx.

Oregon Conservation Reserve Enhancement Program

The Oregon Conservation Reserve Enhancement Program (CREP) is a cooperative venture between the State of Oregon and the U.S. Department of Agriculture Farm Service Agency (FSA), with support from the Natural Resources Conservation Service (NRCS), soil and water conservation districts, watershed councils, and other regional partnership organizations.

CREP restores, enhances, and maintains streamside areas along agricultural lands to benefit fish, wildlife, and water quality. Landowners receive annual rental payments and financial incentives to plant trees and shrubs in riparian areas, install fencing and livestock watering facilities, and implement other approved conservation measures.

Oregon added 71 contracts in the Federal Fiscal Year (FFY) 2014 to enroll 2,487.51 acres, bringing the cumulative total to 41,920.3 acres.

OWEB funds and supports CREP technical assistance positions around the state. We currently fund and manage eleven CREP Technical Assistance grants, covering 22 counties in order to provide staffing, training, and outreach support for these technicians.

Commented [A33]: Who is "we"? OWEB or ODEQ or Oregon?

In 2014, DEQ made no Clean Water State Revolving Fund (CWSRF) loans to nonpoint source projects.

Commented [A34]: How does this fact relate to the Oregon Conservation Reserve Enhancement Program?

3.4 Program Directions and Priorities in 2014

DEQ continues to implement the NPS Program and direct funding into basins impaired by NPS pollution. In addition, DEQ is continuing to work toward implementation of the watershed approach, which would incorporate the use of the EPA's key watershed planning components with the nine key NPS elements. This includes continued improvement in coordination between the various DEQ Water Quality Programs including NPS, TMDLs, Integrated Report, Source Water Protection, Groundwater, Clean Water State Revolving Fund, and 319 Project Grants.

In addition, DEQ has been working with staff from the Oregon Water Enhancement Board (OWEB), Natural Resource Conservation Service (NRCS), and other funding entities to prioritize and coordinate our efforts to address nonpoint sources of pollution. Development of an Oregon Watershed Approach that would integrate implementation ready TMDL Implementation Plan requirements (Oregon TMDL Rule, OAR 340-042-0025); EPA's Key Watershed Planning Components with Nine Key NPS elements; and drinking water protection program elements is planned.

Priorities for the NPS Management Program are:

- Watershed Approach Basin Reports: These reports are in-depth assessments conducted by DEQ of the state's basins. These assessments take the form of local Water Quality Status and Action Plans, which describe water quality conditions and include recommendations for actions that DEQ and others who are interested in these basins can take to improve water quality. Where reports have been developed, DEQ has been able to use the action plans and basin priorities to determine how resources will be allocated.
    - Combining the expertise of DEQ's 17 water quality subprograms to ensure that DEQ's resources and scientific information are effectively put to use.
    - Consulting with local, state and federal agencies, as well as local interest groups and watershed councils, to help DEQ identify problems and solutions. The watershed approach allows opportunities for direct, interactive feedback between DEQ and its many stakeholders.
- TMDLs: DEQ focuses on development and implementation of TMDLs.
    - Development: Draft and implement a guidance document that identify the TMDL process.
    - Development: Areas where land uses and land management are a source or potential source of the pollutant TMDLs will be developed to address the nonpoint source(s) and point sources as appropriate.
    - Development: Provide better reasonable assurance during TMDL development process.
    - Implementation: Work~~ing~~ with Designated Management Agencies (DMAs) to assure they are meeting TMDL priorities that address their responsibilities identified in the TMDL or WQMP.
    - Implementation: Identify lead staff to work with sister agency DMAs to achieve consistency and efficiency.
    - Implementation: Conduct additional analysis to provide better reasonable assurance and guide implementation for existing TMDLs that are identified as priorities.
    - Implementation: Continue to build relationships with funding agencies and entities to direct funding toward high priority projects.
- Agriculture: Agriculture Water Quality Management Program has been implemented by Oregon Department of Agriculture (ODA) and local partners for more than a decade. During that time, implementation of conservation practices and restoration has occurred. However, implementation activities had been opportunistic and were difficult to show that progress was being made. In order to address the issue, ODA established focus areas and strategic implementation areas to make investments in small

Commented [A35]: Confusing. Do you mean these areas will be "identified"?

geographic areas in an attempt to show measurable improvements are being made. In order to support ODA's efforts, DEQ's priorities for agriculture are the following.

- Participate in biennial review process to assist ODA to identify and document implementation actions.
- Provide water quality data analysis during the biennial review process.
- Support ODA to establish measures to quantify implementation and evaluate program accomplishments.
- Participate in local grant funding process to direct resources to high priority agricultural issues.
- Participate in EPA and NRCS directed effectiveness monitoring program "National Water Quality Initiative (NWQI)." In 2014, EPA awarded technical assistance grant to support to the development of monitoring plan for Fifteenmile DEQ and its partners. DEQ is committed to provide 319 funding to support effectiveness monitoring in Fifteenmile and Willow NWQI basins.
- Working with the Conservation Effectiveness Partnership in 2014, DEQ continued to meet with USDA-NRCS, Oregon Water Enhancement Board (OWEB), and ODA to evaluate the impacts of grant investments on water quality and watershed health. The partner agencies finalized the report on the Wilson River in Tillamook Bay and continue working to finalize the report on Wychus Creek along the Upper Deschutes River.

- Forestry: Participate as appropriate in private Forest Practices Act rule analysis and concept development for water quality issues; revisions to management plans for state forests; and federal forest management planning to ensure that forestland management is consistent with water quality standards and TMDL load allocations.
    - Prevent, reduce, eliminate, or remediate NPS water pollution and, where necessary, improve water quality to support beneficial uses on forestlands.
    - Provide comment on FPA rules for private forestlands in cooperation with Oregon Department of Forestry (ODF) Private Forest Division staff to ensure that water quality standards are being attained, TMDL load allocations are being met, and beneficial uses are being supported on private forestlands in Oregon.
    - Evaluate voluntary implementation of Oregon Plan for Salmon and Watersheds effectiveness in reducing water quality risks and impacts, identify information gaps, and collect additional information as needed in cooperation with ODF and landowners.
    - Review any changes to state forest management plans and work with ODF State Forest Division staff so changes to plans continue to protect water quality and beneficial uses on state-owned forestlands.
    - Cooperate on priorities, strategies, and funding using a watershed approach to protect and restore water quality on federal forestlands.
- Urban and rural residential: Establishment of TMDLs provides opportunities for DEQ to work with DMAs that have authority to regulate urban and rural residential areas.
    - Improve and establish consistent coordination between TMDL and Stormwater programs.
    - Finalize and implement post construction stormwater guidance.
- 319 Grant Program: It is critical for the 319 Grant Program to be implemented strategically and efficiently. Oregon's priorities are to streamline as much of grant administration and reporting, and to allocate funds strategically.
    - Continue process improvement of Request for Proposals for timely and efficient issuance;
    - Provide guidance to DEQ staff and grant recipients for grant administration including contracting and invoicing;
    - Continue to report 319 Grant data into GRTS and meet reporting deadlines;
    - Coordinate with NRCS and OWEB for reporting on implementation activities;
    - Incorporate measures, timelines, and milestones in NPS Annual Report;
    - Use of Annual NPS Report to track yearly progress of implementation of the approved NPS Management Program.
- Source Water Protection: Identify where nonpoint sources of pollution are significant threats to drinking water sources and incorporate into NPS Program priorities (including forestry and agriculture).
- Groundwater: Identify where nonpoint sources of pollution are impacting groundwater quality; incorporate into NPS Program priorities (including forestry and agriculture); and utilize state authorities for groundwater protection as needed.

  - There are GWMA and basin coordinators assigned to each GWMA and basin/subbasin. They take the lead role as GWMAs and TMDLs are developed and implemented. The types and extent of water quality impairments, as well as available resources and impediments vary geographically. It is therefore critical to consider GWMA/basin specific conditions and develop local priorities and solution for local problems to achieve water quality improvements.
- Assessments and Monitoring: DEQ conducts various types of assessments as required by the federal CWA and uses monitoring data for these assessments as appropriate.

To promote watershed restoration and protection, DEQ:

- Collects information necessary to assess the state's waterbodies to determine if designated uses are being met;
- Uses Oregon's Integrated Report to evaluate progress made in restoring designated use support of all waters;
- Produces TMDLs for impaired waters where near-term delisting is not apparent;
- Uses TMDLs to establish NPS pollutant reduction goals;
- Uses watershed coordinators to assist local stakeholders and resource agencies to implement TMDLs at the local level;
- Collaborates with DMAs, federal, state and local agencies and watershed groups, to develop and/or implement TMDL Implementation Plans;
- Promotes TMDL Implementation Plans as the basis for allocating resources to reduce NPS pollution entering the water body;
- Administers federal CWA Section 319 Grant Program and other applicable grants to enable actions that achieve water quality goals;
- Reviews existing monitoring data for priority watersheds and recommend supplemental data to measure water quality trends associated with watershed activities;
- Reports data to local stakeholders and general public;
- Reports progress made in water quality improvement to EPA and the public through the NPS Annual Reports and the NPS website; and
- Produces Success Stories for water bodies that meet water quality standards because NPS activities have been implemented.

3.5 Oregon NPS Management Program Plan Key Actions

The primary purpose of Oregon's NPS program and plan is to develop and implement strategies to prevent, control, and eliminate water pollution from nonpoint sources in waters of the state to meet water quality standards and TMDL load allocations. The plan represents a unified approach reflecting the fact that the State intends to continue to plan, implement and prioritize actions to address NPS problems on a statewide basis.

Oregon's NPS Management Program Plan (NPS Plan) describes outcomes and key actions expected over the 5-Year plan period from 2014 to 2018. Some actions occur every year, others have fixed end target dates, and some occur every 5-Years. The following table of Key Oregon NPS Management Program Plan goals, actions, milestones and timeframe are taken from the plan. These key elements are used to track and report on administrative outputs, overall program goals, and planned actions during five year life of the plan. The table is organized by the program plan contents.

DEQ will report on the progress made on each of these actions through the Oregon DEQ NPS Annual Report that is submitted to USEPA Region 10 for approval each year. Each year the DEQ NPS Annual Report will identify the activities completed during the year in implementing the Oregon NPS Program Management Plan. Some plan actions have specific dates identified for completion. Others occur continuously throughout the life of the plan.

The following table states the activities that occurred during 2014 in implementing a NPS Plan action:

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
MAJOR NPS PLANS				
Update NPS Management Plan Every 5 Years	Update Oregon's NPS Plan that describes how the state's NPS Management Program achieves water quality standards and TMDL load allocations through restoration and protection.	DEQ issues and submits to EPA For Approval	2014 to 2015	Draft NPS Plan Prepared and Submitted to EPA for Approval
Implement NPS Management Plan	Implement the NPS Management Plan to achieve the NPS Program goals and priorities.	Various milestones	2014 to 2018	Occurring Over time and Annual Activities Reported in NPS Annual Report
Issue NPS Annual Report	The NPS Annual Report describes the progress in implementing the NPS MANAGEMENT PLAN and achieving the NPS Program goals and objectives.	DEQ issues and submits annually for EPA Approval	2014 to 2018	2014 NPS Annual Report Draft Begun for Submittal and Approved by EPA in Year 2015
319 Grant Funding DEQ NPS Program	DEQ uses some of the 319 grant to fund DEQ activities to support work to achieve the NPS program goals and priorities.	DEQ NPS Program Funding	2014-2018	2013 Annual Report Describes 319 Funding
Priority Projects To Receive 319 Grant Funding For Pass Through Grants	Region and HQ staff identify and rank projects to receive pass though 319 grant funds for addressing NPS program priorities.	List of Priority Projects In The 319 Grant Request For Proposals	2014-2018	2014 319 Grant Request For Proposals includes list of priority projects
319 Grant RFPs	Continue process improvement of 319 Grant RFPs for timely and efficient issuance. Provide training to DEQ NPS and TMDL staff to increase efficiency and timeliness.	DEQ Provides Timely And Efficient Issuance of 319 Grant RFPs.	2014-2018	2014 RFP was issued and no training of staff was done

Commented [A36]: EPA provided comments in December 2014. Also may want to include the public comment period and number of comments received etc.

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
319 Grant Administration	Provide guidance to DEQ staff and grant recipients for grant administration including contracting and invoicing in order for DEQ to receive 319 Grants proposals and to issue 319 Grant dollars faster and more efficiently. Restoration and water quality sampling projects are funded in the spring early enough to implement. Provide training to DEQ NPS and TMDL staff on its use.	DEQ Develops, Receives EPA Approval, and Issues 319 Grant Administration Guidance	2015	No 319 Grant Administration Guidance was completed

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
319 GRANT PROGRAM				
GRTS	Continue to report 319 Grant Data into GRTS; Meet annual reporting deadlines.	Provide GRTS Reporting on time to EPA for Approval	2014-2018	GRTS Reporting was on time
NPS Implementation	Collect information from NRCS, USFS, BLM and OWEB on annual NPS project implementation activities including 319 Grant projects.	Include information in the DEQ NPS Annual Report	2014-2018	NPS implementation activities is included in annual report
NPS Pollutant Load Reduction Estimates	Collect information on annual nitrogen, phosphorus, and sedimentation-siltation NPS pollutant load reduction estimates for NPS projects.	Include information in DEQ NPS Annual Report	2014-2018	NPS Pollutant Load Reduction estimates is included in annual report
DEQ's NPS Program Website	DEQ's NPS Program Website updated as needed.	DEQ NPS Program website updates at least annually to reflect current RFP and NPS Annual Report and other documents as needed	2014-2018	Public Review and Comment Notices W~~h~~ere added to the Website
WATERSHED APPROACH BASIN REPORTS				
Watershed Basin Status and Action Plans	Develop a template for Watershed Basin Status and Action Plans. Provide training to DEQ NPS and TMDL staff on its use.	Make Watershed Basin Status and Action Plans Template available to DEQ staff	2015	No Action

Watershed Basin Status and Action Plans	Develop Watershed Basin Status and Action Plans within identified priority watersheds that identify priority problems and waters.	DEQ issues Watershed Basin Status and Action Plans	2014-2018	Three Plans were nearly completed and three were begun
EPA's Nine Key Elements	Report on how TMDL Implementation Plans and Watershed Basin Status and Action Plans meet EPA's Nine Key Elements.	DEQ reports on status of these activities to meet EPA's Nine Key Elements Report	2014	Not Done
Volunteer Monitoring	Volunteer Monitoring Watersheds Sample Plans are developed.	QAPPs and SAPs reviewed by DEQ	2014-2018	Volunteer monitoring plans were reviewed by DEQ

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
BASIN SPECIFIC PROJECTS				
Basin Specific Activities	Basin specific activities and projects will be prioritized through the various TMDL/NPS Program processes and these basin specific activities and projects will be documented and reported.	Basin specific activities reported in DEQ's NPS Annual Report	2014-2018	Basin specific activities are reported in annual report
TMDLS AND OTHER WQ PROGRAMS				
TMDL Guidance or IMD	Develop TMDL Guidance or IMD on how to produce work plans that identify data needs and designing a monitoring study.	TMDL Data Needs and Monitoring Study Produces Implementation Ready TMDLs and WQMPs	2015	Not completed
Technical Assistance	HQ will provide technical assistance on TMDL development and TMDL implementation efforts.	DEQ Staff Provide TMDL Technical Assistance to Ensure TMDL Load Allocations and Water Quality Standards Are Met	2014-2018	Technical assistance was provided
TMDL IMPLEMENTATION				
TMDL Implementation Plans	Work with DMAs to develop and implement TMDL Implementation Plans (including annual reports) as described in the TMDL/WQMP.	DMAs Meet TMDL/WQMP responsibilities	2014-2018	DEQ worked with DMAs to develop and implement TMDL Implementation Plans
TMDL Implementation Plans	DEQ reviews TMDL Implementation Plan annual reports. DEQ also determines what percent (%) of DMAs submitted annual reports. DEQ may track via ACES.	DMAs Meet TMDL/WQMP responsibilities	2014-2018	TMDL Implementation Plan annual reports were reviewed by DEQ
TMDL Implementation Plan	Develop a process for DEQ staff on how to conduct TMDL Implementation Plan review.	DMAs Meet TMDL/WQMP responsibilities	2015	Process not developed ~~with any work done~~.

Commented [A37]: How do you know? Do you track the number?

Commented [A38]: How do you know? Do you track the number?

Commented [A39]: How many? Is there a report that summarizes the results of these reviews?

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
TMDL IMPLEMENTATION (Cont.)				
TMDL & NPS Implementation	Develop a spreadsheet and process for DEQ to track and report on landscape condition for achieving TMDL implementation timelines and milestones including water quality status and trends. This would also include measuring what percent (%) was submitted on time and what % is delinquent, etc.	Information included in the DEQ NPS Annual Report	2014	TMDL implementation and water quality status and trends not included in the Annual Report
Reasonable Assurance	Conduct analysis during TMDL/WQMP development to provide reasonable assurance and guide implementation for TMDLs.	Information included in the DEQ NPS Annual Report	2014-2018	Reasonable Assurance Analysis of TMDLs Not Included In Annual Report
TOXICS				
Water Quality Pesticide Management Team and Pesticide Stewardship Partnerships (PSPs)	Continue to work with the WQ-PMT and implement programs to address water quality pesticide issues including the PSP projects.	Reduce, where needed, instream pesticide concentrations	2014-2018	PSP projects are reported on in the annual report
Public Water System (PWS)	Continue developing contaminant-specific reduction strategies for public water system use, such as for nitrates and pesticides from urban and rural residential lands.	Reduce or protect PWSs from NPSs of pollution	2014-2018	Contaminant-specific reduction strategies for public water system use are identified in annual report
AGRICULTURE				
Landscape Condition for TMDLs and WQS	Document definition of system potential and site capable vegetation	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agriculture Water Quality Program	2014	DEQ provided input as ODA drafted definition of site capable vegetation.

Commented [A40]: Was this analysis conducted?

Commented [A41]: Would be helpful to reference which page in the annual report to find this information. True with other references to the annual report in this table.

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
AGRICULTURE (Cont.)				
Landscape Condition for TMDLs and WQS	Conduct effective shade assessments for evaluating implementation to achieve TMDL/WQS goals under area rules and plan	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agriculture Water Quality Program	2014	DEQ provided input as ODA developed assessment methodology developed at 6th field scale.
Biennial Review of Area Rule and Plan	Participate in ODA's biennial review process by providing water quality status and trends and landscape condition in priority areas	DEQ provides substantive input during the Area Rule and Plan revision	2014-2018	In 2014, DEQ participated in more than xx% of ODA's biennial reviews. (Data coming soon)
Update DEQ Guidance for Biennial Reviews	Collaborate with ODA for updating DEQ guidance for providing comment during ODA's Biennial review Process	DEQ provides substantive input during the Area Rule and Plan revision	2015	To be completed in 2015
Biennial Review of Area Rule and Plan	Participate in ODA's biennial review process by providing water quality status and trends and landscape condition in priority areas	DEQ provides substantive input during the Area Rule and Plan revision	2014-2018	In 2014, DEQ participated in more than xx% of ODA's biennial reviews. (Data coming soon)
Grant Funding	DEQ participate in local grant funding process to direct resources to high priority agricultural issues.	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agriculture Water Quality	2014-2018	In 2014, DEQ participated in local grant funding process in most basins.
ODA Area Rule Compliance	Work with ODA to prioritize and help develop assessment methodologies for addressing sediment and sedimentation, bacteria, nutrients, and pesticides.	Coordination between, and effective implementation of, the TMDL/NPS Programs and Agriculture Water Quality	2014-2018	DEQ provided comments on ODA's strategic implementation area program

Commented [A42]: Need to add a number.

Commented [A43]: This is the same miletone as the one two rows above.

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
FORESTRY				
Oregon Department of Forestry Forest Practices Act (FPA) Sufficiency Analysis	Participate with ODF to jointly develop study designs (and funding sources) to specifically address unanswered questions from the 2002 FPA Sufficiency analysis.	Private and State Forestlands Meet TMDL Load Allocations and Water Quality Standards	2015	DEQ's work with ODF on finishing 2002 FPA Sufficiency analysis is described in annual report
Forest Practices Act Rule	Participate in private Forest Practices Act rule analysis and concept development for water quality issues and revisions to management plans for state forests.	Private and State Forestlands Meet TMDL Load Allocations and Water Quality Standards	2014	DEQ's work with ODF on private Forest Practices Act rule is described in annual report
ODF/DEQ MOA	Participate with ODF on revising the current MOA between ODF and DEQ.	Revision to the 1998 DEQ/ODF MOA	2015	To be completed in 2015
URBAN/ RURAL RESIDENTIAL LANDS				
TMDL and Stormwater	TMDL and Stormwater	TMDL and Stormwater	TMDL and Stormwater	TMDL and Stormwater
FEDERAL LANDS				
USFS Annual Status Report	The USFS will submit to DEQ a Statewide Annual Status Report to meet the MOU and any DEQ TMDL reporting requirements.	USFS submittal of the document to DEQ	2014 - 2018	To be done in 2015
BLM Annual Status Report	The BLM will submit to DEQ a Statewide Annual Status Report to meet the MOU and any DEQ TMDL reporting requirements.	BLM submittal of the document to DEQ	2014 - 2018	To be done in 2015
Coordination of USFS and BLM with DEQ	The USFS and BLM will coordinate with DEQ for establishing priorities, strategies, and funding using a watershed approach to protect and restore water quality on federal forestlands, this will include WQRPs.	Annual check in on Federal Lands progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018	Not Done

Commented [A44]: Where is the milestone, commitment, scheduled date and status?

Commented [A45]: Will you be including this information to the NPS annual reports?

Table 1. NPS Management Plan Actions, Priorities, Milestones 2014 to 2018 and 2014 Activities

GOALS	ACTION	MILESTONES	TIME FRAME	YEAR 2014 ACTIONS
FEDERAL LANDS (Cont.)				
BLM BMPs	BLM develops Oregon specific land use activities BMPs, monitors implementation and effectiveness of BMPs, and submits to DEQ for review and comment.	Annual check in on Federal Lands progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018	Road BMPs approved by DEQ and are in use by BLM
Pre-TMDLs and Post-TMDL	The USFS and BLM will use the Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters, May 1999, Version 2.0.	Annual check in on Federal Lands progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018	Partly identified in each annual progress report
Agricultural Activities	The USFS and BLM will develop and implement a programmatic strategy to address agricultural activities on federal lands, such as grazing.	Annual check in on Federal Lands progress towards meeting TMDL Load Allocations and Water Quality Standards	2014 - 2018	Not Done

Commented [A46]: Not sure I understand how this milestone relates to the action.

Commented [A47]: Not sure I understand how this milestone relates to the action.

3.6 Prioritization of NPS Activities in 2014

Prioritization of program activities is important to best use Oregon's limited resources for preventing or reducing NPS pollution and improving water quality. In addition, recommendations from a long-term water quality program planning effort were used to help prioritize work.

The following criteria were used to prioritize activities for 2014:

Commented [A48]: No priorities based on severity of the impairment and potential to adversely impact water quality/human health etc.?

1. Actions that are measurable and achievable – known environmental result.
2. Actions that act as a catalyst to move the NPS Program forward.
3. Actions that can guide other program efforts such as setting policy or developing tools.
4. Actions that enable the program to leverage internal and external resources.
5. Actions that invest in and or develop political will and community support.
6. Actions that develop an internal process to increase efficiency and consistency.
7. Actions that include an ongoing assessment of monitoring and particularly 319 funding for projects that include monitoring.

This prioritization process focused DEQ's NPS efforts in 2014 on agricultural, federal, state, and private forestry land use activities, and the Oregon Coastal Nonpoint Pollution Control Program (CNPCP).

Nonpoint Source Program

2013 – 2014 accomplishments

- Distributed $2.35 million in 319 grants to fund projects in Oregon's priority basins and groundwater management areas
- Updated Oregon's Nonpoint Source Management Program Plan
- Prepared an annual report of Nonpoint Source Program accomplishments
- Worked collaboratively with the Oregon Department of Agriculture, Oregon Department of Forestry, and other Designated Management Agencies to address nonpoint source issues associated with agriculture, forest, or urban land uses.

Commented [A49]: Oregon did not submit a final NPS plan for EPA's approval until 6/19/15.

2015 – 2017 expected results

- Distribute $1.7 to $1.9 million in 319 grants to fund projects in Oregon's priority basins and groundwater management areas
- Prepare an annual report of Nonpoint Source Program accomplishments
- Track and report on administrative and environmental outcomes from water quality restoration and protection efforts
- Continue to work with the Oregon Department of Agriculture, Oregon Department of Forestry, and other Designated Management Agencies to address nonpoint source issues associated with agriculture, forest, or urban land uses.

2011 319-FUNDED DEQ AGREEMENT NO. 069-12
URBAN ISSUES WORKING GROUP NON-POINT SOURCE EDUCATION PROJECT (W11601-00)

Commented [A50]: Not sure why this information is located here in the report. Need some kind of introduction to explain.

Klamath Basin Non-Point Source Education Project
Project Location: Communities in the Klamath Basin
Project Purpose: Increase Local Awareness of Water Quality Concerns and Solutions
Photos Credit: Klamath Watershed Partnership & Ginny Monroe, Outreach Coordinator

The primary cause of water quality impairment in the Klamath Basin is nonpoint source pollution from hydrologic alteration, agriculture and urban-suburban activities. Both California and Oregon are working together to address TMDL issues and nonpoint source pollution. Public education and participation are critical to this effort. 319 Project work focused on raising awareness in the upper Klamath Basin about local water quality issues and solutions with emphasis on nonpoint source pollution and its effect on wetlands and other elements of the natural environment. Project partners developed and distributed nonpoint source pollution education materials targeting stormwater runoff (bacteria, nutrients, metals, turbidity, and sediment), organized volunteer stenciling of storm drains and riparian planting, constructed four information kiosks, and a hands-on interactive display on wetlands and nonpoint source pollution. This project was completed in the fall of 2014. Project partners included South Suburban Sanitary District, OWEB, Klamath Outdoor Science School, City of Klamath Falls, Wingwatchers, Klamath Sustainable Communities, and other local volunteers.

URBAN ISSUES WORKING GROUP NON-POINT SOURCE EDUCATION PROJECT (W11601-00)
Klamath Basin Non-Point Source Education Project (Cont.)

4. NPS Activities and Accomplishments in 2014

4.1 Programmatic – NPS Management and Administration

4.1.1 Performance Partnership Agreement

A portion of DEQ's nonpoint source program activities are funded through the EPA and DEQ 2014-2016 Performance Partnership Agreement (PPA) NPS and 319-Funded Related Water Quality Component. The current PPA is for activities occurring from **July 1, 2014 to June 30, 2016**. This funding used in waters impaired by NPS pollution supports program management, administration, TMDL development and implementation, mainstem Columbia water quality management, and agency coordination.

Commented [A51]: Is any of the funding used for watershed protection or addressing watersheds at risk?

These funds support **9.73 FTE** positions within DEQ that were involved in the following PPA NPS and 319-Funded Related Water Quality Component funded activities:

- Water Quality Standards and Assessments
- TMDLS
- Groundwater Program
- Water Quality Data Analysis, Management and Monitoring
- Management of Nonpoint Sources of Pollution

The following **Table 8** is a compilation of nonpoint source pollution control related commitments from **elements 1, 2, 4, 7 and 8 of the July 1, 2014 to June 30, 2016** Performance Partnership Agreement (PPA) work plan.

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments.

Commented [A52]: May be helpful to include the status in future reports.

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 1: Water Quality Standards and Assessments			
1.1	Conduct a rulemaking process to revise ammonia criteria for aquatic life.	New ammonia criteria recommended to the EQC for adoption and submitted to EPA. Approved criteria	**12/31/2014** **5/30/2015**
1.2	Conduct a rulemaking process to revise copper criteria and adopt 4 new pollutant criteria recommended by EPA.	New criteria recommended to the EQC for adoption and submitted to EPA.	**6/30/2016**
1.3	Conduct a review and prepare for rulemaking to revise Oregon's temperature water quality standard. Determine how to address natural thermal regimes and variability for temperature.	Prepare to propose new criteria to the EQC for adoption.	**6/30/2016**
1.4	Address water quality standards-related action needs (e.g., variances, site-specific background pollutant criteria, UAAs and/or SSC) arising from implementation of revised human health criteria or the remaining effective portion of Oregon's temperature standard.	Variances and other water quality standards revisions.	**Ongoing**
1.5	Describe ant degradation implementation procedures that address the issues raised in EPA's review of Oregon's Antidegradation Implementation guidance document (IMD).	Updates to Antidegradation Implementation IMD (may be in form of addenda).	**6/30/2015**
1.6	Conduct rulemaking to correct error in applicability of the pH criteria to the Snake River (correct river miles specified).	Revised pH criteria for Snake River to correct error in current rule. Possible additional pH revisions.	**12/31/2015**

	Evaluate need to revise the pH criterion for the Snake and Columbia Rivers and the Owyhee and Malheur River basins.		

Table 2. July 1 2014 to June 30 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 1: Water Quality Standards and Assessments (Cont.)			
1.7	Identify and plan next set of standards work to be completed based on water quality program needs and stakeholder input (triennial review). Upon completion of this planning process, provide EPA with a list of possible additional water quality standards revisions that could be undertaken subject to resource availability and priorities.	Standards work plan that identifies needs and priorities. Proposed standards revisions, as time and resources allow	**6/30/2015**
1.8	DEQ will submit Oregon's 2012 303(d) list to EPA, which will include an assessment of toxics data. DEQ will update Oregon's Integrated Report on water quality and 303(d) List pending EPA's approval. DEQ will distribute final approved 303(d) list and Integrated Report for agency and public use.	Oregon's 2012 Integrated Report and 303(d) list, and list of TMDL priorities	**9/30/2014** **(2015)**
1.9	DEQ will assist EPA in identifying relevant data elements and geo-referenced information to contribute to EPA's national data roll-ups and national measure target determinations. DEQ will assist EPA and EPA contractors in developing a list of potential candidates to meet national measures and in the development of appropriate success stories.	Oregon Integrated Report	**Ongoing**
1.10	DEQ will develop an effective and sustainable approach to producing complete and timely Integrated Reports. Such approach will need to identify and develop staffing resources and data infrastructure and evaluation processes and tools. DEQ's priority will be to develop GIS and automated data analysis tools and processes needed to determine impairment and streamline the assessment process.	A project plan that includes recommended tasks and resources to implement. Initial tasks are being implemented.	**6/30/2015** **6/30/2016**
1.11	DEQ will track the development and modifications to EPA's water quality framework (ATTAINS). DEQ will evaluate whether this system would meet Oregon's needs.	_____	**Ongoing**
1.12	DEQ will review and prioritize needed updates to the IR assessment methodology. After an initial planning process, DEQ will identify which water quality standards assessment methodology updates and revisions could be undertaken this biennium, subject to resource availability and priorities. DEQ will consider whether methodology updates for biological criteria can be completed during this time period.	Updates/new protocols for Oregon Assessment Methodology for Integrated Report on Water Quality Status Id. of methodology updates to be completed this biennium.	**6/30/15**

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 2: TMDLS			
2.1	Develop TMDLs and WQMPs in accordance with 303(d) list schedule.	Issuance of TMDLs for the: - Coquille Basin - MidCoast Basins - Chetco Basin - Sixes Basin Begin Powder/Burnt Basins TMDL Development Upper Deschutes Basin TMDL Development Begin Coos TMDL development	 **12/14** **12/15** **6/16** **6/16** **3/15** **Ongoing** **6/15**
2.2	Implement TMDL Wasteload Allocations in NPDES permits through collaboration with NPDES permit writers.	Pollutant Discharge Limits that will meet WLAs for each permitted discharge.	**Ongoing**
2.3	Implement the Willamette River Basin TMDL. Work with watershed councils, local governments, and other DMAs to develop appropriate management practices and plans for controlling pollutants to the Willamette River. Work with USDA agencies to leverage Farm Bill resources to implement priority best management practices in critical areas.	Completed Implementation plans throughout Willamette Basin that guide management practices, pollutant controls to meet load allocations in TMDLs. Facilitate projects that result in improvements in water quality.	**Ongoing**
2.4	Implement TMDLs for Nonpoint Sources in subbasins where TMDLs/WQMPs have been completed. Work with watershed councils, local governments and other DMAs to develop appropriate management practices and plans for controlling pollutants. Work with USDA agencies to leverage Farm Bill resources to implement priority best management practices in critical areas.	Completed Implementation plans that guide management practices, pollutant controls to meet load allocations in TMDLs. Facilitate projects that result in improvements in water quality.	**Ongoing**

Commented [A53]: Is this a NPS activity that is funded by 319 funds? Seems like a PS activity.

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 2: TMDLS (Cont.)			
2.5	Implementation of load allocations or require TMDL implementation plans for all sources assigned load allocations.	Implementation plans that meet load allocations or management measures identified in the TMDL/WQMP.	**Ongoing**
2.6	Work with EPA to develop a plan that is consistent with EPA's 303(d) Vision by December 31, 2014. This plan may describe ODEQ's process, actions, or determinations on the following components of EPA's 303(d) Vision: prioritization, assessment, protection, alternatives, engagement, and integration.	Incorporate the components of EPA's 303(d) TMDL Vision into the TMDL Program planning documents.	**Ongoing**
Element 4: Groundwater Program			
4.1	Implement the Lower Umatilla Basin Groundwater Management Area Action Plan by focusing on agricultural, residential, commercial, industrial, municipal, and public water supply activities that will prevent and reduce nitrate contamination in groundwater.	<u>Coordination</u> - Meet with local stakeholders, Groundwater Management Committee, and local agencies to coordinate Action Plan activities. - Provide technical support. - Research BMPs and their effectiveness. <u>Education and Outreach</u> - Organize education and outreach efforts to increase awareness of groundwater vulnerability and BMPs, including participation at "outdoor schools" and farm fairs. - Maintain GWMA website.	**Meet as needed; about 6 meetings/yr.** **Ongoing** **Ongoing** **Annually** **Ongoing** **Quarterly**

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 4: Groundwater Program (Cont.)			
4.1 (Cont.)	Implement the Lower Umatilla Basin Groundwater Management Area Action Plan by focusing on agricultural, residential, commercial, industrial, municipal, and public water supply activities that will prevent and reduce nitrate contamination in groundwater. (Cont.)	Monitoring and Data Analysis - Monitor groundwater quality at 32 domestic and irrigation wells to evaluate impacts and effectiveness of Action Plan. -Complete groundwater nitrate trend analysis for entire GWMA (including food processor sites) - Evaluate success of BMP awareness and implementation.	**Quarterly** **2014** **Every four years**
4.2	Implement the Northern Malheur County Groundwater Management Area Action Plan by focusing on agricultural, residential, commercial, industrial, municipal and public water supply activities that will prevent and reduce nitrate contamination in groundwater.	Coordination - Meet with local stakeholders, Groundwater Management Committee, and local agencies to coordinate Action Plan activities. - Provide technical support. - Research BMPs and their effectiveness. Education and Outreach - Organize education and outreach efforts to increase awareness of groundwater vulnerability and BMP. Monitoring and Data Analysis - Monitor groundwater quality at 36 domestic and irrigation wells to evaluate impacts and effectiveness of Action Plan. - Complete groundwater nitrate trend analysis. - Evaluate success of BMP awareness and implementation.	**Meet as needed; typically 1 meeting/ yr.** **Ongoing** **Ongoing** **Annually** **Quarterly** **2014** **Every four years**

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 4: Groundwater Program (Cont.)			
4.3	Implement the Southern Willamette Valley Groundwater Management Area Action Plan by focusing on agricultural, residential, commercial, industrial, municipal and public water supply activities that will prevent and reduce nitrate contamination in groundwater.	Coordination - Meet with local stakeholders, Groundwater Management Committee, and local agencies to coordinate Action Plan activities. -Provide technical support. - Research BMPs and their effectiveness. Education and Outreach -Organize education and outreach efforts to increase awareness of groundwater vulnerability and BMPs, including 2 demonstration projects and 2 workshops. - Maintain GWMA website. Monitoring and Data Analysis - Monitor groundwater quality at 25 monitoring wells and 15 domestic wells to evaluate impacts and effectiveness of Action Plan. - Conduct nitrate well water screening events. - Evaluate success of BMP awareness and implementation.	**3-4 SWV GWMA Committee meetings per year** **Ongoing** **Ongoing** **2 demonstration projects per biennium; 2 major outreach/education events per year** **Ongoing** **2-4 times per year** **10 events per biennium** **As scheduled**
4.4	Each year, two geographic areas will be identified for groundwater monitoring activities beginning in 2014 with complete coverage of the state over a ten year cycle. Groundwater monitoring locations and timing will be prioritized to complement the information needed for developing the Basin Assessment reports DEQ uses for planning geographically-targeted water quality protection activities. Department, the Oregon Department of Agriculture	Monitoring and Data Collection - Monitoring at approximately 50 wells (combination of domestic wells and monitoring wells) in a geographically targeted area of Oregon outside of the GWMA's. - Nitrates and targeted analytes based on known or suspected risk factors.	**Ongoing beginning in November of 2014**

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 4: Groundwater Program (Cont.)			
4.5	Complete federal and state groundwater reporting requirements.	- Biennial Report to the legislature. - Groundwater component of 305(b) report.	**12/30/2014** **As scheduled**
4.6	Participate in EPA-sponsored annual groundwater meetings and conferences as workload and resources allow.	Meetings	**As scheduled**
Element 7: Water Quality Data Analysis, Management and Monitoring			
7.3	Ambient Monitoring Network -DEQ will continue to monitor approximately 130 ambient water quality station 6 times annually throughout Oregon. These stations provide status and trends data for understanding water quality. These stations provide status and trends data for understanding water quality.	- Continue entering data into the database. - The Oregon Water Quality Index (OWQI) will continue to be updated annually. Annual reports will be prepared on water quality trends and indicators. - Data will be used to support the 303(d) assessment process. - Data will be used for the 305(b) /Watershed Assessments.	**1/13** **1/14**
7.4	Collect water quality data to support TMDL development.	TMDL developed on schedule and supported by adequate data.	**Ongoing**
7.5	Conduct 27 site visits in Oregon as part of the National Coastal Conditions Assessment.	- Provide data for upload to EPA management system. - Use information in the narrative section of the 305(b) report/Watershed Assessments when available.	**10/30/2015**

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319-Funded Related Water Quality Component			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 7: WQ Data Analysis, Management and Monitoring (Cont.)			
7.6	Collect water quality, biological data and physical habitat data at 30 randomly selected sites in an Oregon basin or watershed.	Water quality, biological data and physical habitat available for use in integrated report and Basin Assessments	**October 2015**
7.7	Collect water quality, biological data and physical habitat data at 30 randomly selected sites in an Oregon basins or watershed.	Water quality, biological data and physical habitat available for use in integrated report and Basin Assessments	**October 2016**
7.8	Identify business requirements for migrating DEQ water quality, biology and habitat data into WQX	Business requirements for migration of water quality, biology and habitat data into WQX/STORET identifies	**June 2015**
7.9	Conduct analysis of water quality data for Watershed Approach Basin Reports	Watershed Approach Basin Reports for three basins per year	**Ongoing**
7.10	DEQ will collaborate with EPA, as resources allow, on EPA monitoring projects conducted in Oregon.	To be determined	**As scheduled by EPA**
Element 8: Management of Nonpoint Sources of Pollution			
8.1	Distribute 319 grants to fund project proposals to Oregon's priority basins based on TMDL development and implementation, drinking water source areas and GWMAs.	Solicit and select projects.	**May 2015 and May 2016**
8.2	Prepare an annual report of NPS program accomplishments.	NPS Annual Report	**March 2015 and March 2016**
8.3	Determine with EPA available NPS Success Stories documenting either water quality progress or full restoration under Program Activity Measure (PAM).	NPS Success Stories	**September 2014 and September 2015**

Commented [A54]: CZARA activities included under this section?

Table 2. July 1, 2014 to June 30, 2016 Performance Partnership Agreement Nonpoint Source Pollution Control Commitments. (Cont.)

2014-2016 Performance Partnership Agreement NPS and 319 Funded Related Water Quality Components			
Number	**DEQ Commitment**	**Outputs**	**Target Date**
Element 8: Management of Nonpoint Sources of Pollution (Cont.)			
8.4	Enter GRTS 319 mandated elements to 319 project tracking data by national deadlines, including load reductions as available.	Data reflecting progress and status of 319 implementation.	**February 2015, February 2016 load reduction, other GRTS data (National GRTS reporting deadlines)**
8.5	Work with EPA to review TMDLs and other basins plans for meeting EPA's 9 Key Element watershed based planning guidance.	Develop strategies to leverage current resources for development of a watershed framework that integrates TMDLs and NPS Programs and is consistent with EPA's 9 Key Elements watershed plan model. Inform DEQ HQ and Regional staff about the Watershed Framework and the linkages between the various DEQ Water Quality subprograms. Develop conceptual model for management practice reporting system for implementation monitoring of WQMPs.	**June 2013**
8.6	Implement Agency Toxics Reduction Strategy.	Implement a toxics reduction strategy that incorporates air, land and water. This effort includes the Pesticide Stewardship Partnerships, Pesticide Collection Events, and other priority activities.	**Ongoing**
8.7	Ag Area Plan & Rule biennial reviews and ODA/DEQ MOA implementation	Review and comment on ODA's agricultural area rules and plans during their biennial review process.	**Ongoing**

4.2 Use of 2014 319-Grant Allocation

Oregon's total 2014 319-Grant Allocation of $2,105,000 was distributed as follows: $764,463 or approximately 36% was directed to the thirty-one (31) 319 projects grant and the remainder, $1,340,537 or approximately 64%, was directed to the 2014 - 2016 Performance Partnership Agreement (PPA) water quality components to fund 9.73 FTE DEQ staff positions for the NPS program.

Table 3. Breakdown of Oregon's 2014 Section 319 Grant Allocation from EPA

BREAKDOWN OF OREGON'S 2014 SECTION 319 GRANT ALLOCATION FROM EPA	
AREA	**FISCAL YEAR 2014 ENACTED**
Region 10	**$8,750,000**
Oregon	**$2,105,000**

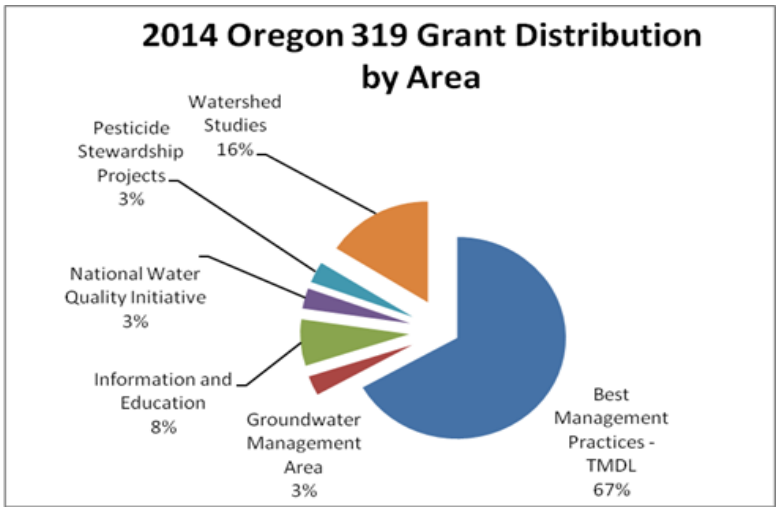
Table 4. 2014 Oregon's 319 Grant Allocation from EPA Use: Funded Positions / NPS Program Activities

2014 OREGON'S 319 GRANT ALLOCATION FROM EPA USE: FUNDED POSITIONS / NPS PROJECT ACTIVITIES			
Fund	**Dollar Amount**	**Percent**	**Use**
DEQ Funded Positions	**$1,340,537**	**64%**	**9.73 DEQ Staff Positions**
NPS Project Activities	**$764,463**	**36%**	**31 Projects**
TOTAL	**$2,105,000**	**100 %**	**--**

4.2.1 NPS Projects Activities

In 2014, the $764,463 319-Grant Funded Thirty-One (31) Projects In Four Areas of Emphasis:

2014 OREGON'S 319 GRANT FUNDED 31 NPS PROJECTS		
Best Management Practices - TMDL	**$510,620**	**67%**
Groundwater Management Area Plan Implementation	**$24,000**	**3%**
Information and Education	**$56,850**	**7%**
Pesticide Stewardship Partnership Projects	**$25,939**	**3.5%**
National Water Quality Initiative (NWQI)	**$25,000**	**3.5%**
Watershed Studies	**$122,054**	**16%**
TOTAL	**$764,463**	**100%**



4.2.2 Funded Positions

A portion of DEQ's nonpoint source program activities are funded through the EPA and DEQ Performance Partnership Agreement (PPA). The current PPA is for activities occurring from July 1, 2014 to June 30, 2016. This funding used in waters impaired by NPS pollution supports program management, administration, TMDL development and implementation, mainstem Columbia water quality management, and agency coordination.

Oregon's 319 allocation from EPA supports 9.73 FTE positions within DEQ on the following activities:

- Characterization of NPS problems/concerns.
- TMDL Development.

- TMDL Implementation
- Development and modeling for NPS TMDLs.
- Development of UAA/SSC[1] as related to NPS activities.
- Plan and update Oregon's 319 Grant funding priorities.
- Update Oregon's 319 Grant Guidelines.
- Distribute 319 Grants For Projects.
- Administer 319 Grants.
- 319-Grant Administration and GRTS reporting of 319 activities.
- Provide technical support to stakeholders for 319 grant implementation.
- Develop grant agreements from draft to execution with recipient's input
- Restoration activities
- Best management practices (BMPs) development/implementation.
- Monitoring to support and determine effectiveness of BMP programs.
- Determine with EPA potential NPS success stories documenting either that the water body is meeting water quality standards or making water quality progress under EPA's national measures.
- Enter GRTS 319 project tracking mandated data elements by national deadlines, including pollutant load reductions, as available.
- Prepare an annual report of NPS program accomplishments.
- Place NPS Success Stories and pollutant load reductions from TMDL Implementation Plans actions and BMPs into DEQ NPS Annual Report.
- Update Oregon NPS Program Management Plan (every five years)
- Coordination between stakeholders.
- Liaison support staff to other state and federal agencies.
- Coordinate with state and federal natural resource managers on meeting water quality goals and objectives.
- Public information.

DEQ's NPS program also includes staff, which performs the following programs / projects:

- With Oregon's 319-Grant dollars thirty-one (31) NPS Projects were funded.
- Implement TMDLs for NPS in subbasins where TMDLs/WQMPs have been completed, such as the Willamette River and Columbia River Basins.
- Implement strategies for GWMA's with established Action Plans.
- Distribute 319 grants to fund project proposals in Oregon's priority basins based on 303(d) listings, Watershed Basin Status and Action Plans, TMDL Water Quality Management Plan, TMDL implementation, GWMAs, and Drinking Water Source Areas.
- Implement the Willamette Mercury TMDL (Phase I) using DEQ's Mercury Reduction Strategy and mercury source characterization work to help identify priorities and strategies.
- Coordinate with the Oregon Department of Land Conservation and Development (DLCD) on the Oregon Coastal Nonpoint Pollution Control Program (CNPCP).
- ODA and DEQ with stakeholders are working together to continuously improve local Agricultural Water Quality Management Area Plans in order to meet the state's water quality standards, including implementation ready TMDLs.
- Columbia Water Quality Management.

Commented [A55]: What does staff do with respect to TMDL implementation? Review DMA's implementation plans? Install BMPs required under the plans? Provide technical assistance in preparation of these plans? How about the development of Water Quality Management Plans?

Commented [A56]: What does staff do with respect to restoration activities? Install restoration measures? Review other agency or landowner restoration measures?

Commented [A57]: What does the NPS program staff do with respect to this bullet that is not mentioned previously.

Commented [A58]: Does the staff or DMAs implement TMDLs?

Commented [A59]: See above comment.

Commented [A60]: What does the NPS program staff do with respect to this bullet?

[1] In order to meet the demand for DEQ to remove beneficial uses in some sub-basins or set "site specific" standards (SSC) has increased. The Clean Water Act requires that a Use Attainability Analysis (UAA) be completed before a State may remove a designated use. A similar scientific analysis is needed to develop SSCs.

Table 5. 2014 Oregon's 319 Grant Funded Positions

2014 OREGON'S 319 GRANT FUNDED POSITIONS / NPS PROGRAM ACTIVITIES	FTE
NPS TMDL Modeling	**0.89**
Regional NPS Implementation and NPS TMDL Development and Implementation	**4.84**
Prorates and Management and Administrative Support	**1.01**
319 Grant Administration and Provision of Technical Assistance with Applicants, DEQ Staff and Coordination with Other Funding Agencies	**1.00**
NPS Policy Development, Collaboration and Provision of Technical Assistance with Stakeholders and other Local, State, and Federal Agencies	**2.00**
TOTAL	**9.73**

4.3 Project Implementation (2014 Activities)

4.3.1 Assessing Oregon's Basins

DEQ coordinates its work to protect and improve Oregon's water by following the watershed approach. DEQ uses the term "watershed" to describe an area of land that contains related waterways. These watersheds may be traditional basins, areas that drain into a single waterway or an area that contains similar waterways, such as a group of coastal rivers.

DEQ plans to cover the state's major basins in the next few years and then re-visit each to mark progress and reassess how to deal with lingering water quality problems.

DEQ completed its first Watershed Basin Status and Action Plans, which totaled three in 2014 (See Section 4.5.7 for more detail).

4.3.2 NPS Projects Funding by Subbasin (2013 Data)

DEQ began collecting information about investments made within 72 subbasins in Oregon related to watershed restoration, protection, and water quality enhancements for 2012 Annual Report and continue to work on it. DEQ has Year 2013 information from only OWRI data for this year's NPS Annual Report.

Commented [A61]: See previous comment on this.

Natural Resource Conservation Service data is not available on the web, available at subbasin scale through Cooperative Agreement. (Do not have NRCS data to include in this year's report.)

Oregon Watershed Restoration Inventory (OWRI) http://www.oregon.gov/OWEB/monitor/Pages/owri.aspx includes completed projects funded by OWEB grants, USFS and BLM, private landowners, and 319 at subbasin scale from 2013. NRCS funds used as match for OWEB grants are also included in this database.

Table 10. Identifies the 2013 OWEB OWRI data of water quality related projects funding within all subbasins (72 total) in Oregon. The total cost for funded projects within the 72 subbasins is **$521,289,422** or 521 million dollars.

Commented [A62]: Is this the most current year?

Table 6. 2013[1] OWEB OWRI Data of Water Quality Related Projects Funded (Total Cost) Within A Subbasin (72 Total In Oregon)
(Refer To Appendix 1 for Detailed Subbasin Data Used To Create This Summary Report)

SUBBASIN	PROJECT(S)	SUBTOTAL
1. **Alsea, Siletz-Yaquina**	Riparian Habitat and Protection and Upland, Grazing, and Irrigation Management	**$44,985**
2. **Alsea**	Fish Passage Improvements and Riparian Habitat and Protection	**$77,959**
3. **Alvord Lake**	Riparian Habitat and Protection and Upland, Grazing, and Irrigation Management	**$55,858**
4. **Applegate**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, and Instream Flow	**$1,737,746**
5. **Bully**	Upland, Grazing, and Irrigation Management	**$135,829**
6. **Burnt**	Upland, Grazing, and Irrigation Management	**$109,970**
7. **Chetco**	Fish Passage Improvements, Instream Flow, and Road Improvements	**$296,618**
8. **Clackamas**	Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Wetland and Estuary	**$3,776,872**
9. **Coast Fork Willamette**	Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$86,196**
10. **Coos**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Road Improvements, and Urban	**$425,835**
11. **Coquille**	Fish Passage Improvements, Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$287,504**
12. **Goose Lake**	Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow Upland, Grazing, and Irrigation Management, Instream Flow, and Upland, Grazing, and Irrigation Management	**$1,881,596**
13. **Harney-Malheur Lakes**	Instream Flow and Upland, Grazing, and Irrigation Management	**$86,165**
14. **Illinois**	Fish Passage Improvements, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$385,165**
15. **Imnaha**	Riparian Habitat and Protection, Instream Flow	**$14,146**
16. **Lake Abert**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Upland, Grazing, and Irrigation Management, Wetland and Estuary,	**$4,046,463**
17. **Lost**	Riparian Habitat and Protection, Upland, Grazing, and Irrigation Management	**$72,158**
18. **Lower Columbia**	Riparian Habitat and Protection, Instream Flow, Road Improvements, and Upland, Grazing, and Irrigation Management	**$81,264**
19. **Lower Columbia-Sandy**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, and Riparian Habitat and Protection	**$6,366,351**
20. **Lower Crooked**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Upland, Grazing, and Irrigation Management, and Urban	**$22,426,156**
21. **Lower Deschutes**	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Instream Flow, Upland, Grazing, and Irrigation Management, and Urban	**$1,040,275**
22. **Lower Grande Ronde**	Instream Flow	**$24,718**

[1] The latest OWEB OWRI data of water quality related projects funded is for the year 2013. Year 2014 data is being placed into the OWRI by OWEB now (2014) and will be available for public use next year in 2015.

SUBBASIN	PROJECT(S)	SUBTOTAL
23. Lower John Day	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Instream Flow, Upland, Grazing, and Irrigation Management, and Urban	**$4,329,508**
24. Lower Malheur	Riparian Habitat and Protection and Upland, Grazing, and Irrigation Management,	**$339,171**
25. Lower Owyhee	Upland, Grazing, and Irrigation Management	**$2,092,364**
26. Lower Rogue	Fish Passage Improvements and Road Improvements	**$538,900**
27. Lower Willamette	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Road Improvements, Upland, Grazing, and Irrigation Management, Urban, and Wetland and Estuary	**$106,665,016**
28. McKenzie	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection	**$3,117,149**
29. Middle Columbia-Hood	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Upland, Grazing, and Irrigation Management, and Urban	**$22,188,597**
30. Middle Fork John Day	Fish Passage Improvements, Riparian Habitat and Protection, Instream Flow, Upland, Grazing, and Irrigation Management	**$797,832**
31. Middle Fork Willamette	Instream Habitat and on-Bank Stabilization, and Riparian Habitat and Protection	**$1,897,451**
32. Middle Rogue	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, and Riparian Habitat and Protection	**$1,172,972**
33. Middle Snake-Succor	Upland, Grazing, and Irrigation Management	**$1,364,791**
34. Middle Willamette	Fish Passage Improvements, Riparian Habitat and Protection, Upland, Grazing, and Irrigation Management, Urban, and Wetland and Estuary	**$1,658,899**
35. Molalla-Pudding	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Upland, Grazing, and Irrigation Management	**$666,255**
36. Necanicum	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Road Improvements	**$3,363,271**
37. Nehalem	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Road Improvements	**$4,431,857**
38. North Fork John Day	Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$1,933,963**
39. North Santiam	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$951,981**
40. North Umpqua	Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Road Improvements	**$1,172,014**
41. Powder	Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$2,044,235**
42. Siletz-Yaquina	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Upland, Grazing, Irrigation Management and Wetland and Estuary	**$7,858,341**
43. Siltcoos	Fish Passage Improvements, Riparian Habitat and Protection, and Road Improvements	**$940,478**
44. Silver	Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$170,679**
45. Silvies	Instream Flow and Upland, Grazing, and Irrigation Management	**$184,501**

SUBBASIN	PROJECT(S)	SUBTOTAL
46. Siuslaw	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Road Improvements, Upland, Grazing, and Irrigation Management, and Wetland and Estuary	**$1,867,697**
47. Sixes	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Road Improvements, and Upland, Grazing, and Irrigation Management	**$3,962,838**
48. South Santiam	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$1,665,859**
49. South Umpqua	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, and Riparian Habitat and Protection	**$369,920**
50. Sprague	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$19,600,033**
51. Summer Lake	Instream Flow	**$4,556**
52. Trout	Instream Habitat and on-Bank Stabilization, Instream Flow, and Upland, Grazing, and Irrigation Management	**$42,105**
53. Tualatin	Fish Passage Improvements, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$229,273**
54. Umatilla	Instream Flow and Upland, Grazing, and Irrigation Management	**$399,489**
55. Umpqua	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Instream Flow, Road Improvements, Upland, Grazing, and Irrigation Management, and Wetland and Estuary	**$1,335,113**
56. Upper Crooked	Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$245,937**
57. Upper Deschutes	Instream Flow and Upland, Grazing, and Irrigation Management	**$1,794,544**
58. Upper Grande Ronde	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Road Improvements, and Upland, Grazing, and Irrigation Management	**$897,245**
59. Upper John Day	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow and Upland, Grazing, and Irrigation Management	**$1,860,361**
60. Upper Klamath	Riparian Habitat and Protection	**$48,409**
61. Upper Klamath Lake	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Wetland and Estuary	**$578,874**
62. Upper Malheur	Instream Flow and Upland, Grazing, and Irrigation Management	**$658,026**
63. Upper Rogue	Fish Passage Improvements and Upland, Grazing, and Irrigation Management	**$264,528**
64. Upper Willamette	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, Upland, Grazing, and Irrigation Management, and Wetland and Estuary	**$3,435,156**
65. Walla Walla	Instream Flow and Upland, Grazing, and Irrigation Management	**$135,107**
66. Wallowa	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Instream Flow, and Upland, Grazing, and Irrigation Management	**$1,742,087**
67. Warner Lakes	Upland, Grazing, and Irrigation Management	**$5,439**

SUBBASIN	PROJECT(S)	SUBTOTAL
68. Williamson	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, and Upland, Grazing, and Irrigation Management	**$543,000**
69. Willow	Fish Passage Improvements, Riparian Habitat and Protection, Instream Flow, Road Improvements, and Upland, Grazing, and Irrigation Management	**$1,677,967**
70. Wilson-Trask-Nestucca	Fish Passage Improvements, Instream Habitat and on-Bank Stabilization, Riparian Habitat and Protection, Road Improvements, and Wetland and Estuary	**$3,622,212**
71. Yamhill	Fish Passage Improvements, Riparian Habitat and Protection, Upland, Grazing, and Irrigation Management, and Urban	**$260,858,340**
TOTAL 2013 OWRI PROJECTS COST FOR 72 SUBBASINS		**$521,289,422**

4.3.3 Total Maximum Daily Loads (TMDLs) and Water Quality Management Plans

Total Maximum Daily Load Program

2013 – 2015 accomplishments

- Continued to develop the Deschutes, Coquille and Mid-Coast basin TMDLs. Continued working on TMDL implementation and implementation plan development in the Willamette, Rogue, Umpqua, Klamath, Tillamook, North Coast and other basins with issued TMDLs.
- Completed implementation plan reviews for submitted TMDL implementation plans for the John Day, Wallowa (Imnaha, Lower Grand Ronde) and Malheur basins. These plans guide management practices and pollutant controls to meet load allocations in TMDLs.
- Willamette TMDL 5-year review of DMA TMDL implementation progress
- Track and report on administrative and environmental outcomes from water quality restoration and protection efforts to meet TMDL allocations

2015 – 2017 expected results

- Submit Coquille, Deschutes, MidCoast, Coos, and Powder/Burnt TMDLs to EPA for approval. Continue working on TMDL implementation and implementation plan reviews in the Willamette, Rogue, Umpqua, Klamath, Deschutes, John Day, Tillamook, North Coast and other basins with issued TMDLs
- Continue to focus 319 grant activities in priority basins for TMDL implementation to address nonpoint sources of pollution
- Track and report on administrative and environmental outcomes from water quality restoration and protection efforts to meet TMDL allocations

In 2012, EPA approved the Upper Klamath and Lost River Subbasins TMDL for dissolved oxygen, chlorophyll a, and pH. DEQ is currently reconsidering this TMDL. DEQ issued a TMDL for the Tualatin Subbasin, amending the 2001 TMDL, to provide waste load allocations for total phosphorus and ammonia at two new discharge locations. EPA approved this revised TMDL in December 2012.

Commented [A63]: Why?

TMDLs take into account the pollution from all sources, including discharges from industry and sewage treatment facilities; runoff from farms, forests and urban areas; and natural sources. TMDLs include a margin of safety to account for uncertainty. TMDLs may include a reserve capacity that allows for future discharges to a river or stream. DEQ typically develops TMDLs on a watershed, subbasin, or basin level and occasionally at the reach level depending on the type and extent of impairments.

The Water Quality Management Plan (WQMP) is the framework for TMDL implementation that is issued by Oregon along with the TMDL (OAR 340-042-0040(l)). The WQMP lays out the strategies for TMDL implementation and serves as a multi-sector plan and provides the reasonable assurance that the TMDL will be implemented and allocations achieved.

In order to ensure § 319-funded TMDLs have maximum utility for informing and facilitating the implementation of NPS projects, as a condition of using § 319 funds to develop TMDLs, the state will include the following supplemental information to support the load allocations specified in the TMDL:

- An identification of total NPS existing loads and total NPS load reductions necessary to meet water quality standards, by source type;
- A detailed identification of the causes and sources of NPS pollution by source type to be addressed in order to achieve the load reductions specified in the TMDL (e.g., acres of various row crops, number and size of animal feedlots, acres and density of residential areas); and
- An analysis of the NPS management measures by source type expected to be implemented to achieve the necessary load reductions, with the recognition that adaptive management may be necessary during implementation. EPA encourages state NPS staff to work with state TMDL staff during TMDL development. NPS staff can bring knowledge of BMP effectiveness and feasibility to ensure that NPS load reduction goals in the TMDL are achievable. Additionally, coordination between the two programs will provide a smoother transition from development of the TMDL to its implementation.

Because the submission of this additional information is a § 319 NPS program requirement, the information provided may be reviewed for adequacy by EPA regional NPS program staff as part of the grant oversight process. Such review is separate from the review by EPA regional staff pursuant to Clean Water Act § 303(d) and EPA's TMDL regulations at 40 CFR Part 130.7, of the proposed TMDLs submitted by states.

4.3.4 Water Quality Standards

On April 11, 2014, EPA approved all revisions to Oregon's toxics water quality standards. The revisions address EPA's Jan. 31, 2013 disapproval of 11 pesticides and selenium aquatic life criteria, and reinstate criteria for arsenic and chromium VI that were inadvertently omitted from a toxics table. In addition, the revisions consolidated all the toxics aquatic life criteria into one new Table—Table 30. The revisions became effective on April 18, 2014. In addition, the EQC adopted revisions to Oregon's freshwater aquatic life criteria for ammonia on Jan. 7, 2015. EQC meeting in Portland. DEQ anticipates these revisions will address EPA's Jan. 31, 2013 disapproval of ammonia criteria that the EQC adopted in 2004. Revisions to the ammonia criteria become effective following EPA approval.

As part of an addition to DEQ's ammonia standard rulemaking, the EQC adopted DEQ is proposing making a few additional corrections and clarifications to its standards including:

- Correctly noting the river miles in the Snake River where the basin-specific pH standard applies.
- Revising designated uses and water quality standards for the West Division Main Canal to reflect EPA's 2013 partial approval and partial disapproval of DEQ's proposed standards for the Canal.
- Adding clarifying notes under the Statewide Narrative Criterion and Natural Conditions Criterion in the temperature rule stating that the criteria were disapproved by EPA and are no longer effective for Clean Water Act purposes.

DEQ has committed to begin a rulemaking to adopt EPA's 2012 Recommended Water Quality Criteria for bacteria in marine waters, as required by EPA under the BEACH Act. DEQ's goal is to adopt the standard by September 30, 2016 per EPA's requirements.

Lastly, in spring 2015, DEQ will initiate a rulemaking to address EPA's disapproval of freshwater aquatic life criteria for copper that EPA disapproved on Jan. 31, 2013. DEQ is currently evaluating the Biotic Ligand Model to derive site-specific criteria for copper based on EPA's latest recommendations.

Oregon's 2012 Integrated Report and 303(d) list

DEQ submitted **Oregon's 2012 Integrated Report and 303(d)** list to EPA in November 2014. The report is available at DEQ's web page: **http://www.oregon.gov/deq/WQ/Pages/Assessment/2012report.aspx.** along with a summary of the results. EPA will review and either approve or disapprove the 2012 303(d) list as submitted. After EPA takes final action, Oregon's 2012 303(d) list will become effective for Clean Water Act purposes.

For the 2012 Integrated Report:

- DEQ started the assessment process in 2011. DEQ reviewed new data and information assessing water quality in Oregon and identified impaired waters needing pollution load-limiting Total Maximum Daily Loads (the 303(d) list).
- For this report, DEQ piloted a rotating basin approach to align the assessment with DEQ's Watershed Basin Status and Action Plans to focus resources and guide the agency's efforts to help protect, improve and enhance the quality of Oregon waterways.
- The objective of aligning the Integrated Report efforts with the Watershed Basin Status and Action Plans is to ensure that these combined efforts provide a comprehensive evaluation of water quality and other environmental information resulting in basin-based water quality status and action plans. DEQ focused on data for dissolved oxygen in the Willamette Basin and Umatilla subbasin and data for a select set of toxic pollutants throughout the state.
- Using the updated 303(d) list, DEQ developed a list of TMDL priorities for the next two years.
- This reports updates information from previous cycles of the Integrated Report using information DEQ reviewed for 2012.

- DEQ provided a draft 2012 report and list of impaired waters in early 2014 for public review and comment. After considering public comments, DEQ finalized the report and list.
- A summary of public comments and DEQ's response is available on the web site.
    - Commenter's were concerned about the limited scope of DEQ's assessment, DEQ's use of water quality standards that were recently revised, identification of impaired waters with mercury in fish tissue, issues about ocean acidification, and identification of waters with impaired biological conditions.
- The 2012 Integrated Report contains more than just the 303(d) list.
    - Many waters and pollutants do not have enough information to say if the water quality is good or bad (55% of the assessments).
    - Other assessment show where water quality is good (25% of the assessments).

After EPA takes final action to approve, disapprove, or add more listings, Oregon's 2012 303(d) list will become effective for Clean Water Act purposes. Until then, the changes made to the 303(d) list with the 2012 Integrated Report are provisional, and the final 2010 303(d) list remains the effective list.

4.3.5 Cross Program Efforts to Address Toxic Chemicals

DEQ Toxics Reduction Strategy

In 2014, DEQ continued work on the short-term Toxics Reduction Strategy priority actions established in 2012. The primary focus of 2014 Strategy work focused on the following activities:

- Developing and implementing low toxicity state purchasing guidelines
- Advancing Green Chemistry in Oregon through collaborations with other agencies and other states
- Develop and implement a pesticide waste collection strategy
- Expand and enhance watershed-based Pesticide Stewardship Partnerships

State procurement of low toxicity products and incentivizing Green Chemistry as an economic opportunity for the State of Oregon are two primary objectives of a 2012 Governor's executive order (#12-05), and which DEQ is implementing in partnership with the Governor's Office, the Department of Administrative Services (DAS), and Business Oregon. DEQ has been supporting DAS since the 2013 development and launch of the pilot Janitorial Supplies price agreement to ensure suppliers of cleaning and other janitorial products meet low toxicity specifications. These specifications include third party certifications and absence of priority toxic chemicals. This price agreement is a joint effort with the State of Washington, representing an estimated $20 million in purchasing power.

In 2014, DEQ also worked with DAS to develop broad Green Chemistry purchasing guidelines for all product and service categories. These guidelines were approved as new policy by state's chief operating officer in the fall of 2014. DEQ is currently consulting with DAS on the implementation of these guidelines, including evaluating options for implementing low toxicity purchasing initiatives for new product categories. These categories include office furniture, building materials, and office supplies.

To advance Green Chemistry for Oregon businesses, DEQ has coordinated with Business Oregon to identify possible outreach projects for key industry sectors or process chemical categories that could produce both significant environmental gains and economic opportunities for Oregon businesses. In addition, DEQ is engaging with other states to develop tools and resources to help businesses and government agencies conduct effective chemical alternatives assessments, thereby avoiding the problem of "regrettable substitutions" of chemicals. DEQ is actively involved in the Interstate Chemicals Clearinghouse (IC2 - http://theic2.org/), which serves as a valuable forum for states to exchange and generate information on priority toxic chemicals and chemical alternatives assessments. In 2014, the IC2 completed an Alternatives Assessment Guide that can be used by states and businesses to assist in the alternatives assessment process. DEQ is also engaging with the State of Washington and other entities in the region

through the Northwest Green Chemistry (http://www.northwestgreenchemistry.org/) organization, which was recently established to advance Green Chemistry in the region.

In addition, the expansion of the Pesticide Stewardship Partnership (PSP) and pesticide waste collections continued in 2014. These are two actions that were recommended by the DEQ Toxics Reduction Strategy. See the following section of the report for the PSP Program update.

More information on DEQ's Toxics Reduction Strategy can be found here: http://www.deq.state.or.us/toxics/index.htm.

Pesticides Stewardship Partnerships (PSPs) and Water Quality Pesticide Management Team (WQPMT)

The Pesticide Stewardship Partnership (PSP) approach uses local expertise in combination with water quality monitoring data to encourage and support voluntary management measures that lead to measurable reduction of pesticides in Oregon waters. This program had been supported by grants and other small sources of funding for over a decade. In 2013, the Oregon Legislature allocated funds to DEQ and the Oregon Department of Agriculture to implement and expand PSPs. This new stable funding has allowed DEQ and ODA to enhance work in existing PSP watersheds in 2014, add new PSP projects in two more watersheds around the state, conduct several pesticide waste collection events, and provide support for pesticide risk reduction technical assistance. The inter-agency Water Quality Pesticide Team (WQPMT) is tasked with overseeing implementation of the expanded PSP Program.

The WQPMT is composed of representatives from DEQ, ODA, the Oregon Health Authority (OHA), Oregon Department of Forestry (ODF), and the Oregon Watershed Enhancement Board (OWEB). Oregon State University (OSU) serves as a technical consultant to the WQPMT. The WQPMT was formed to coordinate, communicate, support, and facilitate water quality protection programs, within the four agencies, related to pesticides in the State of Oregon. The WQPMT operates under a Memorandum of Understanding (MOU) established in 2009

Using established criteria, the WQPMT selected four (4) watersheds as pilot areas for water quality monitoring, with the intent of selecting two of these watersheds for implementation of full, long-term PSP projects. The selection decision will be based on the monitoring data and the strength of local partnerships. One year of monitoring has been completed in two of these pilot watersheds, and monitoring will be completed in the other two watersheds in the spring of 2015. In addition, monitoring and outreach in existing PSP watersheds in Western Oregon became more refined in 2014, with more intensive focus on smaller areas of individual watersheds where Pesticides of Concern are found more frequently and in higher concentration.

Continued success in reducing Pesticides of Concern – including chlorpyrifos, malathion and diuron - in Eastern Oregon PSP watersheds was noted in 2014. Partners in Hood River, Walla Walla River, and Wasco County watersheds continued implementation of multiple pesticide stewardship actions and outreach efforts to ensure that water quality improvements are maintained. For instance, although the maximum concentration of malathion detected in Wasco streams was higher in 2014 than in 2013, the percentage of detections above the water quality standard fell from 32% to 23%. Outreach efforts continued to be focused on communicating PSP monitoring results and providing technical assistance to orchards.

The first five (5) agricultural waste pesticide events, supported by the new state funding allocation, were conducted in 2014. Events held in Milton-Free water, Hermiston, Ontario, Madras, and McMinnville resulted in the collection and proper disposal of over 84,000 pounds of waste pesticides from 141 participants. Two (2) additional events are planned for the spring of 2015 in the Medford and Coos Bay areas.

The new state funds allocated by the Oregon Legislature also supported pesticide stewardship technical assistance efforts in PSP watersheds. Grants were awarded by the WQPMT to local agencies, non-profits and a university to conduct direct assistance to pesticide users to improve pesticide and pest management practices in ways that will benefit water quality. These grant projects will address pesticides used in an array of applications in both rural and urban areas. In addition, the WQPMT supported the purchase (by ODA) of a spray "patternator" to help optimize spray efficiencies for growers in the Columbia River Gorge, as well as a "tunnel sprayer" for use in the North

Willamette watersheds. The tunnel sprayer can be used with any trellised crops to recapture and reuse overspray, thus reducing spray drift up to 99% and reducing chemical purchase costs by as much as 35%.
More information on the PSP program can be found here: http://www.deq.state.or.us/wq/pesticide/pesticide.htm
Information on the WQPMT can be found here:
http://www.oregon.gov/ODA/programs/Pesticides/Water/Pages/AboutWaterPesticides.aspx

4.3.6 Drinking Water Protection

Approximately 75% of Oregon's citizens get their drinking water from public water systems. Oregon's drinking water protection program works to implement strategies ensuring the highest quality water is provided to the intakes and wells. DEQ is responsible for source water protection that includes minimizing the risk to the source water before it reaches the surface water intake for a public drinking water system. DEQ uses Clean Water Act tools and pollution prevention to minimize treatment costs and reduce public health risk. When source waters meet Clean Water Act water quality standards, then standard treatment technology should be sufficient to produce safe drinking water. Source Water Assessments that identify risk associated with land management activities have been completed for all public water systems; refer to DEQ's drinking water website for more information:
http://www.deq.state.or.us/wq/dwp/dwp.htm.
The following tasks were completed in 2014:

- Encouraged protection strategies on a watershed scale basis in the Rogue, Umpqua, Siletz, Coast Fork Willamette, Tualatin, and Clackamas sub-basins.
- Assisted The Dalles in obtaining emergency DWSRLF grant to fund seeding and mulching in their municipal watershed following a fire.
- Assisted Clackamas River Water Providers, the Clackamas SWCD and their partners with a technical assistance and funding program for residential on-site systems, addressing forest fire risks, and developing outreach materials to encourage use of prescription drop-off boxes.
- Assisted North Coast public water systems and their communities evaluate risks from forest management, agricultural sources, and quarries.
- Continued implementing strategies for nitrate reduction in Irrigon's groundwater source area. Initiatives included addressing large animal density on rural lands, onsite systems, and private wells.
- Engaged PWSs and partners in Polk County to develop strategies to address nitrates in regional groundwater.
- Collaborated with a Douglas SWCD and ODA project to assess watershed conditions and conduct landowner outreach within priority South Umpqua Basin drinking water source areas.
- Prepared data and comments for ODA staff on Agricultural Water Quality Management Plans for several basins in Oregon.
- Engaged public water systems and communities in pesticide collection events for several watersheds.
- Collaborated with the USDA Forest Service and Geos Institute to develop concepts for regional projects to develop watershed restoration methodologies.
- Contributed to ongoing Mid Coast Sediment TMDL development to address sediment-based drinking water and biocriteria impairments in the basin.
- Supplied maps and scientific information to citizens, municipalities, and watershed councils regarding source water protection, land use, and climate change.

4.3.7 Groundwater Management Areas

Groundwater Management Areas (GWMAs) are designated by DEQ when groundwater in an area has elevated contaminant concentrations resulting, at least in part, from Nonpoint sources. Once the GWMA is declared, a local Groundwater Management Committee comprised of affected and interested parties is formed. The Committee then works with and advises the state agencies that are required to develop an action plan that will reduce groundwater contamination in the area. Oregon has designated three GWMAs because of elevated nitrate concentrations in groundwater.

These include the Lower Umatilla Basin GWMA, the Northern Malheur County GWMA, and the Southern Willamette Valley GWMA. Each one has developed a voluntary action plan to reduce nitrate concentrations in groundwater.

DEQ's objectives for groundwater quality protection in the future include the following activities:

Lower Umatilla Basin Groundwater Management Area

The Lower Umatilla Basin (LUB) GWMA was declared in 1990. An Action Plan was adopted in 1997 that details the sources of nitrate and measures to be taken to reduce the nitrate contamination. The nitrate trend in the LUB GWMA continues to increase, although at a slower and slower rate.

The following LUB GWMA tasks were completed in 2014:

- Continued sampling of LUB GWMA well network consisting of 33 wells.
- The LUB GWMA Committee continued to work on the second LUB GWMA Action Plan and a Communications and Outreach Plan.

- DEQ participated in informal presentations at Outdoor Schools involving 52 presentations were given for 656 students from nine school districts in April, May, and June 2014. These presentations involved several communities within the LUB GWMA (Hermiston, Echo, and Stanfield) and a few nearby communities as well (Heppner, Ione, Condon, Arlington, Sherman County, and Pendleton). The Outdoor School presentations utilized a groundwater model and a surface water model to describe how groundwater and surface water are related. Also described was the difference between point sources and non-point sources of contamination and how to minimize water pollution.

Northern Malheur County GWMA and Lower Umatilla Basin GWMA

The Northern Malheur County (NMC) GWMA was declared in 1989. An Action Plan was adopted in 1991 that identifies the source of contamination and measures to be taken to reduce the contamination. The nitrate trend in the Northern Malheur County GWMA is slightly declining.

The following NMC GWMA tasks were completed in 2014:

- Continued sampling of NMC GWMA well network consisting of 36 wells and 2 surface water drains.
- Completion of the DRAFT Fourth Northern Malheur County GWMA Nitrate Trend Analysis Report that shows the regional groundwater nitrate trend continues to slightly decrease.
- Continued sampling of Northern Malheur County GWMA well network consisting of 36 wells sampled quarterly. Finalize the Fourth Northern Malheur County GWMA Nitrate Trend Analysis Report that is currently in preparation.
- Continued sampling of Lower Umatilla Basin GWMA well network consisting of 33 wells sampled quarterly.
- The next regional trend analysis is scheduled for early 2017.
- Finalize the Second Lower Umatilla Basin GWMA Action Plan that is currently in preparation.
- Complete the Communications and Outreach Plan that the Lower Umatilla Basin GWMA Committee is currently working on.
- Lower Umatilla Basin GWMA**:** Six formal presentations on the status of the Lower Umatilla Basin GWMA were given to a variety of audiences and stakeholders for a variety of reasons.
- A presentation was given for the Tour of Knowledge (a non-profit citizen group that promotes protecting and preserving natural resources) in February 2014 to give them an overview of the LUB GWMA. This presentation (along with several conversations) resulted in recruitment of additional participants in the LUB GWMA Committee.

Southern Willamette Valley GWMA

Commented [A64]: Language is confusing. Was this report finalized during 2014 or just in progress?

Commented [A65]: Does this pertain to the Northern Malheur County GWMA Nitrate Trend Analysis?

Commented [A66]: Language is confusing. Did you complete these actions or are they in progress?

The Southern Willamette Valley has been the focus of studies for 20 years because of concerns about elevated levels of nitrate in the shallow groundwater. The nitrate contamination originates from many everyday sources, such as fertilizer, septic systems, and animal waste. In 2004, DEQ designated the Southern Willamette Valley as Groundwater Management Area (GWMA) to help ensure that Willamette Valley groundwater could continue to provide a high quality resource for present and future use. Since then, local stakeholders have been engaged in planning to protect and improve the groundwater resource in the Southern Willamette Valley. To view the website for this project, go to http://gwma.oregonstate.edu/.

DEQ continues to monitor the 24 monitoring wells DEQ installed in the Southern Willamette Valley, as well as the 17 domestic wells that make up the a long term monitoring program. In 2013, DEQ conducted a focused pesticide and nitrate sampling of 33 wells near two small public water systems that had reported 12 pesticides in a 2012 USDA study. DEQ is now looking at revising the long-term monitoring program to better focus on areas with changing trends. In addition, EPA continues to run stable isotopic analyses on surface and groundwater samples collected by the DEQ Lab.
The following tasks were conducted in 2014:

- DEQ and the Lane Council of Governments conducted two focus groups in 2013 and 2014: i. In 2013 for rural residents and in 2014 for large agricultural producers. These focus groups were designed to understand what knowledge/perceptions/barriers people might have regarding groundwater quality and protection of groundwater. Participants for both focus groups were selected based on their proximity to two small schools in Northern Benton County. Both of these schools have public water systems with nitrate levels either at or near 10 mg/L nitrate-N. The outcome of these focus groups is informing a social marketing approach developed to facilitate behavior change about groundwater protection.
- OSU Extension Service held approximately 20 outreach events throughout the groundwater management area. This includes: rural living basic classes (teaching rural landowners how to maintain their wells and septic system); free nitrate screening of well water at multiple venues; living on the land series of classes; and classroom education in many of the GWMA children in public schools using a curriculum developed by OSU Extension for the SWV GWMA. These activities have been funded by a 319 Clean Water Grant.
- In early 2014, DEQ shared the results of the domestic well pesticide testing with the more than 30 homeowners at public meeting and by letter. In addition to pesticides, DEQ also tested for nitrate, sulfate, chloride, iron and manganese. Over 40 people attended this public meeting.
- One of the most exciting developments, which started in 2013, is the Lysimeter project managed by Environmental Protection Agency's Western Ecology Division, based in Corvallis (EPA), and Benton Soil and Water Conservation District (SWCD). This project is funded by an Oregon Department of Agriculture (ODA) Fertilizer Fund Grant and an internal EPA RARE grant. Lysimeters can monitor water below the root zone of crops, which then can provide indications of what impact may originate from various crops and management practices. Some Lysimeters were installed almost 20 years ago and still have integrity; others were installed in early 2014 so that specific crops and fertilizer and irrigation practices are captured in this study. All Lysimeters are in 12 actively managed agricultural fields and all of the growers/owners have given their permission for this study. DEQ conducts the nitrate and phosphorous analyses. This partnership (The Farmers, DEQ, EPA, SWCD and ODA) is truly unique in the nation and speaks loudly for the farmer's appreciation of voluntary compliance and the collaborative process.
- Another "first" is the involvement of the Willamette Partnership, a local organization focusing on restoration effectiveness, in using the nitrate data to create the framework for nutrient credits, based on the use of innovative management practices that protect groundwater quality. While nutrient credits are a long-term goal, it is an impressive outcome for a collaborative project with limited funding.
- DEQ continues to monitor a subset of the 24 monitoring wells DEQ installed in the Southern Willamette Valley, as well as ~ 17 domestic wells. Some wells have been eliminated from the long-term program for various reasons.
- The Southern Willamette Valley GWMA Committee continues to meet 3-4 times a year, to address and assess ongoing issues. Meetings continue to draw 30-40 people who are willing to travel to Harrisburg Oregon at 8:00 AM to hear and talk about groundwater quality – even after 10 years of meetings! This demonstrates that the groundwater protection theme resonates with many of the valley's residents. More information is at http://gwma.oregonstate.edu/.

- Students from a Lane County High school who have been participating with DEQ Laboratory in the collection of 'split samples', now have their own 'nitrate testing shop' at their school, and are offering free nitrate testing to the community.

319 Clean Water Funds have been extremely limited for years. Several of the projects mentioned in this section rely heavily of this source of funding to finance groundwater quality protection, outreach and education projects. The potential loss of 319 pass-through funds casts a shadow over the SWV GWMA partnerships, as most other grant opportunities do not include groundwater as a focus for funding, and there are no other known sources for such grants.

- Continue monitoring a subset of the 41 long-term wells in the Southern Willamette Valley GWMA to determine groundwater trends, and then reduce to an appropriate number based upon individual well trends. Provide EPA samples for stable isotopes analyses.
- Provide support for grants obtained by EPA and Benton SWCD that will evaluate the effectiveness of conservation enhancement practices in reducing nitrate pollution to the groundwater in the Southern Willamette Valley GWMA.
- Use a social marking approach to facilitate behavior change regarding groundwater protection. Based on the results of these focus groups, we will design the most appropriate messages aimed at incorporating groundwater protection into the daily life of those GWMA residents.
- Update the Southern Willamette Valley Action Plan, to reflect activities that have been completed, and include additional voluntary strategies that were not part of the original Action Plan.
- Use the groundwater analyses and outcomes of the social marketing process to direct future work and GWMA Committee meeting topics.
- Evaluate the potential nitrate impact to a 'deeper' aquifer in the Linn County area of the Southern Willamette Valley GWMA.

Commented [A67]: Are these planned actions for 2015 or the future in general? If so, may want to include a general introductory sentence.

4.3.8. Coastal Zone NPS Program

Oregon's Coastal Nonpoint Pollution Control Program (CNPCP) is being developed in compliance with requirements adopted as part of the National Ocean and Atmospheric Administration (NOAA) Coastal Zone Act Reauthorization Amendments of 1990 (CZARA).

The CNPCP developed by DEQ and DLCD received approval by NOAA and EPA in 1998, with the exception of three components that were conditionally approved:

1. New development.
2. Operating onsite sewage disposal systems.
3. Additional management measures for forestry.

Commented [A68]: In 1998 EPA and NOAA conditionally approved Oregon's CNPCP, subject to far more than three conditions. During 2014, EPA and NOAA provided interim approvals for all but three of those remaining conditions.

On December 20, 2013, NOAA and EPA issued a notice of intent to disapprove Oregon's coastal nonpoint program under the Coastal Zone Act Reauthorization Amendments based upon perceived deficiencies in Oregon's program and opened a public comment period. The federal agencies' findings were based on Oregon's program as it existed in July 2013. The notice also identified the specific deficiencies and described what Oregon would need to do to have an approvable program.

Commented [A69]: This term is subjective.

NOAA and EPA received hundreds of comments, including comments from the State of Oregon submitted on March 20, 2014. Oregon's submittal included additional and revised measures addressing the perceived deficiencies cited in NOAA and EPA's December 2013 notice. NOAA and EPA indicated they intend to issue a final determination by January 30, 2015. The materials described above and others related to NOAA's and EPA's evaluation of Oregon's CNPCP can be found here:
http://coast.noaa.gov/czm/pollutioncontrol/?redirect=301ocm

Commented [A70]: Need to update as EPA did issue a final determination on that date.

4.3.9. Monitoring and Data

DEQ conducts various types of monitoring as required by the state statute and federal CWA. The existing monitoring programs that address NPS pollution include, but are not limited to:

- TMDL Development – Collect data to develop TMDLs for 303(d) listed streams. The data is used for a subbasin scale cumulative effects analysis for the development of the TMDLs.
- Groundwater – Identify areas of groundwater contamination and determine trends in Groundwater Management Areas.
- Large River Ambient – Collect data for long term trending at fixed sites across the state.
- Volunteer Monitoring – Improve data quality collected by third parties. In addition, increase the data accessibility for local and state assessments.
- Coastal Environmental / Bacteria Monitoring – Collects data to determine the need for beach advisories.
- Toxics Monitoring - Toxics Monitoring Project for surface waters in watersheds across Oregon. This project will give information about current and emerging contaminants that threaten aquatic life and human health.
- Pesticide Stewardship Partnership - Collaborative approach to monitoring pesticide in agricultural areas. Data identifying current use pesticides found in surface water is shared with growers to help them target management practices that reduce pesticides in water.
- Biomonitoring – Collecting data to identify watersheds where aquatic life is impaired and begin to identify chemical and physical indicators that are related to biological impairments.

Commented [A71]: These are goals rather than a description of the data collected and for what purposes.

Formatted: Font color: Auto

TMDL Monitoring Program

TMDL Development and Effectiveness – Collect data to develop TMDLs for 303(d) listed water bodies. The data is used for a subbasin scale cumulative effects analysis for the development of the TMDLs, and to determine if TMDLs are bringing water bodies into compliance with water quality criteria.

These studies are ongoing, and are used to provide data to DEQ modelers for developing and validating models and load allocations. The Powder and Deschutes Rivers had the most intensive monitoring in 2014. Where TMDLs have been completed, basin coordinators will use the data for trending (and follow-up if new pollutant sources are identified). To my knowledge, none of these studies have sufficient data to show trends at this time.

Commented [A72]: Who represents "my"—May want to delete this sentence.

In 2014, the TMDL monitoring program analyzed over 600 water samples and reported nearly 7,000 laboratory analyses. Projects were conducted statewide in each of DEQ's administrative regions, and included:

- Powder River Water Quality Study
- Upper Deschutes River Nutrient and BOD Study
- Tillamook Estuary Sloughs Study
- Tillamook Relative Bed Stability Study
- Johnson Creek Bacteria Study
- Siletz/Yaquina Suspended Solids Trend Monitoring
- Santiam/Calapooia Water Quality Study
- Tenmile Lakes Basin Partnership Study

In combination, these studies also totaled approximately 50 multi-parameter data sonde deployments (dissolved oxygen, pH, temperature, conductivity, and turbidity), one permanent data sonde installation with telemetry, and 60 seasonal temperature monitors.

Statewide Watershed-based Toxics Monitoring Program.

The Toxics Monitoring Program collects data that supports the Agency's mission of protecting the environment and human health from the effects of toxics pollutants. This information may identify new problem areas or validate earlier findings. In 2013, DEQ completed its sampling of sites around the entire state in each basin. This sampling effort also included some sediment and tissue samples collected in conjunction with our sister agencies, ODFW and ODA. Analysis of these collected samples occurred in 2014. DEQ staff are currently in the process of compiled and analyzing the data and completing a summary report.

In 2015, the next phase of the toxics monitoring program will begin. The sampling design is currently under development.

Lower Mid-Columbia River Ecological Assessment

In 2013, data from the Lower Mid-Columbia River Ecological Assessment was used by the Oregon Health Authority to create a fish consumption advisory for mercury in fish tissue between Bonneville and McNairy dams on the Columbia River.

Commented [A73]: Any activities occurred under this topic during 2014. If not, consider deleting since this report focuses on accomplishments during 2014.

Volunteer Monitoring Coordination.

DEQ conducted outreach and education activities and provided technical assistance to support volunteer monitoring in watersheds throughout Oregon. Staff reviewed and assisted in the development of four sampling plans for organizations and worked with additional organizations to refine monitoring strategies or goals outside of the sampling plan process.

Sampling Plans Reviewed:

- Partnership for the Umpqua Rivers QAPP
- Volunteer Water Quality Monitoring: Upper Nehalem Temperature Monitoring
- BLM Water Quality Monitoring: Powder Basin Nutrients
- Volunteer Water Quality Monitoring: Rogue Basin Recreation Safety Monitoring 2014

Commented [A74]: Is this a volunteer monitoring effort?

Staff provided high quality water quality testing equipment or supplies to 26 different organizations. There are approximately 50 organizations currently with equipment around the state. Provided technical assistance on equipment and protocols to approximately 25 organizations over the phone and conducted six trainings in water quality monitoring techniques attended by participants from 16 different organizations.

Staff also worked to coordinate sampling projects in the Middle Willamette and Mid Coast basins focused on NPS pollution impacts that provide data for TMDL implementation in these basins.

Groundwater Management Areas.

DEQ staff performed routine sampling of three Groundwater Management Areas (GWMAs) in the state. The Lower Umatilla Basin, Northern Malheur County, and Southern Willamette Valley GWMAs are sampled four times per year.

4.4 Land Uses

4.4.1 Agricultural Lands

4.4.1.1 Oregon Department of Agriculture

DEQ's Nonpoint Source program works with Oregon Department of Agricultur~~eal~~ (ODA) Water Quality Management Program to prevent pollution and improve water quality on agricultural lands. DEQ and ODA's program staff and management work collaboratively on various water quality related projects to address agricultural nonpoint sources. DEQ's basin coordinators and ODA staff have ongoing working relationships with the review and implementation of Agricultural Water Quality Management Area Plans, as well as local water quality issues related to drinking water, pesticide management, and groundwater protection.

Coordination highlights

- In 2014, DEQ participated in biennial reviews by providing written comments and presenting water quality related information at LAC meetings. DEQ submitted formal comments on about 80%, thirteen out of sixteen biennial reviews.

- In response to the Oregon Board of Agriculture's recommendation, ODA initiated two "Strategic Implementation Areas" in 2014 to test the use of program-initiated compliance evaluation.
- ODA initiated 70 water quality investigations. 25 resulted from program-initiation in the two SIAs, 11 from ODA staff observation, 12 from notification from other agencies, and 22 from public complaints.
- ODA continued to work with SWCDs in 2014 in Focus Areas. By the end of 2014, 83% of Focus Area pre-assessments (40 out of 48) were complete, including 23 using ODA's Streamside Vegetation Assessment tool (developed in 2013), 14 using other streamside vegetation methods, and 3 assessing other conditions (including bacteria and sediment).
- DEQ and ODA also held a series of coordination meetings to discuss how to bridge the gap between DEQ and ODA's expectations for adequate streamside vegetation for the purpose of protecting water quality.
- DEQ also participated in ODA's effort to draft a guidance document for developing measurable objectives. Once finalized, ODA's staff will use the document to develop objectives and associated timelines and milestones. The guidance document is scheduled to be completed in 2015.

Agricultural Water Quality Management Program

One of the main NPS program actions for agriculture is participation in ODA's biennial review process by providing water quality information as well as commenting on progress made in implementing the area plans and rules. See ODA's 2012 report on the program for more information.

http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/ORAgWaterQualityReport.pdf

Biennial Reviews

In 2014, ODA initiated sixteen biennial reviews. DEQ's regional staff provided formal comments on thirteen of those sixteen area plans and rules, and presented water quality information at the local advisory committee meetings.

A team of NPS and regional staff revised the draft guidance document in 2014. The guidance includes examples and suggested texts to include in the DEQ comments on biennial reviews.

The team also developed general priorities for agriculture and provided a template and guidance on how to communicate them to ODA during biennial review process. Statewide priorities are as follows.

- Prevention and protection are as important to DEQ as restoration; Area Plans should include BMPs that protect waters of the State from all forms of contamination and should not be limited to TMDL parameters.
- In most parts of the state, DEQ's highest priority for agricultural lands is to protect and re-establish riparian vegetation.
- DEQ encourages each plan to include strategies to track environmental outcomes including upland and riparian conditions as well as water quality.

In addition, DEQ staff identify additional priorities that are specific to each management area. DEQ staff began including these priorities in the cover letter for submitting DEQ comments to ODA.

ODA's area plans as well as reports can be found at the following link:
http://egov.oregon.gov/ODA/NRD/water_agplans.shtml.

Focus Areas

The SWCD-led Focus Area process involves conducting a pre-assessment to document current conditions, implementing projects to improve water quality, conducting a post-assessment to document progress, and reporting the results. A description of the Focus Area process is posted on the ODA website.

www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/WaterFocus4.pdf

ODA and SWCDs identified "pilot" Focus Areas and began implementing projects to improve water quality in those areas during the 2011-2013 biennium. SWCDs received almost $700,000 to implement projects within Focus Areas

in 2012 and 2013. The following report was issued at the end of 2013. ODA's evaluation found improvements in streamside vegetation, or other water quality conditions, in some of the Focus Areas.

http://oacd.org/oacdpress/wp-content/uploads/pilot-newsletter_Nov-18-1.pdf

For the 2013-2015 biennium, ODA expanded the Focus Area approach to all SWCDs. The percentage of lands meeting goals of Area Plans within Focus Areas will be available after the end of the 2013-2015 biennium, in the latter part of 2015. Most of the SWCDs (42 out of 48) are addressing streamside vegetation within Focus Areas. By the end of 2014, 83% of Focus Area pre-assessments (40 out of 48) were complete, including 23 using ODA's Streamside Vegetation Assessment tool (developed in 2013), 14 using other streamside vegetation methods, and 3 assessing other conditions (including bacteria and sediment). All SWCDs are conducting outreach to landowners in the Focus Area and most are planning or implementing water quality improvement projects.

Strategic Implementation Areas

In 2013, the concept of "Strategic Implementation Areas" was developed to test the use of systematic program initiated compliance. In 2014, ODA selected two areas, one in western Oregon and one in eastern Oregon, and used publically available information to evaluate compliance with water quality regulations. ODA conducted focused outreach and education to address priority water quality concerns and used their authority to investigate and enforce problems that persisted. Twenty-five investigations were initiated in the two SIAs in 2014.

http://www.oregon.gov/ODA/shared/Documents/Publications/NaturalResources/SIA4.pdf

Investigations outside SIAs

In addition to the SIAs, the program initiated 11 investigations in 2014. Between 2006 and 2013, ODA initiated 7.6 cases per year average. Prior to 2006, there was no investigation initiated by ODA. Normally there is a compliance action for each site visit, however occasionally more than one site visit is needed to take a compliance action. On a first site visit, the landowner receives a Letter of Compliance, Water Quality Advisory, or Letter of Warning. On additional site visits, formal enforcement actions can be completed.

ODA's Agricultural Water Quality Management Program Compliance Summary

The Agricultural Water Quality Management Act (ORS 568.900 to 568.933) authorizes ODA to develop Agricultural Water Quality Management Area Plans (area plans) throughout the state. The statute also authorizes the development of Agricultural Water Quality Management Area Rules (area rules) to serve as a regulatory backstop to the voluntary efforts described in the area plans. Compliance investigations may be initiated in response to written complaints, agency observation, or notification by another agency. ODA evaluates the complaints, notifications, or observations based on the potential to impact waters of the state and responds accordingly.

The following compliance figures are based on calendar year 2014, and the data was provided by ODA.

Figure 2. In 2014, the majority of compliance cases were in the Northwestern part of the state. ODA does not take enforcement actions without a site visit.

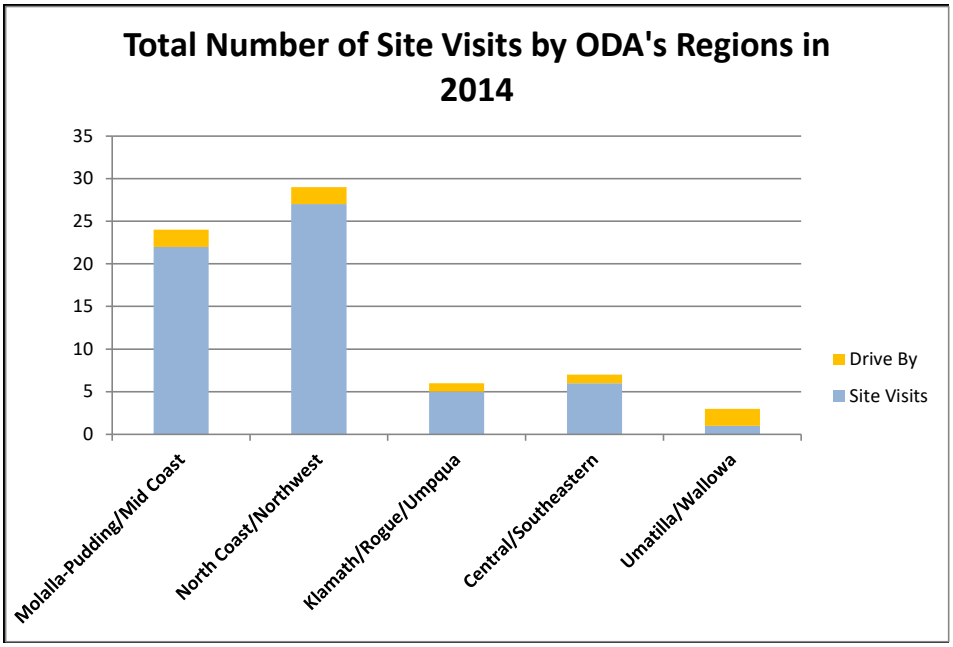


Figure 3. In 2014, more compliance investigations were initiated due to issues related to riparian management than other water quality issues.

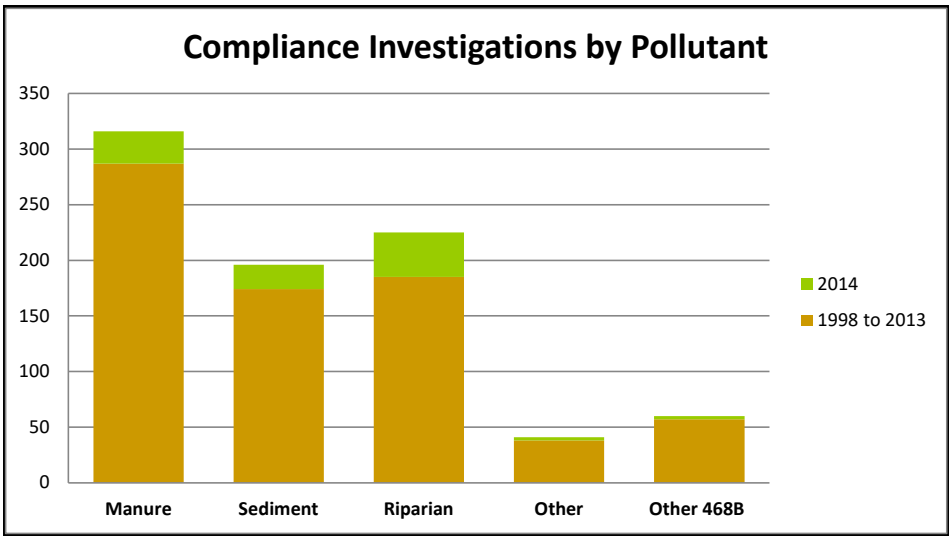


Figure 4. In the past 14 years, over half of the investigations were initiated due to complaints submitted by the public. In 2014, more than half of the investigations were initiated by ODA, and more than 2/3 were initiated by ODA or other agencies.

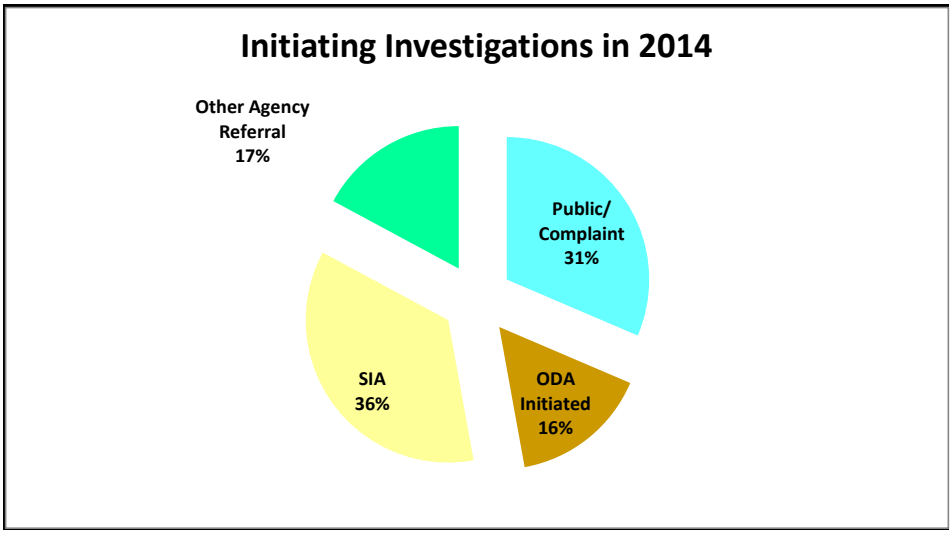
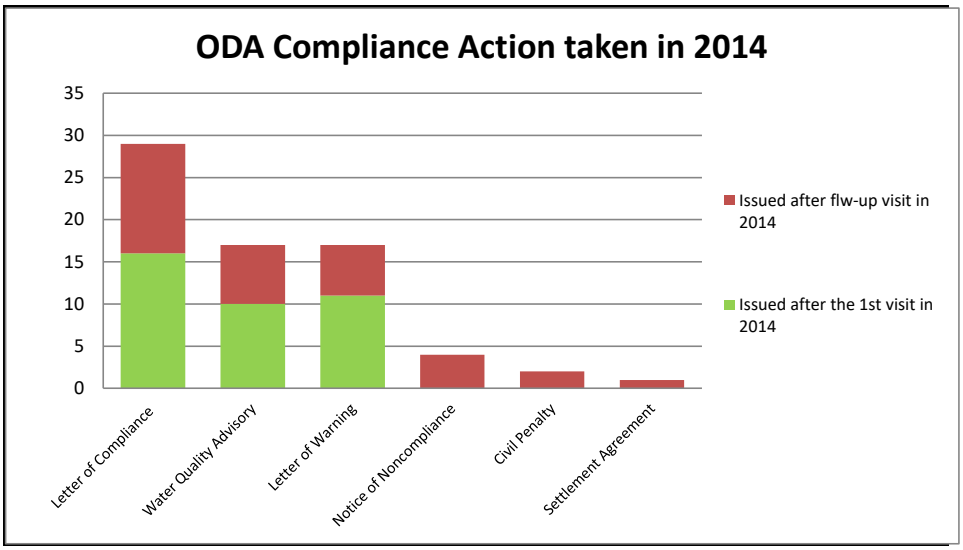


Figure 5.. ODA took 74 compliance actions in 2014. In some cases, it could take ODA more than 1 site visit to take compliance action.



Local Management Agencies

ODA is identified as one of the Designated Management Agencies under various TMDLs and Administrative Rule Division 42 (TMDL rule). ODA in turn has identified Soil and Water Conservation Districts (SWCDs) as Local Management Agencies~~y~~ to implement AgWAM~~awam~~ Area plans. AgWQM Area plans are considered to be TMDL implementation plans for agriculture and a mechanism to address water quality issues.

ODA provides funding to 45 Soil and Water Conservation Districts for implementation of water quality programs and annually negotiates scope of work agreements to specify area plan implementation activities to be completed.

Outreach and Education Summary

In 2014, the SWCDs used various venues to reach agricultural producers and rural land residents to promote conservation practices. Additional information on conservation practices is captured under funding partner section. The decrease is likely due to the fact that SWCDs began working with individual land owners in focus areas.

Table 7. SWCDs Outreach and Education Summary in 2014. In general, the number of events and attendance decreased from the previous year. The decrease is likely due to the fact that SWCDs began working with individual land owners in focus areas.

SWCDs OUTREACH AND EDUCATION		
TYPE	**# EVENTS**	**ATTENDANCE OR DISTRIBUTION**
Presentations	**267**	**6,030**
Demonstrations/Tours	**76**	**1,496**
Displays	**277**	**29,883**
Student Events	**282**	**12,779**
Fact Sheets	**294**	**19,639**
Newsletter articles	**133**	**51,892**
TOTAL	**1,329**	**121,719**

Table 8.. Under scope of work agreements with ODA, Oregon's SWCDs provided technical assistance to approximately 7,000 landowners in 2014. Over 330,000 additional acres of agricultural lands are now managed under 375 approved conservation plans.

SWCDs TECHNICAL ASSISTANCE, WATER QUALITY PROJECTS ON ACRES IN PLANS							
SWCD	**# LANDOWNERS RECEIVING TA**	**# SITE VISITS**	**FUNDING SUPPORT**	**# WQ PROJECTS IMPLEMENTED**	**# ACRES IMPLEMENTED**	**# APPROVED PLANS**	**# ACRES IN PLANS**
Totals	**6,935**	**3,126**	**555**	**628**	**10,6037**	**375**	**33,0328**

Management area specific information on the SWCD activities is available upon request.

4.4.2 Federal Agencies

National Water Quality Initiative

In 2013, EPA directed the states to conduct effectiveness monitoring using 319 funds in National Water Quality Initiative (NWQI) watersheds where the Natural Resources Conservation Service identified to improve water quality by focusing its investments. In 2014, Tetra Tech provided technical assistance to DEQ to support monitoring plan development for Fifteenmile NWQI effectiveness monitoring project. DEQ and its partners will be developing and implementing the effectiveness monitoring projects in Fifteenmile and Willow basins during 2015-2019.

Conservation Effectiveness Partnership

Working with the Conservation Effectiveness Partnership in 2014, DEQ continued to meet with USDA-NRCS, Oregon Water Enhancement Board (OWEB), and ODA to evaluate the impacts of grant investments on water quality and watershed health. The partner agencies finalized the report on the Wilson River in Tillamook Bay and continued working to finalize the report on Wychus Creek along the Upper Deschutes River.

4.4.2 State and Private Forest Lands

RipStream (Riparian Function and Stream Temperature)

The Oregon Department of Forestry (ODF)'s RipStream project has been developed to provide a coordinated monitoring effort with which to evaluate effectiveness of Oregon Forest Practices Act (FPA) rules and strategies in protecting stream temperature, and promoting riparian structure that provides necessary functions for the protection of fish and wildlife habitat. DEQ is participating in the RipStream project by providing 319 funds and assisting in analyses of data and study results in cooperation with ODF staff.

In order to meet this objective, the following questions were addressed:

- Are the FPA riparian rules and strategies effective in meeting DEQ water quality standards regarding anti-degradation of stream temperature and the water quality standard?
- Are the FPA riparian rules and strategies effective in maintaining large wood recruitment to streams, downed wood in riparian areas, and shade?
- What are the trends in riparian area regeneration?
- What are the trends in overstory and understory riparian characteristics? How do they along with channel and valley characteristics correlate to stream temperature and shade?

ODF's initial analysis showed that current riparian protections on fish-bearing streams on private lands are inadequate to meet water quality standards for temperature. In this study, streams in State Forests are meeting both numeric and Protecting Cold Water (PCW) criteria of the temperature standard. However, streams on private forests are not meeting the PCW criterion. Private streams are typically meeting the numeric criteria, although 3 of 18 experimental stream reaches showed an exceedance due to harvest. It should be noted that the starting temperatures in these streams are usually far below the numeric targets.

Streams managed by private land riparian rules showed a post-harvest average increase of 0.7 degrees C in the daily maximum temperature as harvested. Many sites were not harvested to regulatory minima for operational reasons, so average increase in daily maximum temperature is larger when sites are harvested to the minimum tree retention allowed (approximately 1.45 degrees C). State forest rules resulted in no change in the average daily maximum.

Subsequent analysis has shown that reductions in shade are the primary factor driving these temperature changes, and shade decreases are primarily connected to lower basal areas. These results demonstrate the need for changes in riparian protection rules for private forestlands in Oregon. Recent analysis for the rule change has shown that substantial increases in riparian protection will be needed on private lands. DEQ has also worked with ODF on the MidCoast Sediment TMDLs, working cooperatively to evaluate the impact of forest practices on sediment regimes and aquatic life during the source assessment.
In 2014, the following was accomplished:

- ODF (in cooperation with and assisted by DEQ and other cooperators/stakeholders) continued to analyze data from the RipStream study to determine what level of riparian protection will be needed in the revised rules.
- ODF staff and others, partly funded by a 319 grant, conducted a modeling analysis and wrote a manuscript for publication examining transmission of heat from harvest units through shaded downstream reaches using the RipStream data, further bolstering the need to protect thermal regimes.
- DEQ, ODFW, ODF, and federal agencies assembled the scientific case for protecting natural thermal regimes, analyzed effects of landscape disturbance on thermal regimes, and presented this information to the Board of Forestry and Environmental Quality Commission. The Board of Forestry subsequently affirmed the need to continue the rule analysis for increased protections on fish-bearing streams and directed ODF to begin the process of constructing new rules.

4.4.3 Federal Forest Lands

DEQ/USFS MOU.

A final draft of the Memorandum of Understanding between U.S. Department of Agriculture-Forest Service's Pacific Northwest Region and State of Oregon Department of Environmental Quality to meet state and federal water quality rules and regulations was completed. Clean Water Act (CWA) Section 319(k) directs federal compliance with the "Oregon Nonpoint Source Pollution Plan" which identifies the need for Federal Agency MOUs. This Oregon plan states: *"MOUs will be developed to ensure that federal land management agencies comply with federal CWA and state water quality requirements and programs"*.

Commented [A75]: During 2014? Am confused about the chronology of this of this section,

Next year in 2013, as was done for the recent updating of the BLM and DEQ MOU http://www.deq.state.or.us/wq/nonpoint/docs/USFSDEQMOU.pdf, DEQ will be providing a 15-day public review and comment period. DEQ is not holding a public hearing about this memorandum and will not be issuing a response to comments. DEQ will be taking written comments on this final draft memorandum and will review and consider all comments received during the public comment period. Following this review, DEQ will modify the memorandum if necessary, approve and sign.

Commented [A76]: "Next year in 2013"? Can you update?

DEQ/BLM MOU.

DEQ and BLM water quality staff throughout 2013 reviewed the MOU and communicated to keep abreast of any major DEQ or BLM water quality issues, such as:

Commented [A77]: Please update to reflect actions during 2014.

BLM Planning Update for Western Oregon Forests.

The Bureau of Land Management (BLM) continues the process of revising the Resource Management Plans (RMPs) for 2.5 million acres of forested lands across six BLM Districts in western Oregon. BLM intends to revise six RMPs with an associated EIS for the Western Oregon Planning Area. BLM has begun the scoping process, to determine the scope of issues to be addressed by the environmental analysis, including alternatives and the significant issues related to the planning process.

The RMPs for Western Oregon will determine how the BLM-administered lands in western Oregon will be managed to further the recovery of threatened and endangered species, to provide for clean water, to restore fire-adapted ecosystems, to produce a sustained yield of timber products, and to provide for recreation opportunities.

In 2012, the State of Oregon signed an MOU defining the process and scope of the state's involvement in developing an RMP that involves and receives better understating of how the state and federal clean water act and state rules and regulations are included in the RMP. DEQ, ODF, ODFW, and DSL directors signed the MOU. The key federal and state natural resources agencies are members of the Cooperating Agencies Advisory Group (CAAG) and technical workgroups such as riparian/aquatic resources.

In 2014, the CAAG met several times to provide comments to draft planning documents prepared by BLM. BLM is developing their RMP differently than in past plans. Programmatic issues are being developed first in order to ensure the outcomes will meet the requirements of the Oregon and California Act, the Federal Endangered Species Act and both the federal Clean Water Act and the State of Oregon water quality standards and TMDL load allocations.

BLM is on a schedule to have a final RMP and EIS completed by 2015.

4.5 Progress of 319 Grant Funded Projects

4.5.1 Description of Types of 319 NPS Projects

DEQ continually seeks projects from government agencies, tribal nations, and nonprofit organizations to address nonpoint sources (NPS) of pollution affecting coastal, river, lake, drinking, and ground water resources of the state. The annual solicitation occurs annually during the months of October through December as part of the 319 Nonpoint Source Implementation Grants.

The 319 Nonpoint Source Implementation Grant funds target prioritized basins for specific NPS pollutants to effectively improve water quality.

The four general focus areas used to develop DEQ project priorities are:

- TMDL Implementation.
- 303(d) listings.
- Ground Water Management Areas (GWMAs).
- Drinking Water Source Areas.

4.5.2 Grant Performance Report Summary

The progress of NPS 319 Funded (Pass-Through) Projects is identified in **Table 18** in **Appendix 1**. The data used in the table is as of December 31, 2014. Forty-four (44) 319-funded projects are open; including the thirty-one (31), 2014 funded projects.

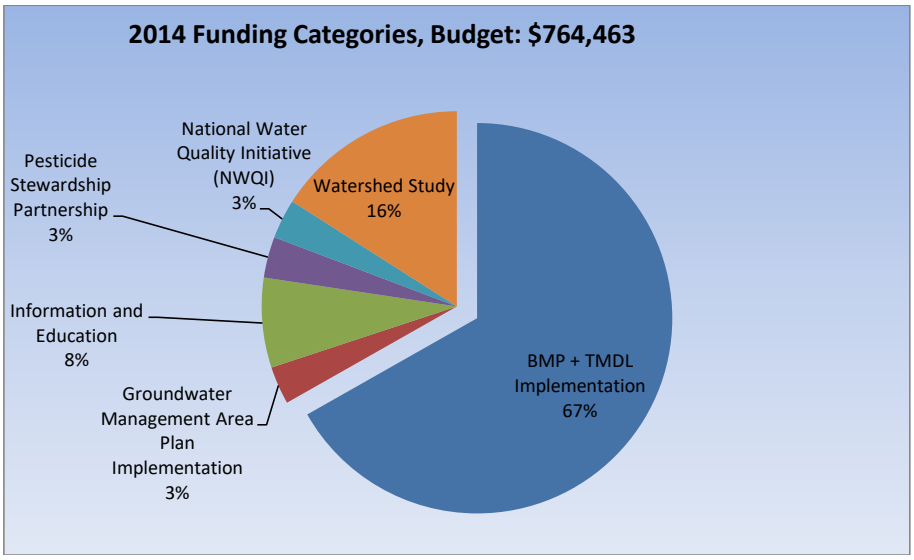
4.5.3 Geographic and Programmatic Priorities for 319 Funding

Table 13 in **Appendix** 2 identifies DEQ's geographic and programmatic priorities for 319 funded projects in 2014 as outlined in the 2014 Section C. Pre Proposal Project Priorities (**Appendix 3)**. These priorities were used to prioritize the 2014 319 Funded Projects. The identification of priority basins (as listed below) does not exclude the submission of proposals for work outside these basins. To determine how the "project need" was met by region and basin/subbasin; please refer to **Appendix 5** Proposed Projects Received from the 2014 RFP for a list of the 2014 319 Grant Funded Projects in Response to the RFP.

4.5.4 2014 319 Grant Funding Categories

The following **Figure 6** identifies the 2014 – 319 funding categories and funded amounts. The **$764,463** total funds for 2014 was divided in six areas of emphasis, as follows: BMP plus TMDL Implementation (67%), Watershed Study (16%), Information and Education (7%), Pesticide Stewardship Program, (3.5%), National Water Quality Initiative (NWQI) (3.5%) and Groundwater Management Area Plan Implementation, (3%).

Figure 6. 2014 Funding Categories



2014 FUNDING CATEGORIES	AMOUNT REQUESTED	% OF TOTAL REQUEST
BMP + TMDL Implementation	$510,620	67%
Groundwater Management Area Plan Implementation	$24,000	3%
Information and Education	$56,850	7%
Pesticide Stewardship Partnership	$25,939	3.5%
National Water Quality Initiative (NWQI)	$25,000	3.5%
Watershed Study	122,054	16%
TOTAL REQUEST	**$764,463**	**100%**

4.5.5 2014 -- 319 Grant Funded Projects

Table 9. Oregon 319 2014 Project List by Subbasin

PROJECT NUMBER	REGION	NAME OF PROJECT	SUBMITTED BY	SUBBASIN	BUDGET
W14750	**ER**	Mid Deschutes River and Tumalo Crk Temp. Monitor	Upper Deschutes WSC	Mid. Deschutes	**$18,340**
W14751	**ER**	the Lower Mill Creek Riparian Restoration Project	Wasco Co SWCD	Mill Creek	**$36,250**
W14752	**ER**	Tri-county yellow flag iris containment and ctrl program	Tri-county CWMA	Grande Ronde	**$8,000**
W14753	**ER**	PBWC WQ Monitoring Extension and Expansion	PBWC	Powder Basin	**$76,213**
W14754	**ER**	FLIR Camera	GRMW	Wallowa	**$4,907**
W14755	**ER**	Owyhee River Improvement Project Phase 4	Malheur Co SWCD	Owyhee	**$48,877**
W14756	**ER**	Getting word out Malheur Basin	Mal WSC	Malheur	**$27,120**
W14757	**NWR**	Nestucca Riparian Restoration	Nestucca-Neskowin WC	Nestucca	**$60,000**
W14758	**NWR**	Milton Creek Riparian Enhancement	Scappoose Bay Watershed Council	Scappoose Bay	**$24,836**
W14759	**NWR**	Upper Nehalem Rip Rest and WQ Monitoring Project	Upper Nehalem WC	Upper Nehalem	**$50,000**
W14760	**NWR**	Clackamas R. WSC WQ monitoring and improvement project	Clackamas River Basin Council	Clackamas	**$18,480**
W14761	**NWR**	TWC catchment scorecard and WQ	TWC	NWR basins	**$24,919**
W14762	**NWR**	Columbia Co WSScale WQ Monitoring	Columbia SWCD	Lower Willamette/NC	**$14,060**
W14763	**NWR**	TEP CCWF 2015	TEP	Tillamook Bay	**$6,250**
W14764	**NWR**	NORP Plant Purchase	NORP		**$10,162**
W14765	**SW**	TMDL Implementation status and trend study	PSU	TBD	**$14,403**
W14766	**SW**	Will. Model WS Revegetation & Standards of Practice Guide 2015	Bonneville Environmental Foundation	Willamette	**$40,000**
W14767	**SW**	PSP pass through	HQ	Various	**$15,000**
W14768	**SW**	PSP DEQ lab	HQ	SW	**$10,939**
W14769	**SW**	National Water Quality Initiative (NWQI)	HQ	TBD	**$25,000**

Commented [A78]: ???

Commented [A79]: ???

Commented [A80]: What does this mean?

Table 9. Oregon 319 2014 Project List by Subbasin (Cont.)

PROJECT NUMBER	REGION	NAME OF PROJECT	SUBMITTED BY	SUBBASIN	BUDGET
W14770	**WR**	Curry cumulative restoration for aquatic health	Curry SWCD	Sixes/Chetco/Lower Rogue	**$24,849**
W14771	**WR**	Targeted to address nitrate to GW Rogue Basin	Jackson Co SWCD	Rogue	**$24,000**
W14772	**WR**	Expanding the Benefit: Rip Revegetation Luckiamute Basin	Luckiamute Watershed Council	Luckiamute	**$31,387**
W14773	**WR**	Coos Biocriteria Assessment and Evaluation, Phase 2	Coos Watershed Association	Coos WS	**$10,462**
W14774	**WR**	10-mile WS WQ and Biological monitoring	TLBP	Tenmile lakes WS	**$11,736**
W14775	**WR**	Gold Hill WQ Improvement - RARE	City of Gold Hill	Rogue	**$12,000**
W14776	**WR**	Prioritization areas of action plan implementation	Lane Council of Governments	SWV-GWMA	**$31,387**
W14777	**WR**	Riparian Rest and Continuous WQ Monitoring	Siuslaw Watershed Council	Siuslaw	**$12,770**
W14778	**WR**	Siletz, Yaquina, Beaver Cr Sub-Basin BMP Project	Lincoln Co SWCD	Siuslaw & Siltcoos	**$18,616**
W14779	**WR**	South Umpqua Basin - Morgan Creek - Phase II	Douglas SWCD	South Umpqua	**$37,500**
W14780	**WR**	Western Oregon LID implementation Guidance	Oregon Environmental Council	NWR-WR	**$16,000**
TOTAL					**$764,463**

4.5.6 Estimates of NPS Load Reductions

Section 319 (h) (11) requires states to ***"report annually on what their nonpoint source programs are accomplishing, including available information on load reductions and actual water quality improvements".*** The load reduction estimates need to be completed for projects funded by 319 funds annually.

EPA has requested that DEQ complete NPS pollutant load reductions using EPA's Section 319 Grants Reporting and Tracking System (GRTS). DEQ used the load reduction model, "Spreadsheet Tool for Estimating Pollutant Load" (STEPL), within GRTS to estimate nitrogen (pounds per year), and phosphorus (pounds per year), Sedimentation-Siltation (tons per year) for **one 319 funded project**. Load reduction estimates were included in the EPA database GRTS (Grants Reporting and Tracking System).

Commented [A81]: Why just one project? Only one project had load reductions for these pollutants?

The following Table 10 identifies the total 2014 load reduction estimate by pollutant for one 319 funded project: Willamette Model Watershed Riparian Revegetation is as follows:

- 39.7 Tons/Year Biological Oxygen Demand
- 200.8 Tons/Year Nitrogen Reduction;
- 30.9 Tons/Year Phosphorous Reduction; and
- 65Tons/Year Sedimentation-Siltation Reduction.

Note: The estimates reported in this table were part of the annual report to EPA for Load Reduction Estimates for the year 2014.

Table 10. Estimates of NPS Load Reductions of One 2014 -- 319 Funded Projects.

2014 NPS PROJECT – ESTIMATED NPS LOAD REDUCTION (STEPL into GRST)				
PROJECT NAME: WILLAMETTE MODEL WATERSHED RIPARIAN REVEGETATION, LOADING ESTIMATES (YEAR FUNDED: 2014)				
SUBBASIN	**BIOLOGICAL OXYGEN DEMAND TONS/YEAR**	**NITROGEN REDUCTION TONS/YEAR**	**PHOSPHOROUS REDUCTION TONS/YEAR**	**SEDIMENTATION-SILTATION REDUCTION TONS/YEAR**
Middle Fork Willamette	**5.2**	**30.2**	**4.4**	**0.8**
Long Tom	**2.9**	**16.8**	**2.5**	**0.5**
Calapooia	**11.5**	**46.7**	**8.3**	**1.9**
Luckiamute	**15.3**	**83.3**	**11.6**	**2.5**

2014 NPS PROJECT – ESTIMATED NPS LOAD REDUCTION (STEPL into GRST)				
PROJECT NAME: WILLAMETTE MODEL WATERSHED RIPARIAN REVEGETATION, LOADING ESTIMATES (YEAR FUNDED: 2014)				
SUBBASIN	BIOLOGICAL OXYGEN DEMAND TONS/YEAR	NITROGEN REDUCTION TONS/YEAR	PHOSPHOROUS REDUCTION TONS/YEAR	SEDIMENTATION-SILTATION REDUCTION TONS/YEAR
South Santiam	1.3	3.6	0.7	0.2
Lower North Santiam	3.5	20.2	2.9	0.6
ESTIMATED LOAD REDUCTION	39.7	200.8	30.9	65

4.5.7 Watershed Based Plans

The Watershed Approach currently being developed by DEQ is based on many components of approaches recommended by EPA and is used in some other states. The Watershed Approach is a basin-scale resource assessment process with greater opportunities for direct, interactive feedback from local stakeholders and tribal nations. Depending on which basin is the focus of the Watershed Approach, an applicable TMDL may have already been developed, may be under development, or may be scheduled for development.

The products of the Watershed Approach process consist of two primary elements: a basin status report and a basin action plan. Stakeholder involvement is also a critical component of the Watershed Approach.

To help protect, improve and enhance the quality of Oregon waterways, DEQ conducts in-depth assessments of the state's basins. These assessments take the form of local water quality status and action plans, which describe water quality conditions and include recommendations for actions that DEQ and others who are interested in these basins can take to improve water quality.

DEQ completed its first three basin status/action plans (links below) as part of this project's pilot year. It will post three more assessments later in 2014. DEQ plans to cover the state's major basins in the next few years then re-visit each to mark progress and reassess how to deal with lingering water quality problems.

Commented [A82]: Please update as it appears that 3 plans had been conducted in 2013 and three more in 2014. Is that correct?

- North Coast Water Quality Status/Action Plan - Summary
- North Coast Water Quality Status/Action Plan- Full Report

- South Coast Basin Water Quality Status/Action Plan - Full Report
- South Coast Basin Water Quality Status/Action Plan - Appendices

- Deschutes Water Quality Status/Action Plan - Summary
- Deschutes Water Quality Status/Action Plan - Full Report

- Rogue Basin Water Quality Status/Action Plan - Summary
- Rogue Basin Water Quality Status/Action Plan - Full Report

- Powder Basin Water Quality Status/Action Plan Summary
- Powder Basin Water Quality Status/Action Plan - Full Report
- Umpqua Basin Water Quality Status/Action Plan - Full Report

The following Water Quality Status/Action Plan is nearly completed:

- Clackamas and Sandy River Basin

DEQ has begun working on Water Quality Status/Action Plans for the following:

- Umatilla Basin
- Tualatin Subbasin
- Upper Willamette Area

5. Success Stories and Environmental Improvement

5.1. WQ-10 and SP-12 Projects

This **Section 319 Nonpoint Source Success Stories** Web site features stories about primarily nonpoint source-impaired waterbodies where restoration efforts have led to documented water quality improvements. **Waterbodies are separated into three categories of stories**, depending on the type of water quality improvement achieved:

- Stories about partially or fully restored waterbodies
- Stories that show progress toward achieving water quality goals
- Stories about ecological restoration

DEQ must prepare these annual reports in order to receive 319 dollars from EPA a~~. A~~nd EPA needs these Success Stories because Congress wants to know why the 319 dollars are needed and how successful they are being used.

All previous Oregon's Watershed Measures & Waterbody Restoration Stories “Success Stories” are developed by DEQ staff with assistance from EPA’s contractor Tetra Tech. It takes a lot of time from DEQ staff to gather the information to put the story together, as well as reviewing the information for accuracy. Although these stories are required by EPA, DEQ staff have found benefits in developing these stories including using the stories to publicize success and further their outreach goals.

EPA Region 10 provided the following information that summarizes those waterbodies in Oregon that meet EPA Success Story designation:

Table 11. Water Quality Success Stories

STATE	WQ-10	SP-12	MAKING PROGRESS STORY
OR	**Diamond Lake**	**Wilson River 1/27/2010 (1)**	**Wilson River**
		Bear Creek 10/5/2010 (6)	**Bear Creek**
		Tillamook 6/30/2011 (2)	**Tualatin River**
		Tualatin (2/2012) (20)	
		Kilchis River 4/22/2013 (1)	
OREGON TOTAL	**1**	**30**	**3**

Commented [A83]: May need to explain SP-12. Also include a discussion on why Oregon fails to develop WQ-10 stories (I understood there is a problem with the data base that houses monitoring data) and how DEQ plans to address this deficiency/barrier/problem.

There are 2 success stories (under "making progress") added to this year's annual report as follows:

1. The **Kilchis River**, Stakeholders Implement Practices to Reduce Bacteria Levels.
2. The **Tillamook River,** Stakeholders Implement Practices to Reduce Bacteria.

KILCHIS RIVER

Stakeholders Implement Practices to Reduce Bacteria Levels

Bacteria from livestock and human sources caused Oregon's Kilchis River to violate water quality standards, prompting the Oregon Department of Environmental Quality (ODEQ) to add the Kilchis River to the state's Clean Water Act (CWA) section 303(d) list of impaired waters in 1998. With support from multiple organizations, landowners installed best management practices (BMPs) throughout the Kilchis River watershed. Data show that bacteria levels have dropped significantly and have met water quality standards for recreation since 2009. However, the Kilchis River remains listed as impaired while additional assessments are performed. WQ-10 Type 2 Success Story: "Making Progress" (no WQ-10 credit is awarded until the waterbody is moved from Category 4 or 5 into Category 1 or 2 on Oregon's Integrated Report for one or more impairments).

Problem

The 65-square-mile Kilchis River watershed (Figure 1) drains into Tillamook Bay on Oregon's coast. The dominant land use in the Kilchis River watershed is state and federal forestlands, accounting for 97 percent of the watershed's total area. Agricultural land uses cover about 2 percent of the watershed, primarily in the lowland areas.

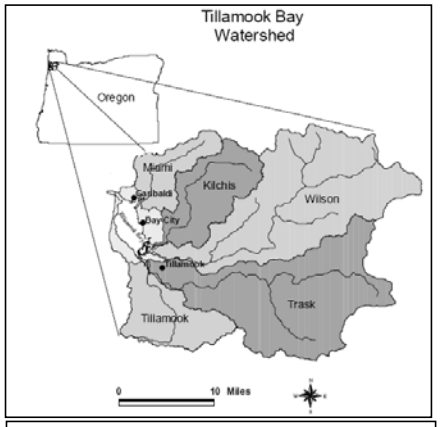


Figure 1. The 65-square-mile Kilchis River watershed is one of five major tributaries within the Tillamook Bay Basin in northwest Oregon.

The Kilchis River is protected for recreational contact use and aquatic life. Oregon's water quality criteria for these uses require that the 30-day log mean should not exceed 126 *Escherichia coli* counts per 100 milliliters (mL), based on a minimum of five samples; and no single sample shall exceed 406 *E. coli* counts per 100 mL.

Beginning in the late-1980s, data indicated that bacteria levels exceeded water quality criteria during the summer near the river's mouth. Between 1986 and 1994, 81 percent (17 of 21) of summertime samples exceeded the applicable criteria. As a result, the ODEQ added a 13.1-mile segment of the Kilchis River to the CWA section 303(d) list of impaired waters in 1998 for bacteria. This segment was divided into two separate segments (OR_1238985454957_2.3_8.5 and OR_1238985454957_8.4_15.4) on Oregon's 2002 list of impaired waters.

Project Highlights

The Tillamook Bay National Estuary Program, now known as the Tillamook Estuaries Partnership (TEP), developed a watershed assessment report specifically for the Kilchis River in 1998. The report described watershed conditions and recommended actions that address issues of water quality, fisheries and fish habitat, and watershed hydrology. On a larger scale, the TEP worked closely with community, state and federal entities to develop and implement the Tillamook Bay Comprehensive Conservation and Management Plan beginning in 1999.

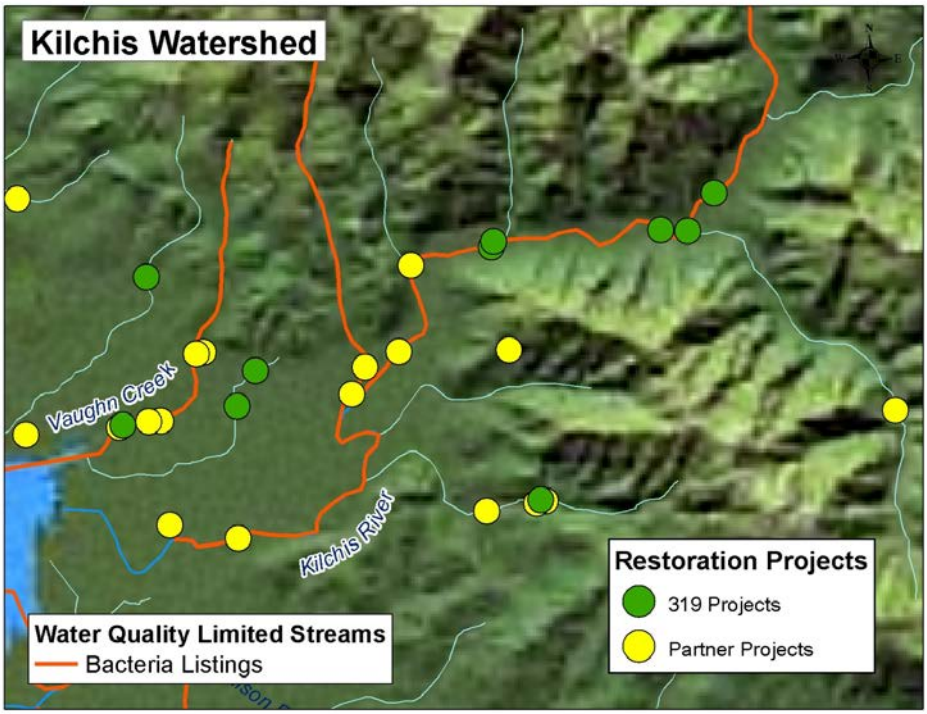
ODEQ completed a Tillamook Bay watershed total maximum daily load (TMDL) for temperature and bacteria in 2001 (addresses all Bay rivers, including the Kilchis River). Also in 2001, the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) and the Tillamook Soil and Water Conservation District (SWCD) published a Watershed Plan/Environmental Assessment for the Lower Tillamook Bay watershed. The 2001 document outlined agricultural facilities, practices and restoration activities needed to address TMDL-related water quality issues.

In 2001 TEP began working with Oregon State University on a 3-year genetic marker study on bacteria in the Tillamook Bay watershed. The study found that both humans and ruminants (including livestock) contributed bacteria to the Kilchis River. Using these data, watershed managers began targeting practices to reduce bacteria.

In collaboration with NRCS and the Oregon Department of Agriculture, the Tillamook County SWCD worked directly with landowners to evaluate and address problems with manure application/storage, runoff and erosion between 2000 and 2012. In the lower Kilchis River watershed, the SWCD helped landowners install seven aboveground wet storage manure tanks, 22 underground wet storage manure tanks and 12 dry storage manure tanks. The SWCD also implemented seven riparian fencing and planting projects with private landowners and worked to promote BMPs such as nutrient management, waste utilization and prescribed grazing. Landowners adopted rotational grazing plans on three farms.

Partners have implemented numerous riparian and habitat restoration projects (Figure 2). For example, TEP has worked with landowners to complete more than 10 restoration projects in the lower Kilchis River through its Backyard Planting Program (BYPP), many in partnership with Tillamook SWCD. TEP, in collaboration with Oregon Department of Fish and Wildlife and the Tillamook County Creamery Association, removed a dam and improved aquatic habitat by adding large woody debris and restoring riparian areas along a Kilchis River tributary in 2009.

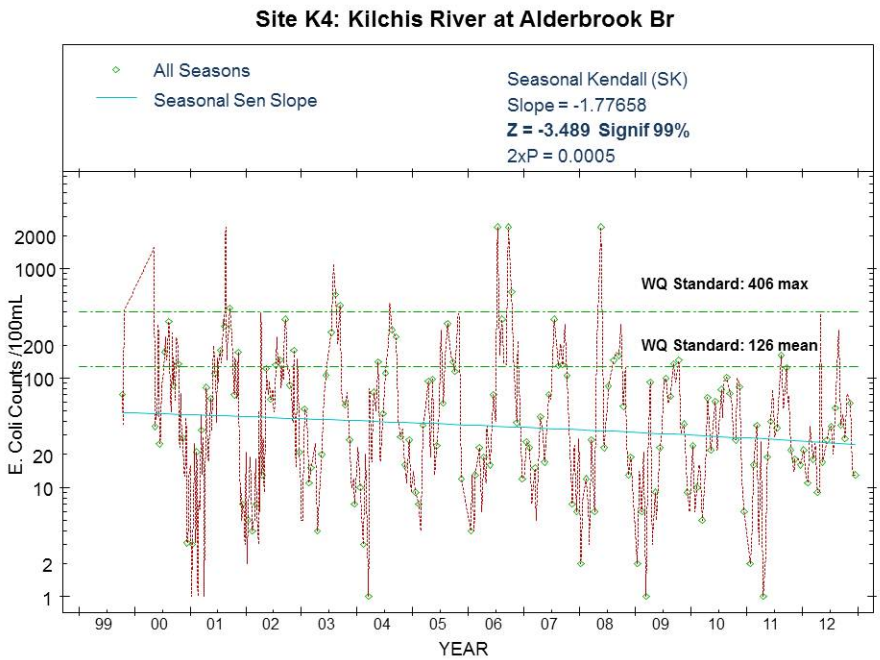
Figure 2. Stakeholders completed numerous restoration projects in the lower Kilchis River watershed (2000–2012). Both the TEP and SWCD conducted numerous education and outreach activities in the Kilchis River and greater Tillamook Bay watersheds, including distributing fact sheets, hosting field trips, holding workshops and classroom-based discussions, and publishing articles in local newspapers.



Results

Data collected in partnership with local groups show that the Kilchis River main stem now meets recreational use standards for bacteria. TEP collects monitoring data in the Kilchis River watershed. Data show three stations (K4, K5 and K6) on the main stem have met the two-part recreational use water quality standard for *E. coli* bacteria since 2009. The data for station K4 (the station closest to the mouth of the river) are presented in Figure 3. Data from four additional monitoring stations on Kilchis River tributaries show significantly decreasing trends in bacteria. Previous DEQ assessments classified the river as an impaired water covered by the Tillamook Bay TMDL and restoration plans. Because Tillamook Bay does not support its shellfish waters designated use due to elevated bacteria levels, the Kilchis River, which feeds into the bay, will remain listed as impaired for bacteria pending additional water quality assessments in the larger Tillamook Bay watershed.

Figure 3. Bacteria levels in the lower Kilchis River have steadily declined since 2000 and now consistently meet water quality standards for recreation.



Partners and Funding

Partners working to restore Tillamook Bay and its watershed have included the Oregon Watershed Enhancement Board, Oregon Department of Agriculture, ODEQ, Oregon Department of Fish and Wildlife, TEP, Tillamook County, U.S. Fish and Wildlife Service, Tillamook County Creamery Association, Tillamook SWCD, Tillamook Native Plant Cooperative and private landowners.

Partners spent more than $1.8 million dollars restoring and protecting the lower Kilchis River watershed. The Tillamook Pioneer Museum spent $1 million (mostly private funds) on the purchase of Tillamook Bay-front property. Partners also completed 17 riparian restoration projects at a cost of $103,789, approximately $71,757 of which was provided by CWA section 319 funding.

Contact

York Johnson
Oregon Department of Environmental Quality
Phone: 503-322-2222
E-mail: johnson.york@deq.state.or.us

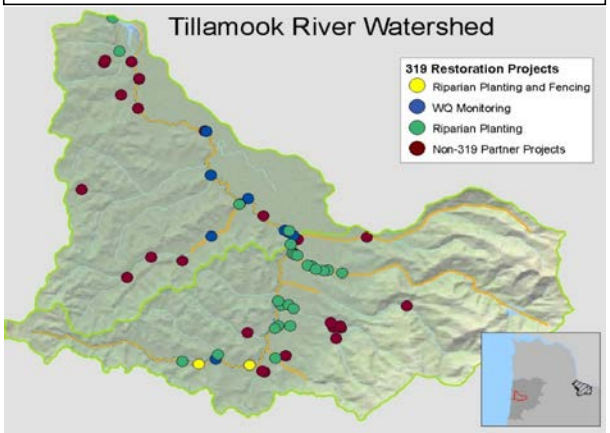
TILLAMOOK RIVER

Stakeholders Implement Practices to Reduce Bacteria

Waterbodies Improved

High bacteria levels from livestock and human sources caused Oregon's Tillamook River and several of its tributaries to violate water quality standards, prompting the Oregon Department of Environmental Quality (ODEQ) to add these waters to Oregon's Clean Water Act (CWA) section 303(d) list of impaired waters in 1998. With support from multiple organizations, landowners installed best management practices (BMPs) throughout the watershed. Data analyses show that bacteria levels declined significantly between 1999 and 2012. The downward trends are expected to continue; the Tillamook River and many of its tributaries should consistently meet recreation water quality standards for bacteria in the near future. W0-10 Type 2 Success Story: "Making Progress" (no WQ-10 credit is awarded until the waterbody is moved from Category 4 or 5 into Category 1 or 2 on Oregon's Integrated Report for one or more impairments).

Figure 1. The 62-square-mile Tillamook River watershed is one of five major tributaries within Oregon's Tillamook Bay Basin. Partners completed restoration projects throughout watershed in 2002–2012.



Problem

The 62-square-mile Tillamook River watershed flows into Tillamook Bay on Oregon's coast (Figure 1). The Tillamook River Basin includes 45 square miles (mi^2) of forest, 13 mi^2 of agriculture and approximately 1.6 mi^2 each of rural residential and rural industrial land uses. The river offers salmon and trout habitat and feeds into shellfish waters. The public uses the river for swimming and wading.

Oregon's current bacteria water quality criteria for recreational contact use and aquatic life requires that the 30-day log mean should not exceed 126 *Escherichia coli* counts per 100 milliliters (mL), based on a minimum of five samples; and that no single sample shall exceed 406 *E. coli* counts per 100 mL.

Data collected at river mile 13 of the Tillamook River between 1986 and 1990 showed that 36 percent (8 of 22) of values violated the applicable bacteria water quality criteria in fall, winter and spring. Data collected from 1986 to 1989 showed that 80 percent (8 of 10) of values exceeded the criteria in the summer. As a result, ODEQ added an 18.5-mile segment of the Tillamook River (OR_1238834454692_0_18.5) to the CWA section 303(d) list in 1998 for bacteria. Because data showed that several Tillamook River tributaries (Killam, Simmons, Mill, and Bewley creeks) also failed to meet bacteria standards, ODEQ added them to the 1998 CWA section 303(d) list as well.

Project Highlights

The Tillamook Bay National Estuary Program, now known as the Tillamook Estuaries Partnership (TEP), worked closely with community, state and federal entities to develop and implement the Tillamook Bay Comprehensive Conservation and Management Plan beginning in 1999. ODEQ completed a Tillamook Bay watershed total maximum daily load (TMDL) for temperature and bacteria in 2001 (addresses all Bay rivers, including the Tillamook River). Also in 2001, the U.S. Department of Agriculture's Natural Resource Conservation Service (NRCS) and the Tillamook Soil and Water Conservation District (SWCD) published a Watershed Plan/Environmental Assessment for the Lower Tillamook Bay watershed. The 2001 document identified agricultural practices and restoration activities that must be implemented to address TMDL-related issues.

In 2001 TEP began working with Oregon State University on a 3-year genetic marker study on bacteria in the watershed. The study found that bacteria in the upper Tillamook River came from ruminant (i.e., cattle, deer) sources, while that in the lower Tillamook River came from both humans and ruminants. Using these data, watershed managers began targeting practices to reduce bacteria.

Between 2002 and 2012, the Tillamook County SWCD cooperated with federal, state and local partners to work directly with landowners to address sources of bacteria by installing BMPs and completing other projects, including: (1) at 28 sites, removed invasive plants and restored native plants in riparian and other sensitive areas; (2) at five sites, fenced out livestock and restored native vegetation around streams; (3) replaced or modified 12 culverts to reduce flooding and erosion; (4) added one flood spillway to reduce flooding on agricultural lands; and (5) decommissioned two roads to reduce sedimentation (see Figure 1).

Both the TEP and SWCD conducted numerous education and outreach activities in the Tillamook River and greater Tillamook Bay watersheds, including distributing fact sheets, hosting field trips, holding workshops and classroom-based discussions, and publishing articles in local newspapers.

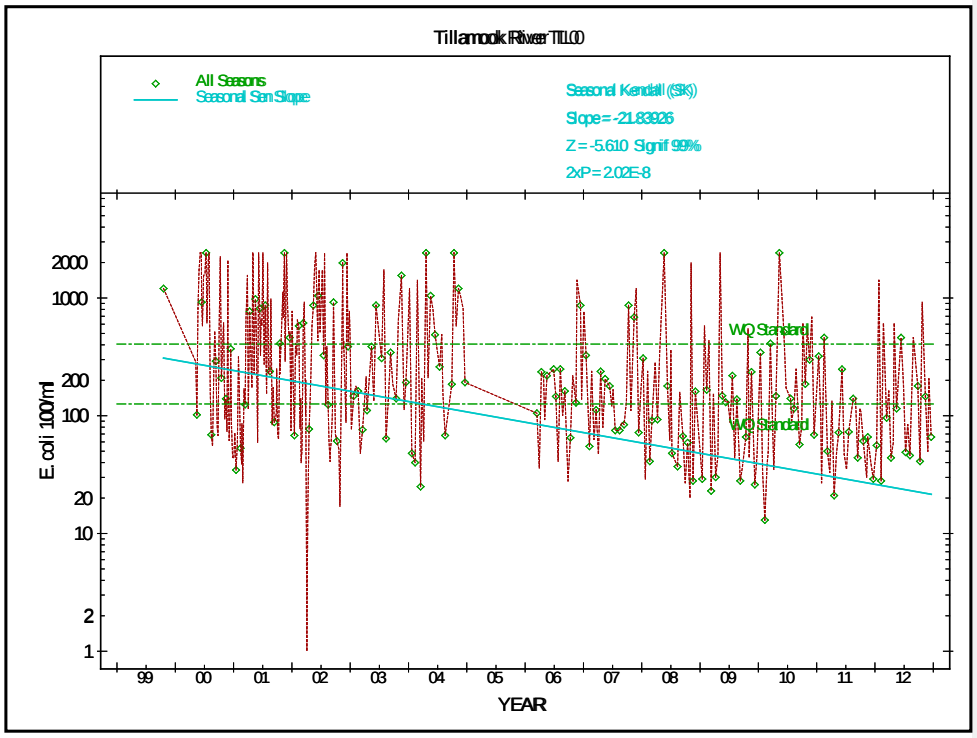
Results

Stakeholders' efforts to reduce bacteria pollution throughout the Tillamook Bay watershed are working. Since 1997, TEP has collected monitoring data from 10 stations throughout the watershed (extending from the river's mouth to its headwater tributaries). ODEQ performed a Seasonal Kendall trend analysis test on the data from all 10 monitoring stations. This statistical test determines if the bacteria levels are generally increasing or decreasing over time (and assigns a confidence level associated with the trend). Although no stations consistently meet the bacteria water quality criteria for recreation, all stations but one show a significant decreasing trend in bacteria counts over time (Table 1). A sample of site-specific data can be seen in Figure 2.

Table 12. Data analyses show that bacteria levels have dropped significantly in the Tillamook River subbasin.

TILLAMOOK RIVER SUBBASIN IMPAIRED WATER	MONITORING SITES	DATA COLLECTION PERIOD	BACTERIA REDUCTIONS: SEASONAL KENDALL TEST CONFIDENCE LEVEL[1]
Tillamook River	TL0, TL1, TL2, TL4, TL7	1999–2012	99%
Tillamook River	TL10	2003–2012	99%
Killam Creek	TL11	2003–2012	95%
Fawcett Creek[2]	TL12	2003–2012	99%
Bewley Creek	TL13	2003–2012	80%

[1] The confidence level indicates the probability that the values are correctly showing a decreasing trend.
[2] Not listed as impaired for recreational use; however, this water is included in the TMDL. Data collected show periodic exceedance of the recreation water quality standard since 2003.Figure 2. Seasonal Kendall test results for site TL0 (1999–2012) on the lower Tillamook River main stem.



APPENDIXES

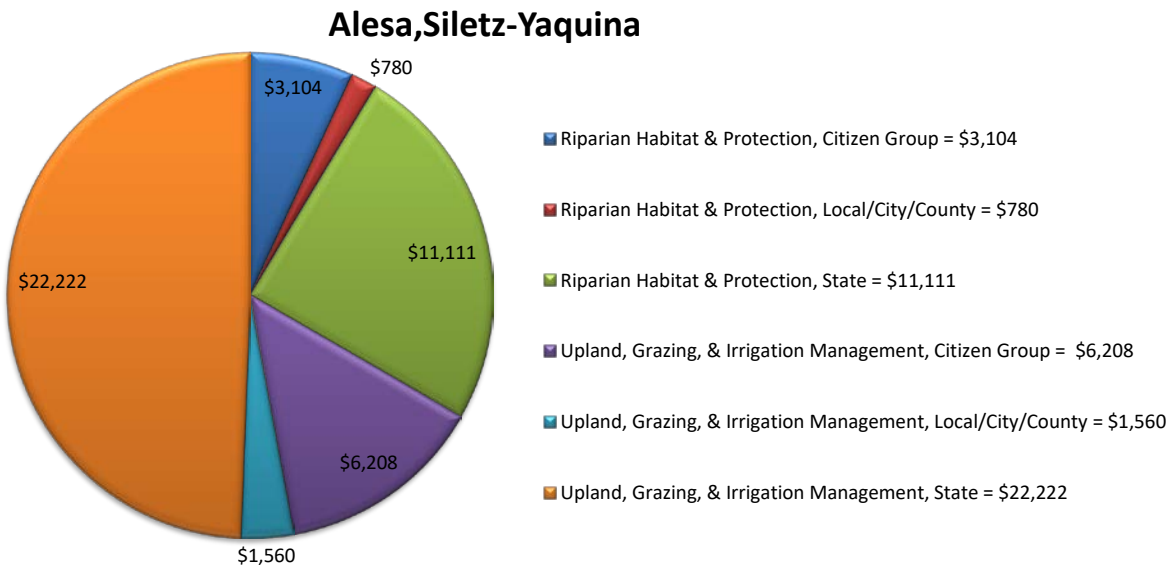
APPENDIX 1: SUBBASIN BY SUBBASIN FUNDING

BY CONTRIBUTOR(S), CASH, IN KIND, AND THE SUBTOTAL COST TO IMPLEMENT WATER QUALITY RELATED PROJECT(S)

Source of Data: ***\\deqhq1\WQNPS\NPS Annual Reports\OWRI_data\2014_Report***

ALSEA, SILETZ-YAQUINA SUBBASIN

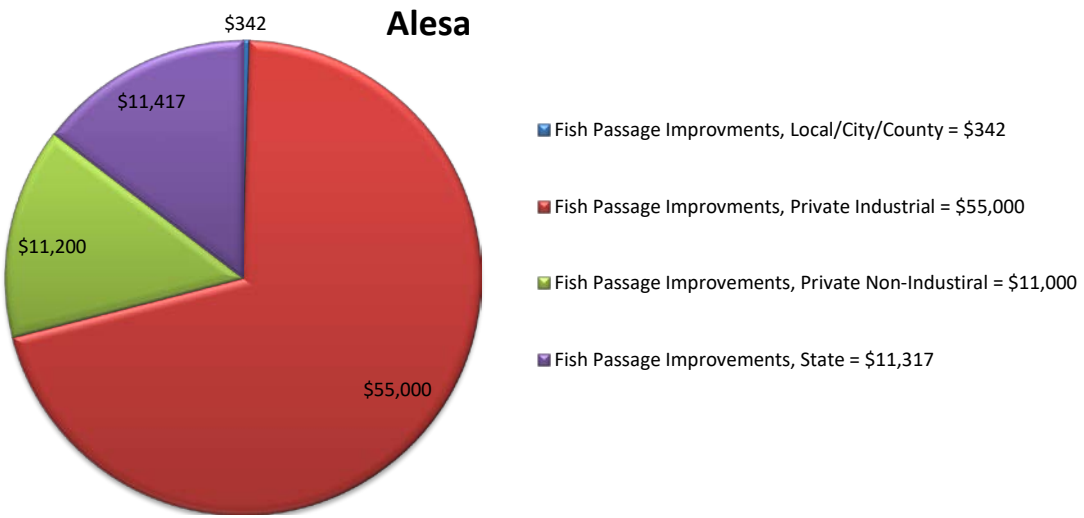
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Alsea, Siletz-Yaquina	Riparian Habitat and Protection	Citizen Group	$3,104	$0	**$3,104**
Alsea, Siletz-Yaquina	Riparian Habitat and Protection	Local/City/County	$0	$780	**$780**
Alsea, Siletz-Yaquina	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Alsea, Siletz-Yaquina	Riparian Habitat and Protection	State	$11,111	$0	**$11,111**
Alsea, Siletz-Yaquina	Upland, Grazing, and Irrigation Management	Citizen Group	$6,208	$0	**$6,208**
Alsea, Siletz-Yaquina	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$1,560	**$1,560**
Alsea, Siletz-Yaquina	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$0	**$0**
Alsea, Siletz-Yaquina	Upland, Grazing, and Irrigation Management	State	$22,222	$0	**$22,222**
TOTAL					**$44,985**



Total Project Cost: $44,985

ALSEA SUBBASIN

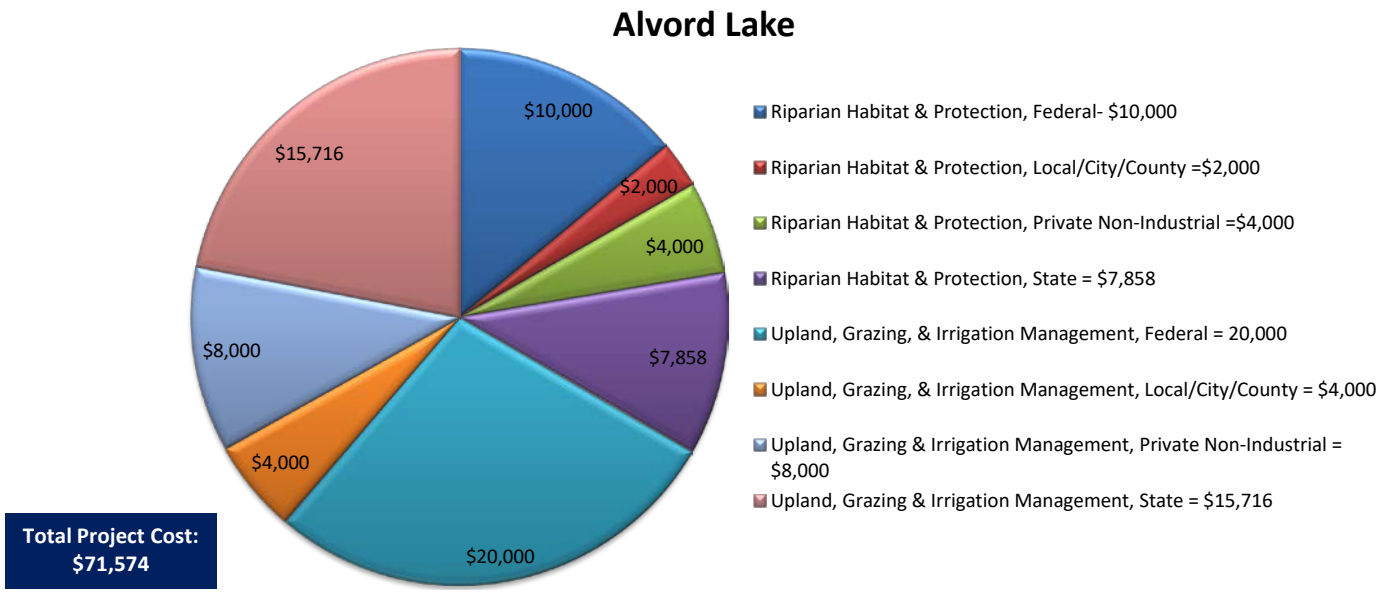
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Alsea	Fish Passage Improvements	Local/City/County	$342	$0	**$342**
Alsea	Fish Passage Improvements	Private Industrial	$55,000	$0	**$55,000**
Alsea	Fish Passage Improvements	Private Non-industrial	$0	$11,200	**$11,200**
Alsea	Fish Passage Improvements	State	$9,327	$2,090	**$11,417**
Alsea	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
TOTAL					**$77,959**



Total Project Cost: $77,959

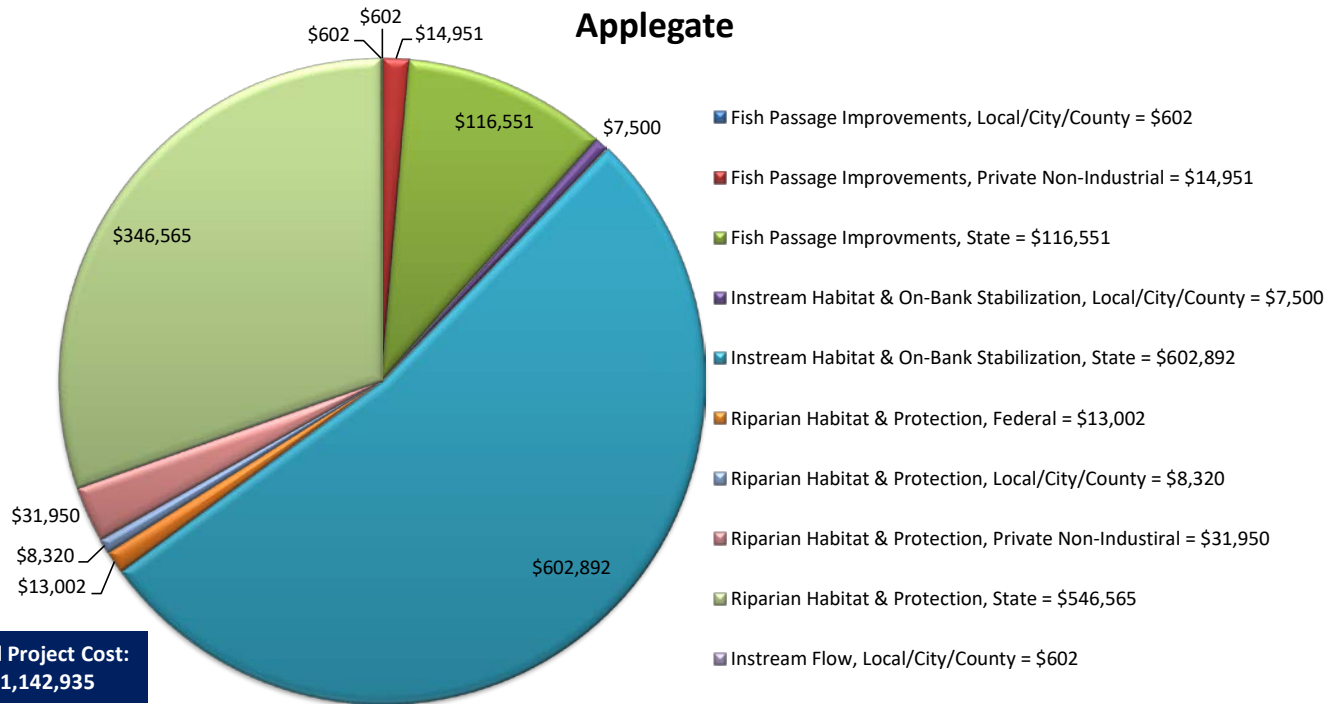
ALVORD LAKE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Alvord Lake	Riparian Habitat and Protection	Federal	$0	$10,000	**$10,000**
Alvord Lake	Riparian Habitat and Protection	Local/City/County	$0	$2,000	**$2,000**
Alvord Lake	Riparian Habitat and Protection	Private Non-industrial	$0	$4,000	**$4,000**
Alvord Lake	Riparian Habitat and Protection	State	$7,858	$	**$7,858**
Alvord Lake	Upland, Grazing, and Irrigation Management	Federal	$0	$20,000	**$20,000**
Alvord Lake	Upland, Grazing, and Irrigation Management	Local/City/County	$	$4,000	**$4,000**
Alvord Lake	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$8,000	**$8,000**
Alvord Lake	Upland, Grazing, and Irrigation Management	State	$15,716	$0	**$15,716**
TOTAL					**$71,574**



APPLEGATE SUBBASIN

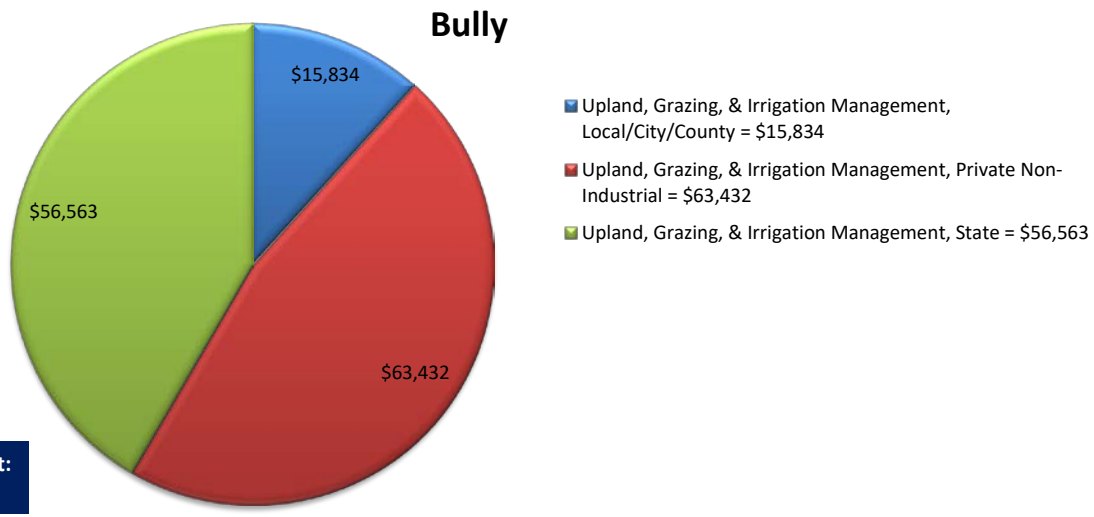
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Applegate	Fish Passage Improvements	Local/City/County	$0	$602	**$602**
Applegate	Fish Passage Improvements	Private Non-industrial	$14,951	$0	**$14,951**
Applegate	Fish Passage Improvements	State	$110,703	$5,848	**$116,551**
Applegate	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$7,500	**$7,500**
Applegate	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$0	**$0**
Applegate	Instream Habitat and on-Bank Stabilization	State	$602,892	$0	**$602,892**
Applegate	Riparian Habitat and Protection	Federal	$0	$13,002	**$13,002**
Applegate	Riparian Habitat and Protection	Local/City/County	$0	$8,320	**$8,320**
Applegate	Riparian Habitat and Protection	Private Non-industrial	$7,890	$24,060	**$31,950**
Applegate	Riparian Habitat and Protection	State	$346,565	$0	**$346,565**
Applegate	Instream Flow	Local/City/County	$0	$602	**$602**
Applegate	Instream Flow	Private Non-industrial	$0	$0	**$0**
TOTAL					**$1,142.935**



Total Project Cost: $1,142,935

BULLY SUBBASIN

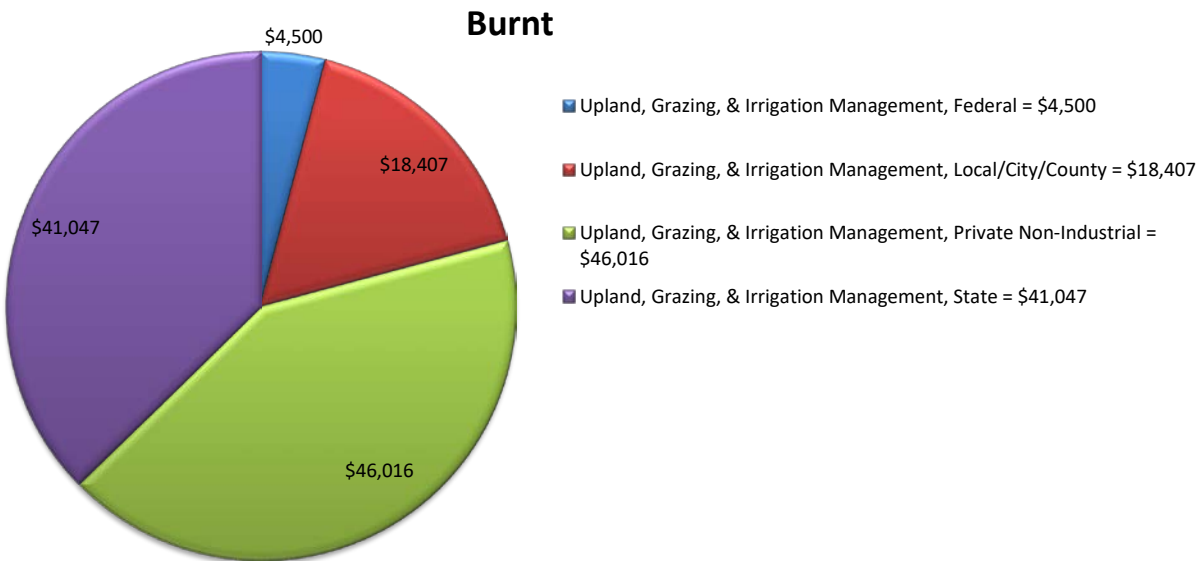
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Bully	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$15,834	**$15,834**
Bully	Upland, Grazing, and Irrigation Management	Private Non-industrial	$63,432	$0	**$63,432**
Bully	Upland, Grazing, and Irrigation Management	State	$56,563	$0	**$56,563**
TOTAL					**$135,829**



Total Project Cost: $135,829

BURNT SUBBASIN

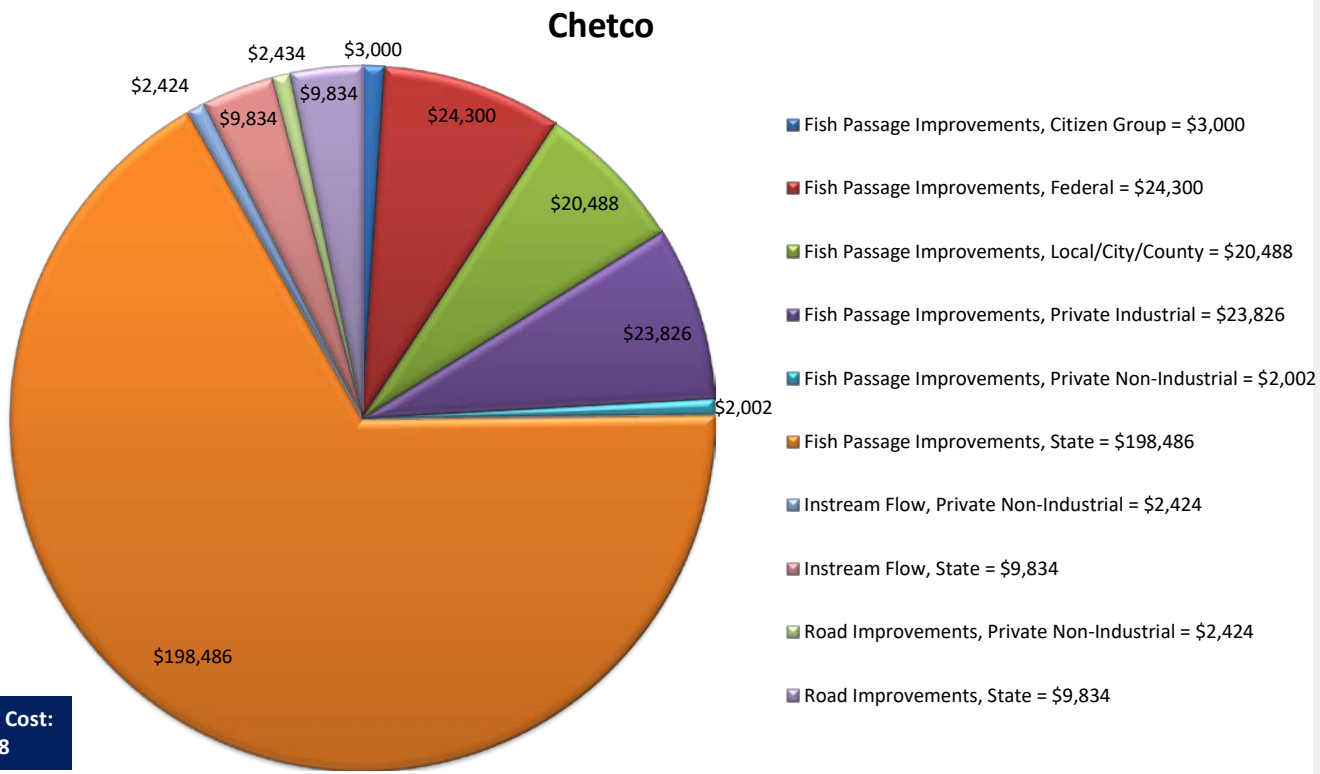
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Burnt	Upland, Grazing, and Irrigation Management	Federal	$0	$4,500	**$4,500**
Burnt	Upland, Grazing, and Irrigation Management	Local/City/County	$11,500	$6,907	**$18,407**
Burnt	Upland, Grazing, and Irrigation Management	Private Non-industrial	$21,831	$24,185	**$46,016**
Burnt	Upland, Grazing, and Irrigation Management	State	$37,947	$3,100	**$41,047**
TOTAL					**$109,970**



Total Project Cost: $109,970

CHETCO SUBBASIN

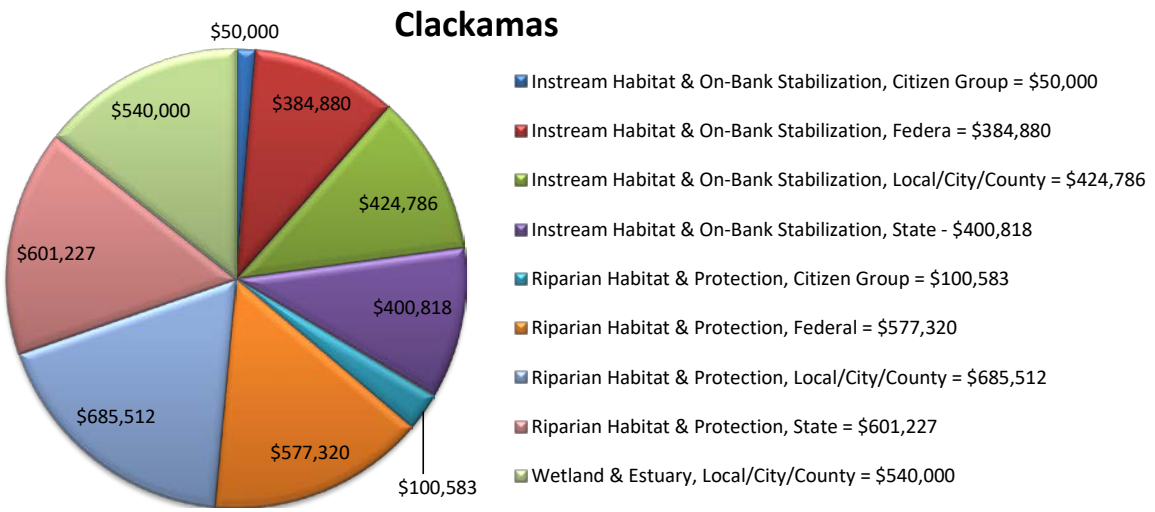
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Chetco	Fish Passage Improvements	Citizen Group	$0	$3,000	$3,000
Chetco	Fish Passage Improvements	Federal	$10,000	$14,300	$24,300
Chetco	Fish Passage Improvements	Local/City/County	$8,898	$11,590	$20,488
Chetco	Fish Passage Improvements	Private Industrial	$20,226	$3,600	$23,826
Chetco	Fish Passage Improvements	Private Non-industrial	$0	$2,002	$2,002
Chetco	Fish Passage Improvements	State	$193,276	$5,210	$198,486
Chetco	Instream Flow	Private Non-industrial	$0	$2,424	$2,424
Chetco	Instream Flow	State	$9,834	$0	$9,834
Chetco	Road Improvements	Private Non-industrial	$0	$2,424	$2,424
Chetco	Road Improvements	State	$9,834	$0	$9,834
TOTAL					**$296,628**



Total Project Cost: $296,628

CLACKAMAS SUBBASIN

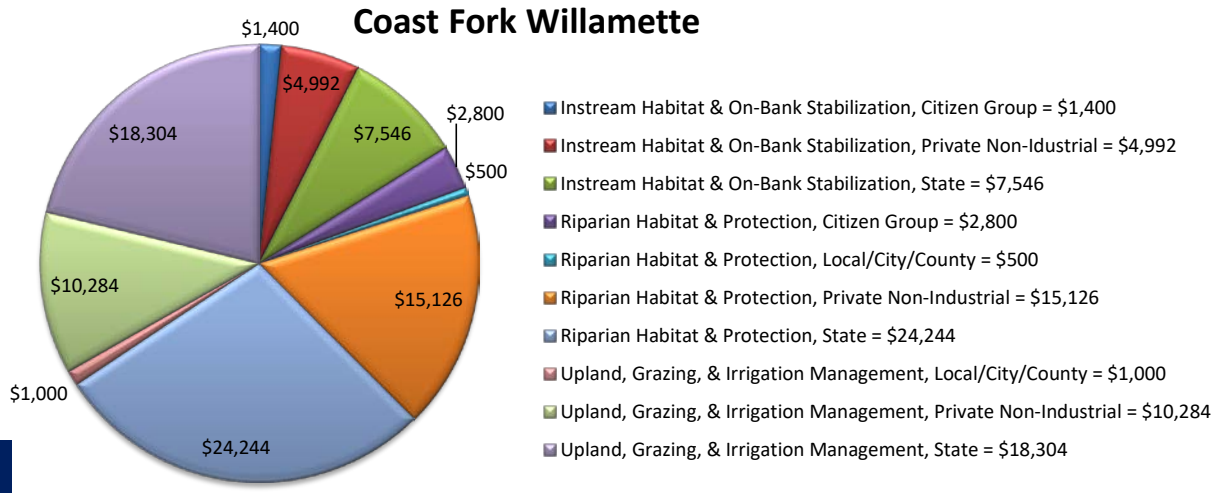
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Clackamas	Instream Habitat and on-Bank Stabilization	Citizen Group	$50,000	$11,746	**$61,746**
Clackamas	Instream Habitat and on-Bank Stabilization	Federal	$384,880	$0	**$384,880**
Clackamas	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$424,786	**$424,786**
Clackamas	Instream Habitat and on-Bank Stabilization	State	$384,018	$16,800	**$400,818**
Clackamas	Riparian Habitat and Protection	Citizen Group	$75,000	$25,583	**$100,583**
Clackamas	Riparian Habitat and Protection	Federal	$577,320	$0	**$577,320**
Clackamas	Riparian Habitat and Protection	Local/City/County	$48,333	$637,179	**$685,512**
Clackamas	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Clackamas	Riparian Habitat and Protection	State	$576,027	$25,200	**$601,227**
Clackamas	Wetland and Estuary	Local/City/County	$540,000	$0	**$540,000**
TOTAL					**$3,776,126**



Total Project Cost: $3,776,126

COAST FORK WILLAMETTE SUBBASIN

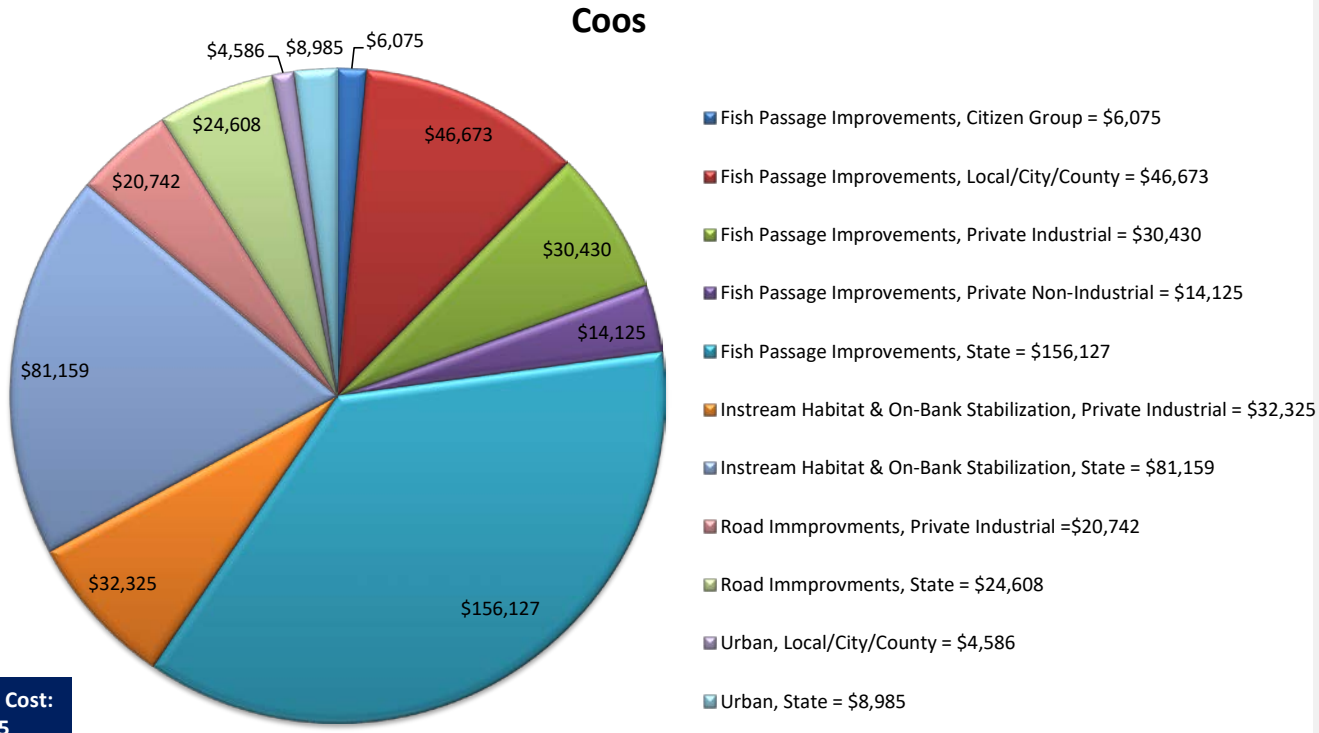
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Coast Fork Willamette	Instream Habitat and on-Bank Stabilization	Citizen Group	$0	$1,400	**$1,400**
Coast Fork Willamette	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Coast Fork Willamette	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$4,992	**$4,992**
Coast Fork Willamette	Instream Habitat and on-Bank Stabilization	State	$7,546	$0	**$7,546**
Coast Fork Willamette	Riparian Habitat and Protection	Citizen Group	$0	$2,800	**$2,800**
Coast Fork Willamette	Riparian Habitat and Protection	Local/City/County	$0	$500	**$500**
Coast Fork Willamette	Riparian Habitat and Protection	Private Non-industrial	$0	$15,126	**$15,126**
Coast Fork Willamette	Riparian Habitat and Protection	State	$24,244	$0	**$24,244**
Coast Fork Willamette	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$1,000	**$1,000**
Coast Fork Willamette	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$10,284	**$10,284**
Coast Fork Willamette	Upland, Grazing, and Irrigation Management	State	$18,304	$0	**$18,304**
TOTAL					**$86,196**



Total Project Cost: $86,196

COOS SUBBASIN

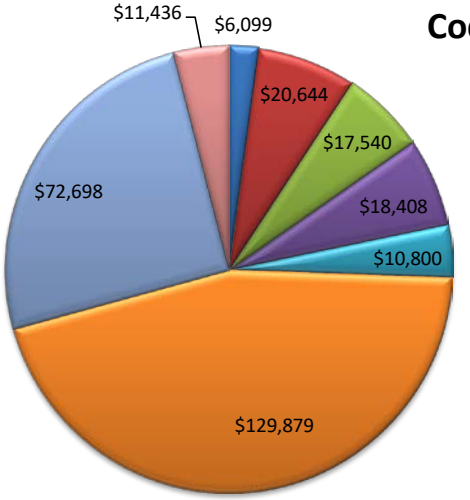
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Coos	Fish Passage Improvements	Citizen Group	$6,075	$0	**$6,075**
Coos	Fish Passage Improvements	Local/City/County	$1,100	$45,573	**$46,673**
Coos	Fish Passage Improvements	Private Industrial	$20,399	$10,031	**$30,430**
Coos	Fish Passage Improvements	Private Non-industrial	$875	$13,250	**$14,125**
Coos	Fish Passage Improvements	State	$150,827	$5,300	**$156,127**
Coos	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Coos	Instream Habitat and on-Bank Stabilization	Private Industrial	$2,710	$29,615	**$32,325**
Coos	Instream Habitat and on-Bank Stabilization	State	$79,559	$1,600	**$81,159**
Coos	Road Improvements	Local/City/County	$0	$0	**$0**
Coos	Road Improvements	Private Industrial	$13,355	$7,387	**$20,742**
Coos	Road Improvements	State	$24,208	$400	**$24,608**
Coos	Urban	Local/City/County	$3,089	$1,497	**$4,586**
Coos	Urban	State	$8,985	$0	**$8,985**
TOTAL					**$425,835**



Total Project Cost: $425,835

COQUILLE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Coquille	Fish Passage Improvements	Local/City/County	$0	$0	**$0**
Coquille	Fish Passage Improvements	Private Industrial	$6,099	$0	**$6,099**
Coquille	Fish Passage Improvements	Private Non-industrial	$18,219	$2,425	**$20,644**
Coquille	Fish Passage Improvements	State	$16,740	$800	**$17,540**
Coquille	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
Coquille	Instream Flow	Local/City/County	$0	$0	**$0**
Coquille	Instream Flow	Private Non-industrial	$15,983	$2,425	**$18,408**
Coquille	Instream Flow	State	$10,000	$800	**$10,800**
Coquille	Upland, Grazing, and Irrigation Management	Federal	$129,879	$0	**$129,879**
Coquille	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$0	**$0**
Coquille	Upland, Grazing, and Irrigation Management	Private Non-industrial	$71,513	$1,185	**$72,698**
Coquille	Upland, Grazing, and Irrigation Management	State	$11,436	$0	**$11,436**
TOTAL					**$287,504**



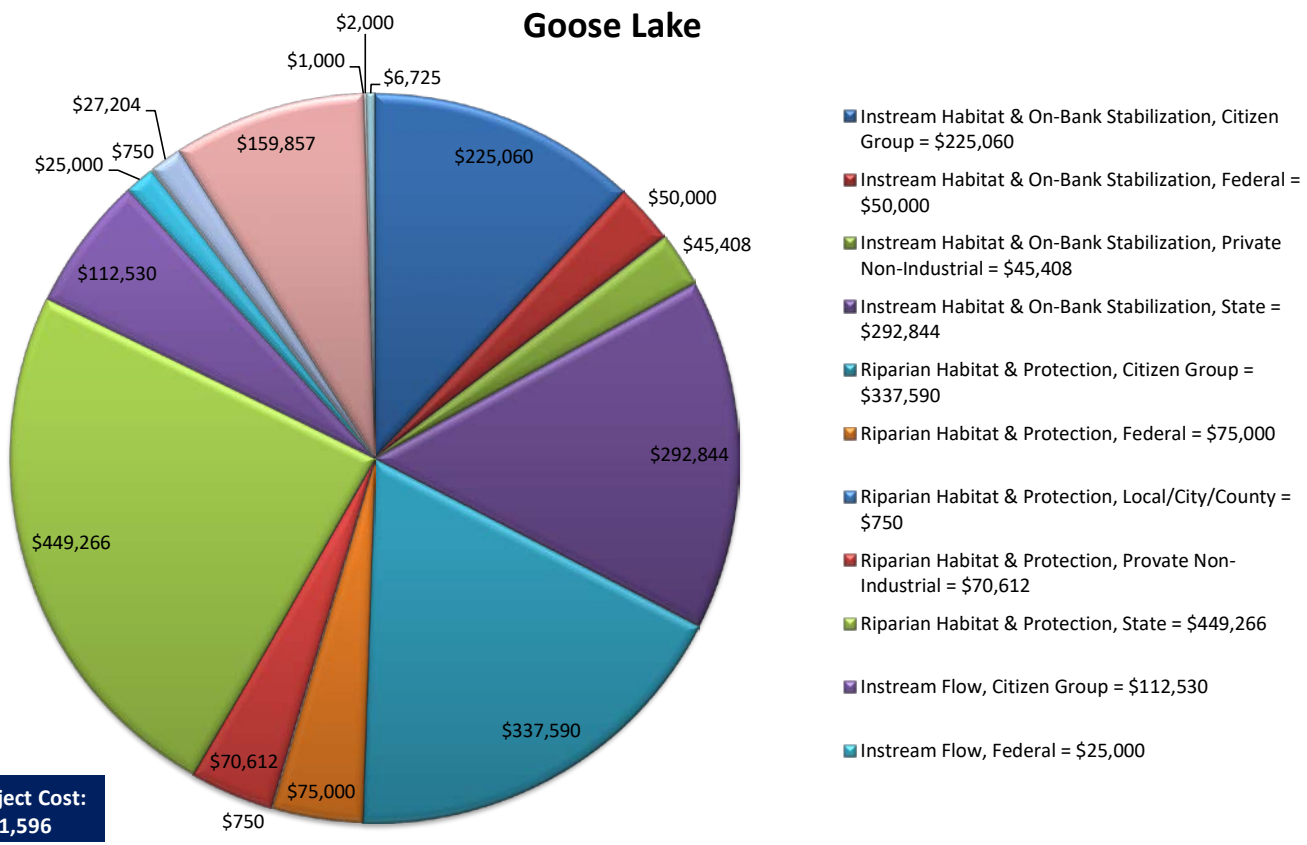
Coquille

- Fish Passage Improvements, Private Industrial = $6,099
- Fish Passage Improvements, Private Non-Industrial = $20,644
- Fish Passage Improvements, State = $17,540
- Instream Flow, Private Non-Industrial = $18,408
- Instream Flow, State = $10,800
- Upland, Grazing, & Irrigation Management, Federal = $129,879
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $72,698
- Upland, Grazing, & Irrigation Management, State = $11,436

Total Project Cost: $287,504

GOOSE LAKE SUBBASIN

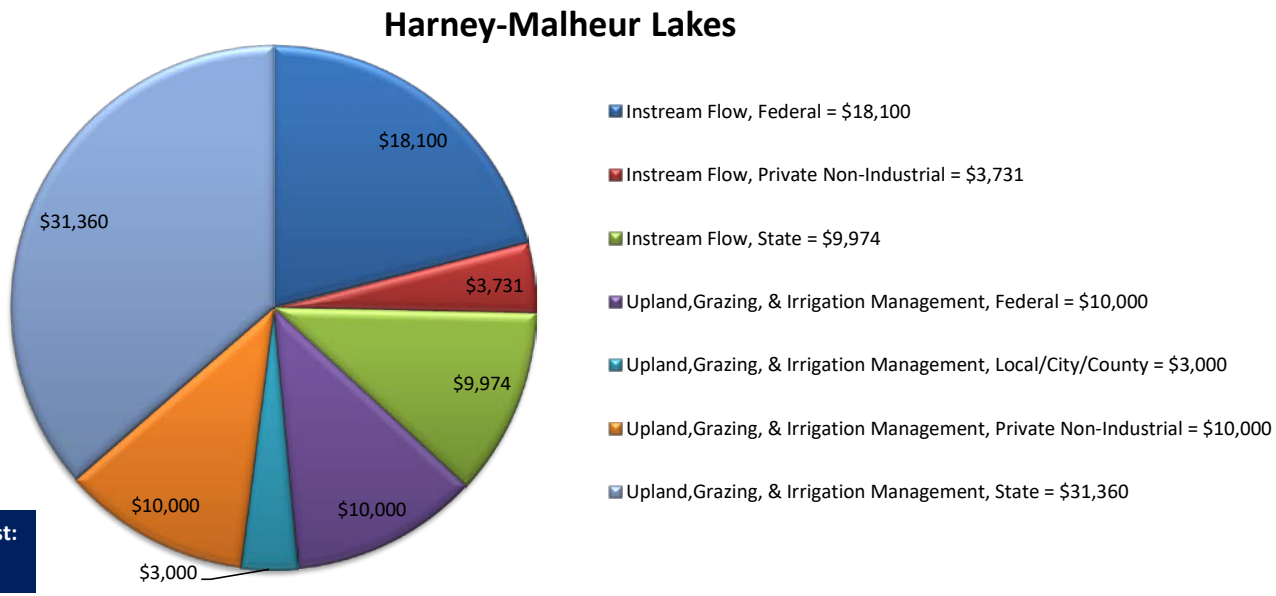
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Goose Lake	Instream Habitat and on-Bank Stabilization	Citizen Group	$189,860	$35,200	**$225,060**
Goose Lake	Instream Habitat and on-Bank Stabilization	Federal	$50,000	$0	**$50,000**
Goose Lake	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Goose Lake	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$45,408	**$45,408**
Goose Lake	Instream Habitat and on-Bank Stabilization	State	$286,444	$6,400	**$292,844**
Goose Lake	Riparian Habitat and Protection	Citizen Group	$284,790	$52,800	**$337,590**
Goose Lake	Riparian Habitat and Protection	Federal	$75,000	$0	**$75,000**
Goose Lake	Riparian Habitat and Protection	Local/City/County	$0	$750	**$750**
Goose Lake	Riparian Habitat and Protection	Private Non-industrial	$0	$70,612	**$70,612**
Goose Lake	Riparian Habitat and Protection	State	$439,666	$9,600	**$449,266**
Goose Lake	Instream Flow	Citizen Group	$94,930	$17,600	**$112,530**
Goose Lake	Instream Flow	Federal	$25,000	$0	**$25,000**
Goose Lake	Instream Flow	Local/City/County	$0	$750	**$750**
Goose Lake	Instream Flow	Private Non-industrial	$0	$27,204	**$27,204**
Goose Lake	Instream Flow	State	$156,657	$3,200	**$159,857**
Goose Lake	Upland, Grazing, and Irrigation Management	Federal	$1,000	$0	**$1,000**
Goose Lake	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$0	**$0**
Goose Lake	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$2,000	**$2,000**
Goose Lake	Upland, Grazing, and Irrigation Management	State	$5,225	$1,500	**$6,725**
TOTAL					**$1,881,596**



Total Project Cost: $1,881,596

HARNEY-MALHEUR LAKES SUBBASIN

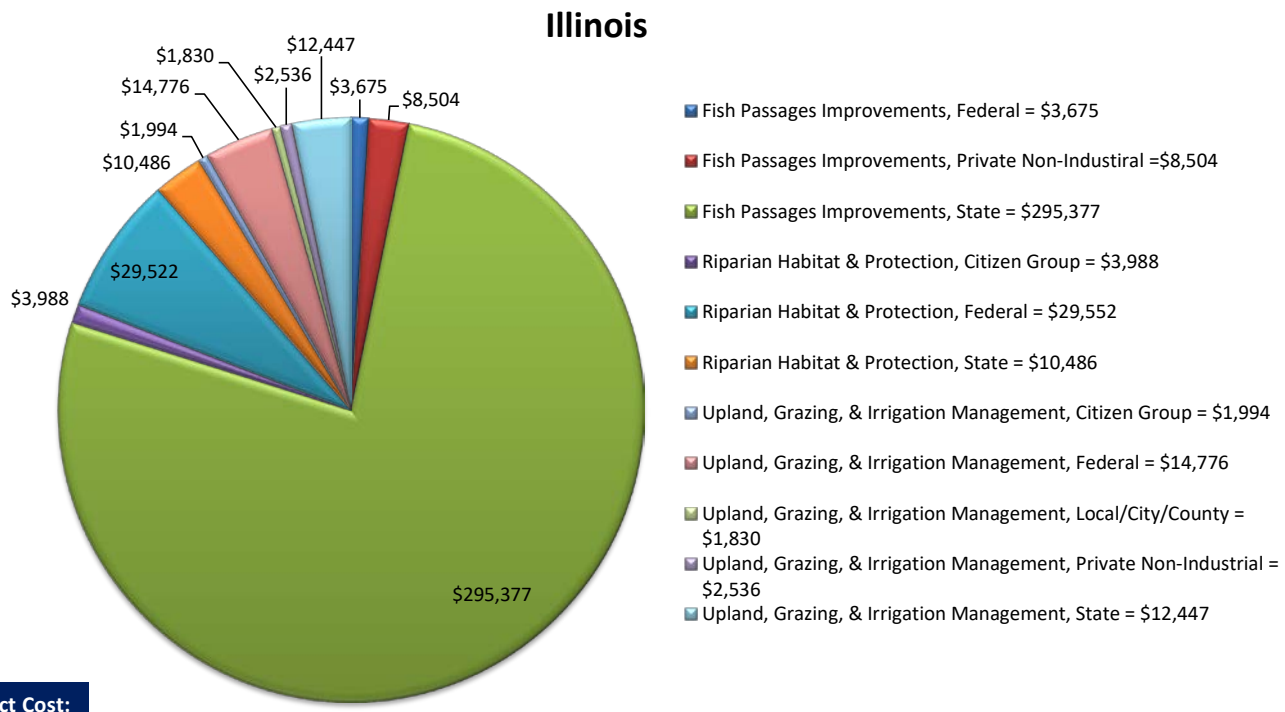
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Harney-Malheur Lakes	Instream Flow	Federal	$0	$18,100	**$18,100**
Harney-Malheur Lakes	Instream Flow	Local/City/County	$0	$0	**$0**
Harney-Malheur Lakes	Instream Flow	Private Non-industrial	$2,131	$1,600	**$3,731**
Harney-Malheur Lakes	Instream Flow	State	$9,974	$0	**$9,974**
Harney-Malheur Lakes	Upland, Grazing, and Irrigation Management	Federal	$0	$10,000	**$10,000**
Harney-Malheur Lakes	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$3,000	**$3,000**
Harney-Malheur Lakes	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$10,000	**$10,000**
Harney-Malheur Lakes	Upland, Grazing, and Irrigation Management	State	$30,360	$1,000	**$31,360**
TOTAL					**$86,165**



Total Project Cost: $86,165

ILLINOIS SUBBASIN

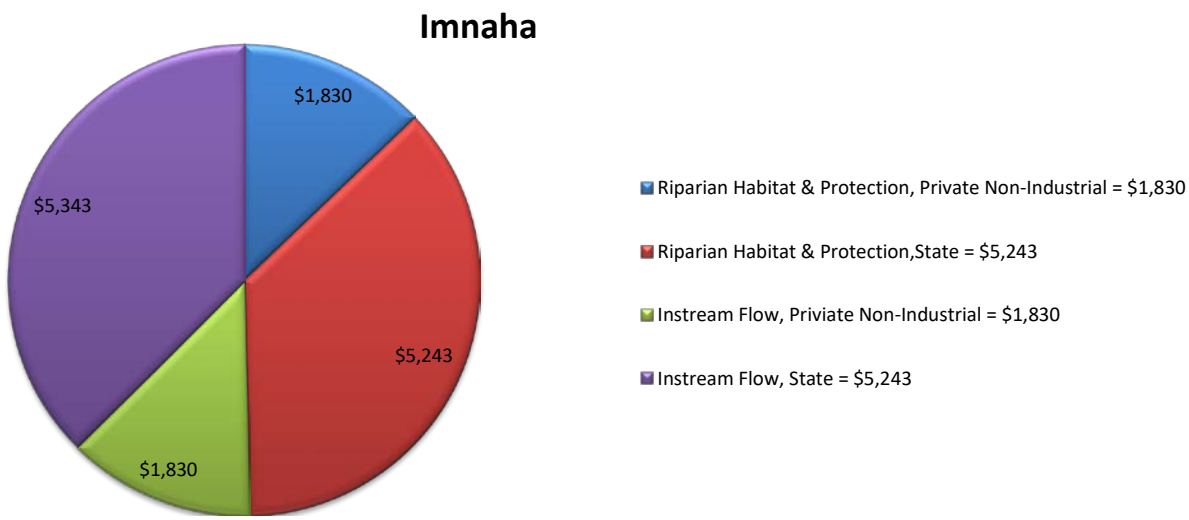
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Illinois	Fish Passage Improvements	Federal	$3,675	$0	**$3,675**
Illinois	Fish Passage Improvements	Private Non-industrial	$8,504	$0	**$8,504**
Illinois	Fish Passage Improvements	State	$295,377	$0	**$295,377**
Illinois	Riparian Habitat and Protection	Citizen Group	$0	$3,988	**$3,988**
Illinois	Riparian Habitat and Protection	Federal	$0	$29,552	**$29,552**
Illinois	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Illinois	Riparian Habitat and Protection	State	$10,486	$0	**$10,486**
Illinois	Upland, Grazing, and Irrigation Management	Citizen Group	$0	$1,994	**$1,994**
Illinois	Upland, Grazing, and Irrigation Management	Federal	$0	$14,776	**$14,776**
Illinois	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$1,830	**$1,830**
Illinois	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$2,536	**$2,536**
Illinois	Upland, Grazing, and Irrigation Management	State	$12,447	$0	**$12,447**
TOTAL					**$385,135**



Total Project Cost: $385,135

IMNAHA SUBBASIN

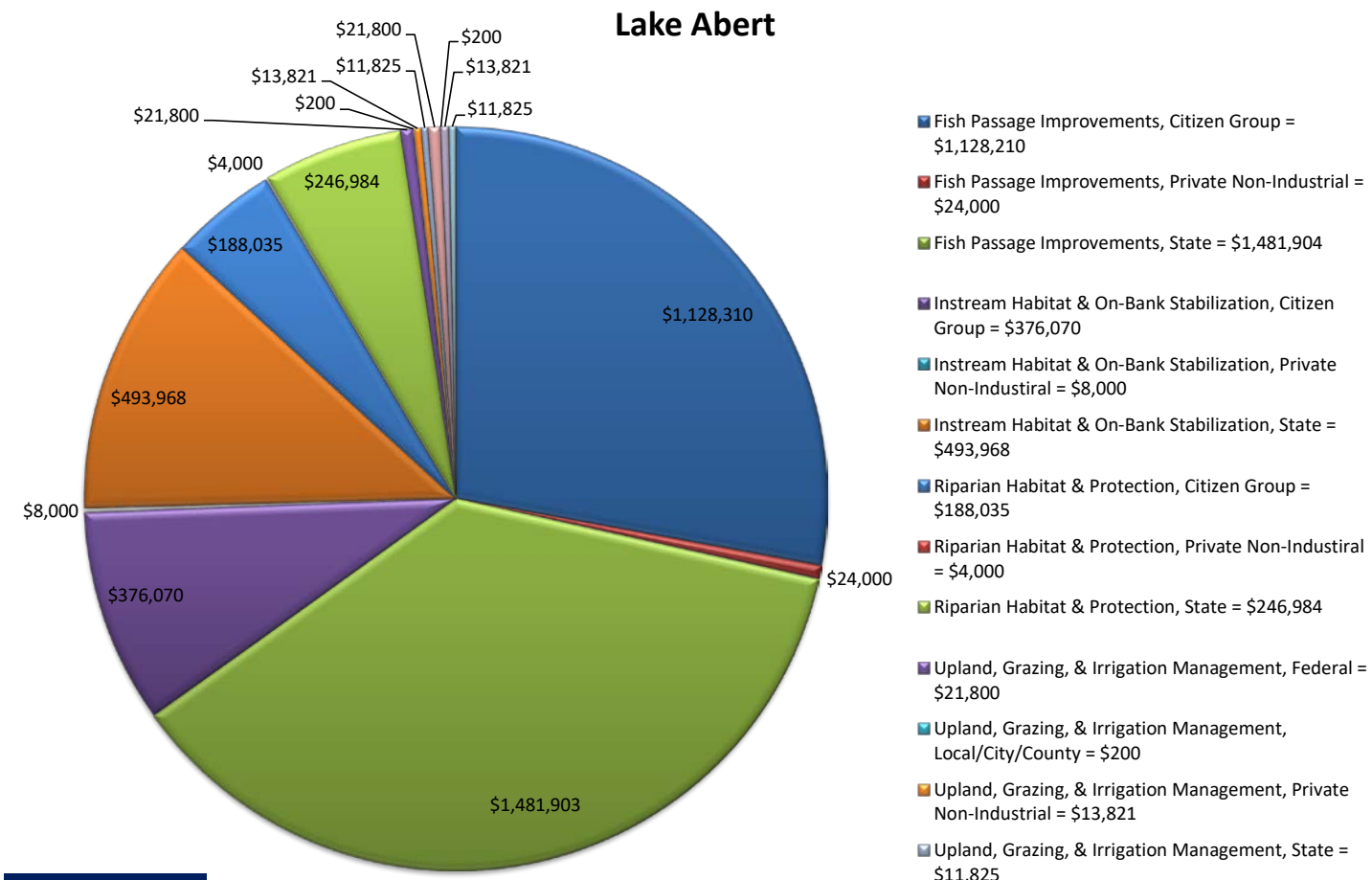
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Imnaha	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Imnaha	Riparian Habitat and Protection	Private Non-industrial	$429	$1,401	**$1,830**
Imnaha	Riparian Habitat and Protection	State	$5,243	$0	**$5,243**
Imnaha	Instream Flow	Local/City/County	$0	$0	**$0**
Imnaha	Instream Flow	Private Non-industrial	$429	$1,401	**$1,830**
Imnaha	Instream Flow	State	$5,243	$0	**$5,243**
TOTAL					**$14,246**



Total Project Cost: $14,246

LAKE ABERT SUBBASIN

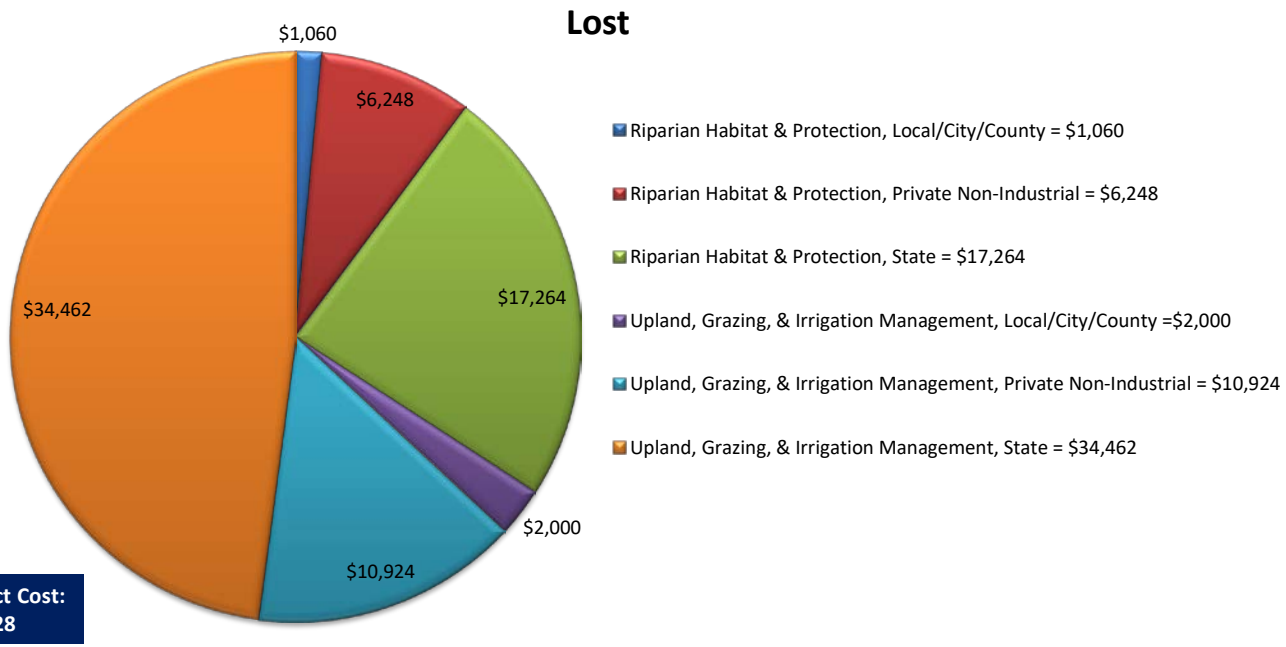
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lake Abert	Fish Passage Improvements	Citizen Group	$1,128,210	$0	**$1,128,210**
Lake Abert	Fish Passage Improvements	Local/City/County	$0	$0	**$0**
Lake Abert	Fish Passage Improvements	Private Non-industrial	$0	$24,000	**$24,000**
Lake Abert	Fish Passage Improvements	State	$1,481,904	$0	**$1,481,904**
Lake Abert	Instream Habitat and on-Bank Stabilization	Citizen Group	$376,070	$0	**$376,070**
Lake Abert	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Lake Abert	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$8,000	**$8,000**
Lake Abert	Instream Habitat and on-Bank Stabilization	State	$493,968	$0	**$493,968**
Lake Abert	Riparian Habitat and Protection	Citizen Group	$188,035	$0	**$188,035**
Lake Abert	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Lake Abert	Riparian Habitat and Protection	Private Non-industrial	$0	$4,000	**$4,000**
Lake Abert	Riparian Habitat and Protection	State	$246,984	$0	**$246,984**
Lake Abert	Upland, Grazing, and Irrigation Management	Federal	$21,800	$0	**$21,800**
Lake Abert	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$200	**$200**
Lake Abert	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$13,821	**$13,821**
Lake Abert	Upland, Grazing, and Irrigation Management	State	$11,825	$0	**$11,825**
Lake Abert	Wetland and Estuary	Federal	$ 21,800	$0	**$21,800**
Lake Abert	Wetland and Estuary	Local/City/County	$0	$200	**$200**
Lake Abert	Wetland and Estuary	Private Non-industrial	$0	$13,821	**$13,821**
Lake Abert	Wetland and Estuary	State	$11,825	$0	**$11,825**
TOTAL					**$4,046,562**



Total Project Cost: $4,046,562

LOST SUBBASIN

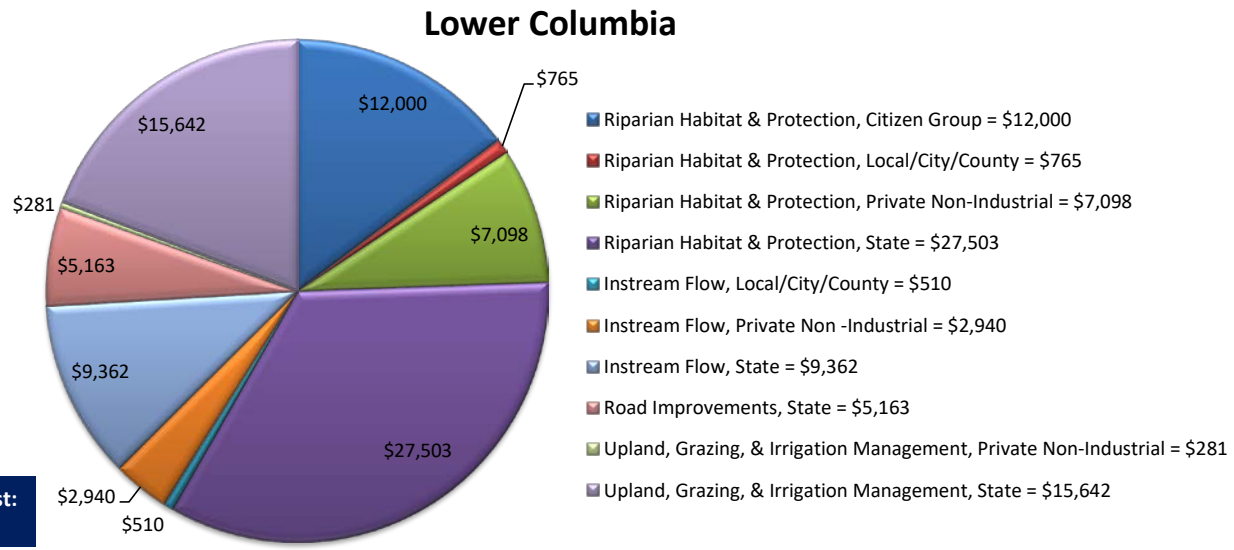
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lost	Riparian Habitat and Protection	Local/City/County	$0	$1,060	**$1,060**
Lost	Riparian Habitat and Protection	Private Non-industrial	$2,519	$3,729	**$6,248**
Lost	Riparian Habitat and Protection	State	$17,264	0	**$17,264**
Lost	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$2,200	**$2,200**
Lost	Upland, Grazing, and Irrigation Management	Private Non-industrial	$9,644	$1,280	**$10,924**
Lost	Upland, Grazing, and Irrigation Management	State	$34,462	$0	**$34,462**
TOTAL					**$71,928**



Total Project Cost: $72,928

LOWER COLUMBIA SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Columbia	Riparian Habitat and Protection	Citizen Group	$0	$12,000	**$12,000**
Lower Columbia	Riparian Habitat and Protection	Local/City/County	$0	$765	**$765**
Lower Columbia	Riparian Habitat and Protection	Private Non-industrial	$0	$7,098	**$7,098**
Lower Columbia	Riparian Habitat and Protection	State	$27,503	$0	**$27,503**
Lower Columbia	Instream Flow	Local/City/County	$0	$510	**$510**
Lower Columbia	Instream Flow	Private Non-industrial	$0	$2,940	**$2,940**
Lower Columbia	Instream Flow	State	$9,362	$0	**$9,362**
Lower Columbia	Road Improvements	State	$5,163	$0	**$5,163**
Lower Columbia	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$281	**$281**
Lower Columbia	Upland, Grazing, and Irrigation Management	State	$15,642	$0	**$15,642**
TOTAL					**$81,264**

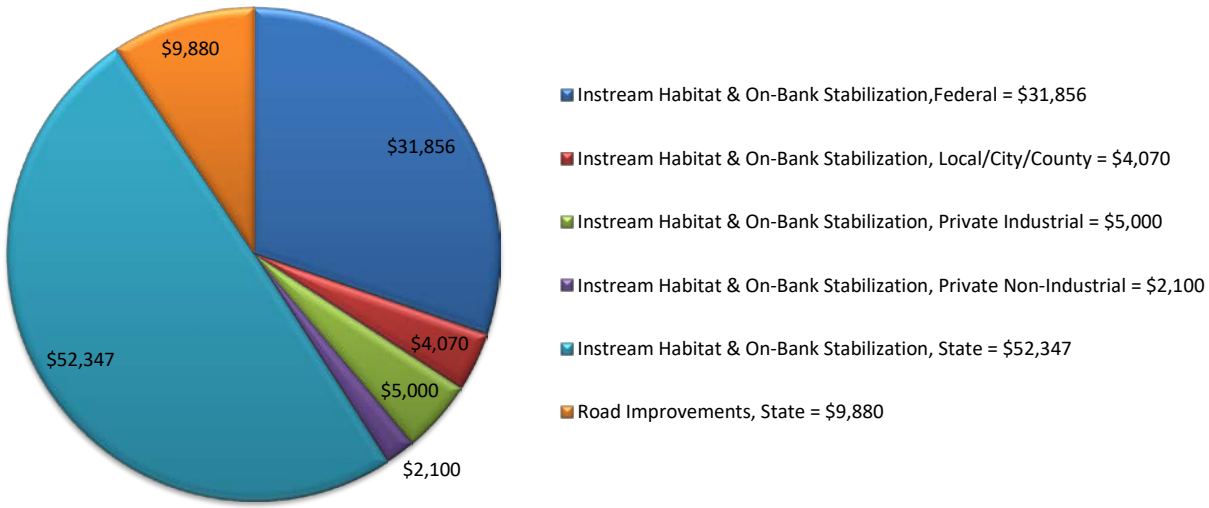


Total Project Cost: $81,264

LOWER COLUMBIA-CLATSKANIE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Columbia-Clatskanie	Instream Habitat and on-Bank Stabilization	Federal	$15,816	$16,040	**$31,856**
Lower Columbia-Clatskanie	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$4,070	**$4,070**
Lower Columbia-Clatskanie	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$5,000	**$5,000**
Lower Columbia-Clatskanie	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$2,100	**$2,100**
Lower Columbia-Clatskanie	Instream Habitat and on-Bank Stabilization	State	$51,347	$1,000	**$52,347**
Lower Columbia-Clatskanie	Road Improvements	State	$9,880	$0	**$9,880**
TOTAL					**$105,253**

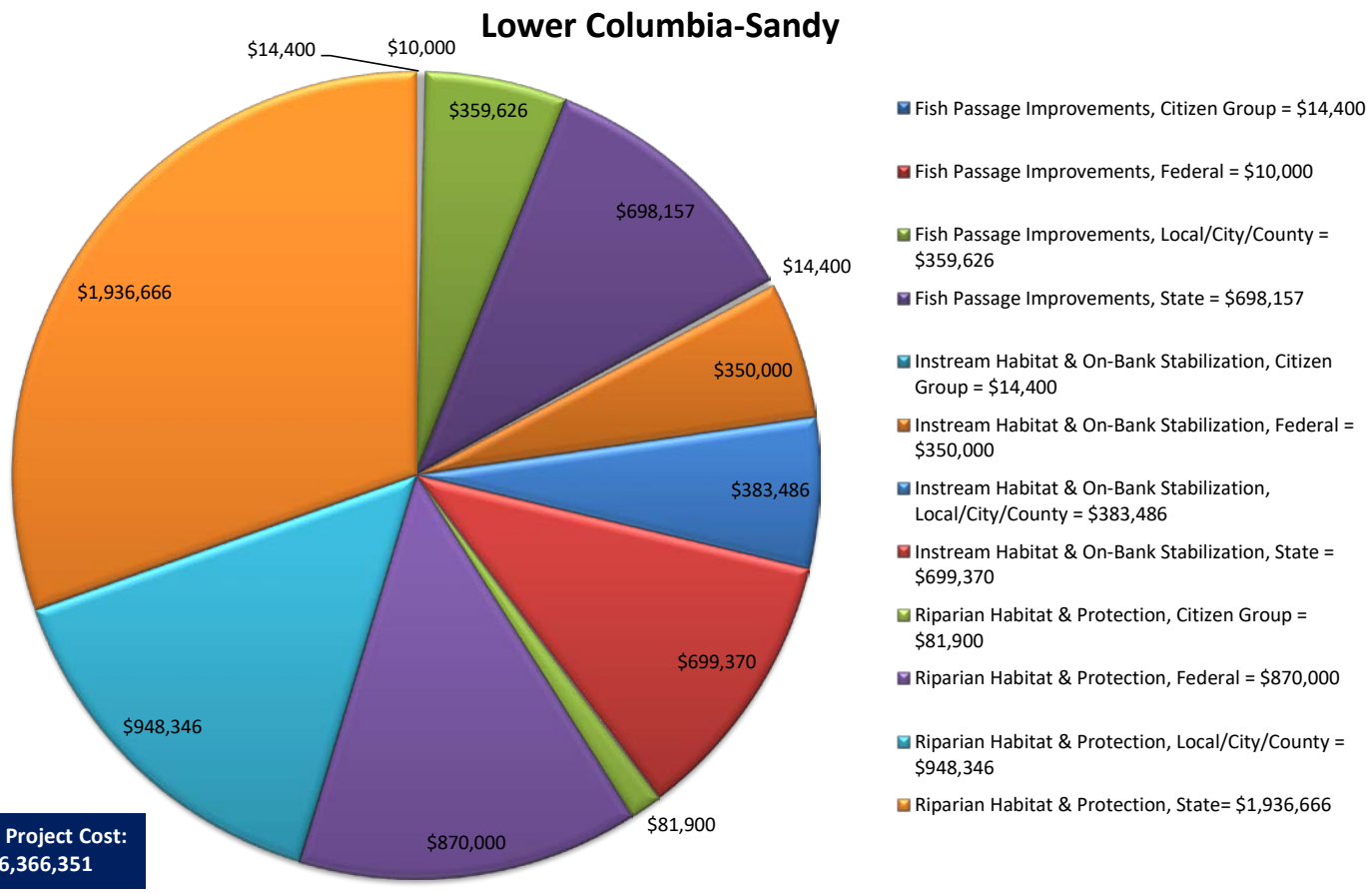
Lower Columbia-Clatskanie



Total Project Cost: $105,253

LOWER COLUMBIA-SANDY SUBBASIN

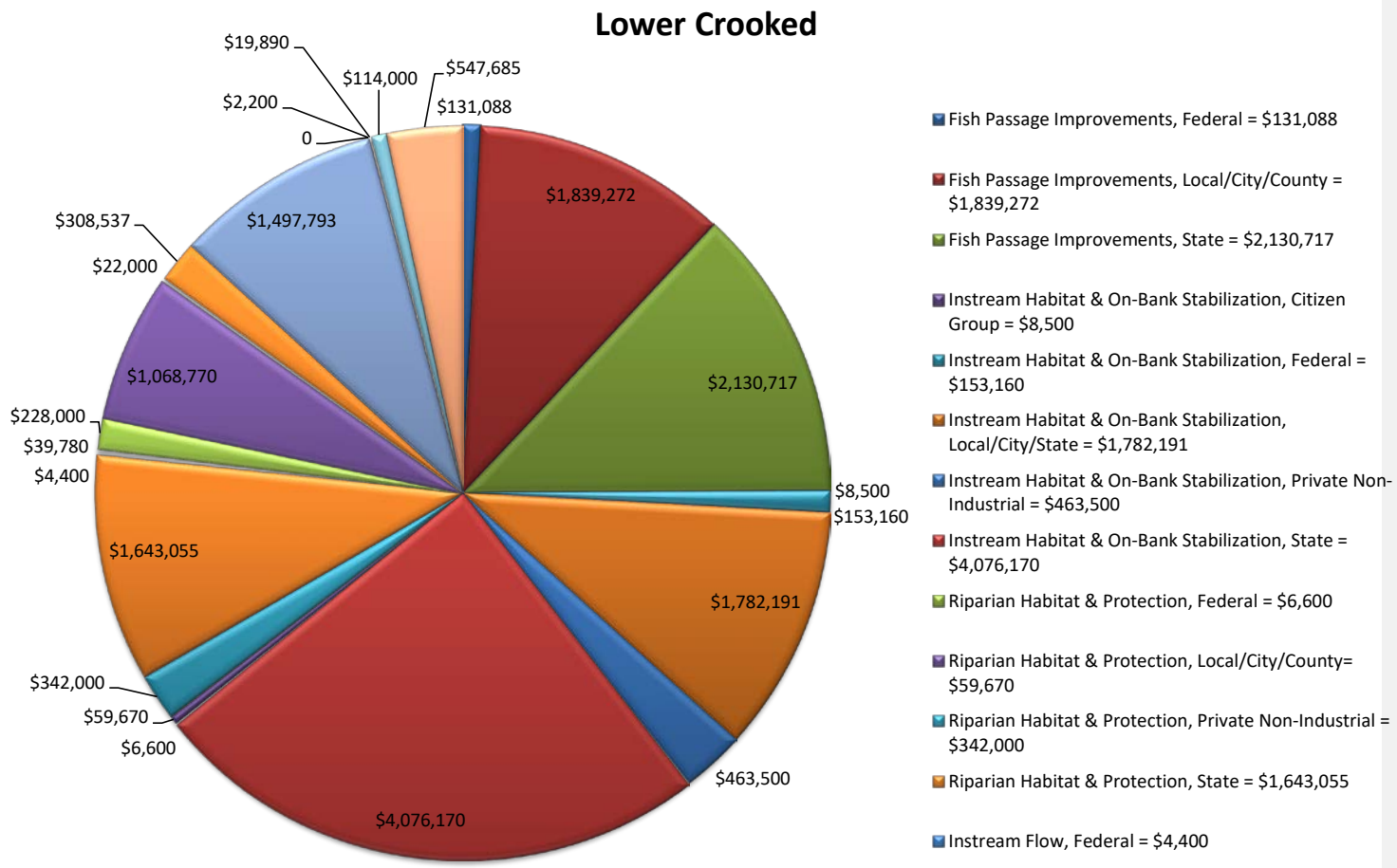
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Columbia-Sandy	Fish Passage Improvements	Citizen Group	$0	$14,400	**$14,400**
Lower Columbia-Sandy	Fish Passage Improvements	Federal	$0	$10,000	**$10,000**
Lower Columbia-Sandy	Fish Passage Improvements	Local/City/County	$350,242	$9,384	**$359,626**
Lower Columbia-Sandy	Fish Passage Improvements	State	$698,157	$0	**$698,157**
Lower Columbia-Sandy	Instream Habitat and on-Bank Stabilization	Citizen Group	$0	$14,400	**$14,400**
Lower Columbia-Sandy	Instream Habitat and on-Bank Stabilization	Federal	$125,000	$225,000	**$350,000**
Lower Columbia-Sandy	Instream Habitat and on-Bank Stabilization	Local/City/County	$338,102	$45,384	**$383,486**
Lower Columbia-Sandy	Instream Habitat and on-Bank Stabilization	State	$699,370	0	**$699,370**
Lower Columbia-Sandy	Riparian Habitat and Protection	Citizen Group	$4,500	$77,400	**$81,900**
Lower Columbia-Sandy	Riparian Habitat and Protection	Federal	$430,000	$440,000	**$870,000**
Lower Columbia-Sandy	Riparian Habitat and Protection	Local/City/County	$866,962	$81,384	**$948,346**
Lower Columbia-Sandy	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
Lower Columbia-Sandy	Riparian Habitat and Protection	State	$1,936,666	$0	**$1,936,666**
TOTAL					**$6,366,351**



Total Project Cost: $6,366,351

LOWER CROOKED SUBBASIN

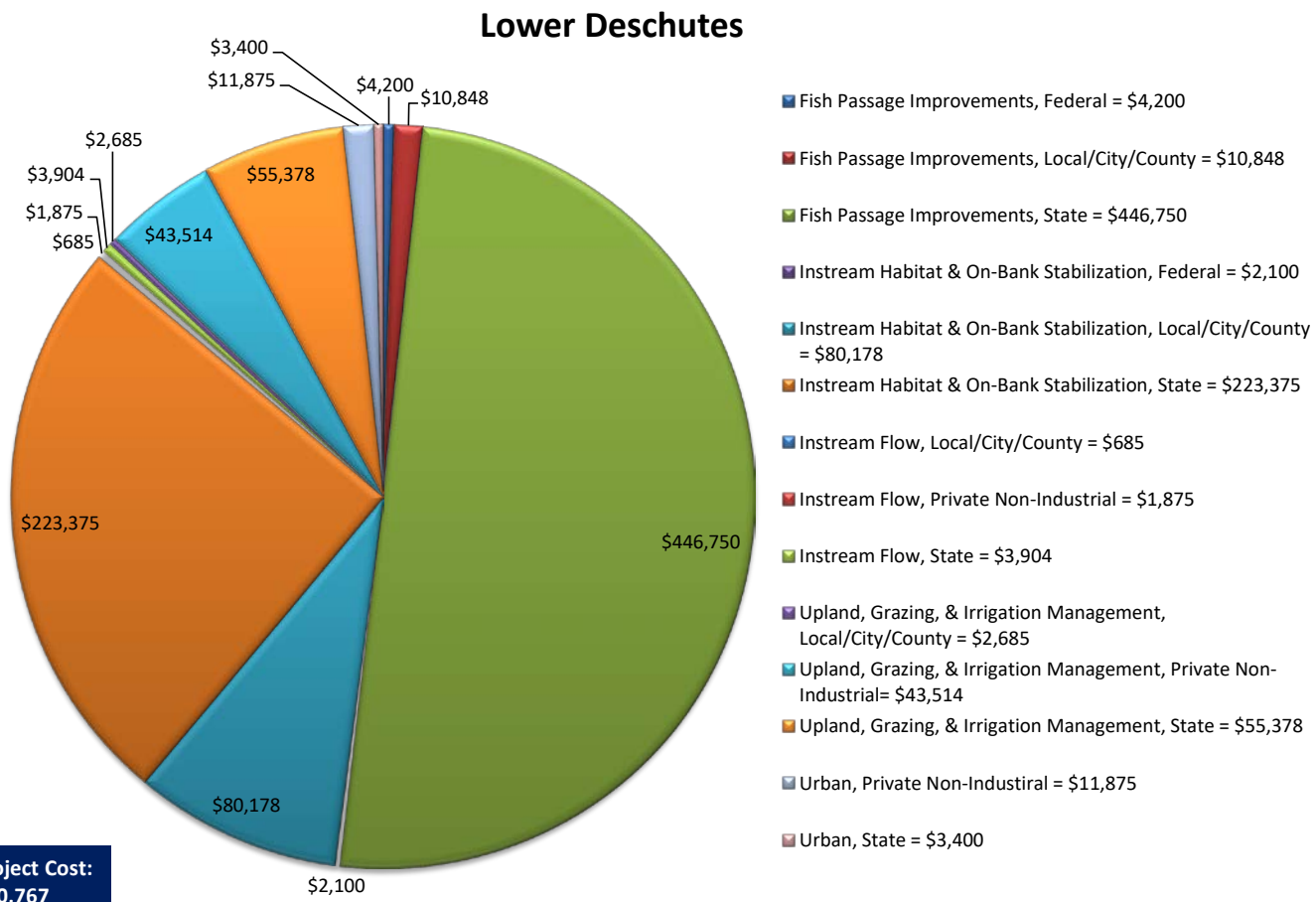
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Crooked	Fish Passage Improvements	Federal	$51,728	$79,360	**$131,088**
Lower Crooked	Fish Passage Improvements	Local/City/County	$1,669,630	$169,642	**$1,839,272**
Lower Crooked	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Lower Crooked	Fish Passage Improvements	State	$2,130,717	$0	**$2,130,717**
Lower Crooked	Instream Habitat and on-Bank Stabilization	Citizen Group	$8,500	$0	**$8,500**
Lower Crooked	Instream Habitat and on-Bank Stabilization	Federal	$65,000	$88,160	**$153,160**
Lower Crooked	Instream Habitat and on-Bank Stabilization	Local/City/County	$1,580,910	$201,281	**$1,782,191**
Lower Crooked	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$463,500	**$463,500**
Lower Crooked	Instream Habitat and on-Bank Stabilization	State	$4,022,970	$53,200	**$4,076,170**
Lower Crooked	Riparian Habitat and Protection	Federal	$0	$ 6,600	**$6,600**
Lower Crooked	Riparian Habitat and Protection	Local/City/County	$0	$59,670	**$59,670**
Lower Crooked	Riparian Habitat and Protection	Private Non-industrial	$0	$342,000	**$342,000**
Lower Crooked	Riparian Habitat and Protection	State	$1,603,155	$39,900	**$1,643,055**
Lower Crooked	Instream Flow	Federal	$0	$4,400	**$4,400**
Lower Crooked	Instream Flow	Local/City/County	$0	$39,780	**$39,780**
Lower Crooked	Instream Flow	Private Non-industrial	$ 0	$228,000	**$228,000**
Lower Crooked	Instream Flow	State	$1,068,770	$26,600	**$1,095,370**
Lower Crooked	Upland, Grazing, and Irrigation Management	Federal	$0	$22,000	**$22,000**
Lower Crooked	Upland, Grazing, and Irrigation Management	Local/City/County	$4,821	$303,716	**$308,537**
Lower Crooked	Upland, Grazing, and Irrigation Management	Private Non-industrial	$326,853	$1,170,940	**$1,497,793**
Lower Crooked	Upland, Grazing, and Irrigation Management	State	$5,777,578	$133,000	**$5,910,578**
Lower Crooked	Urban	Federal	$0	$2,200	**$ 2,200**
Lower Crooked	Urban	Local/City/County	$0	$19,890	**$19,890**
Lower Crooked	Urban	Private Non-industrial	$0	$114,000	**$114,000**
Lower Crooked	Urban	State	$534,385	$13,300	**$547,685**
TOTAL					**$16,488,978**



Total Project Cost: $16,488,978

LOWER DESCHUTES SUBBASIN

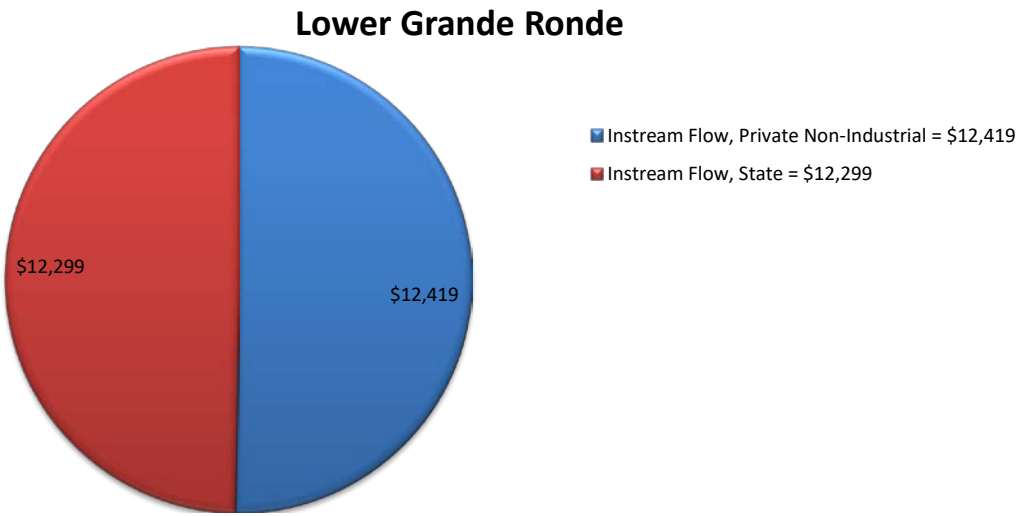
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Deschutes	Fish Passage Improvements	Federal	$0	$4,200	**$4,200**
Lower Deschutes	Fish Passage Improvements	Local/City/County	$10,848	$0	**$10,848**
Lower Deschutes	Fish Passage Improvements	State	$446,750	$0	**$446,750**
Lower Deschutes	Instream Habitat and on-Bank Stabilization	Federal	$0	$2,100	**$2,100**
Lower Deschutes	Instream Habitat and on-Bank Stabilization	Local/City/County	$5,424	$74,754	**$80,178**
Lower Deschutes	Instream Habitat and on-Bank Stabilization	State	$223,375	$0	**$223,375**
Lower Deschutes	Instream Flow	Local/City/County	$0	$685	**$685**
Lower Deschutes	Instream Flow	Private Non-industrial	$1,875	$0	**$1,875**
Lower Deschutes	Instream Flow	State	$3,904	$0	**$3,904**
Lower Deschutes	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$2,685	**$2,685**
Lower Deschutes	Upland, Grazing, and Irrigation Management	Private Non-industrial	$8,346	$35,168	**$43,514**
Lower Deschutes	Upland, Grazing, and Irrigation Management	State	$55,378	$0	**$55,378**
Lower Deschutes	Urban	Local/City/County	$0	$0	**$0**
Lower Deschutes	Urban	Private Non-industrial	$0	$11,875	**$11,875**
Lower Deschutes	Urban	State	$3,400	$0	**$3,400**
TOTAL					**$890,767**



Total Project Cost: $890,767

LOWER GRANDE RONDE SUBBASIN

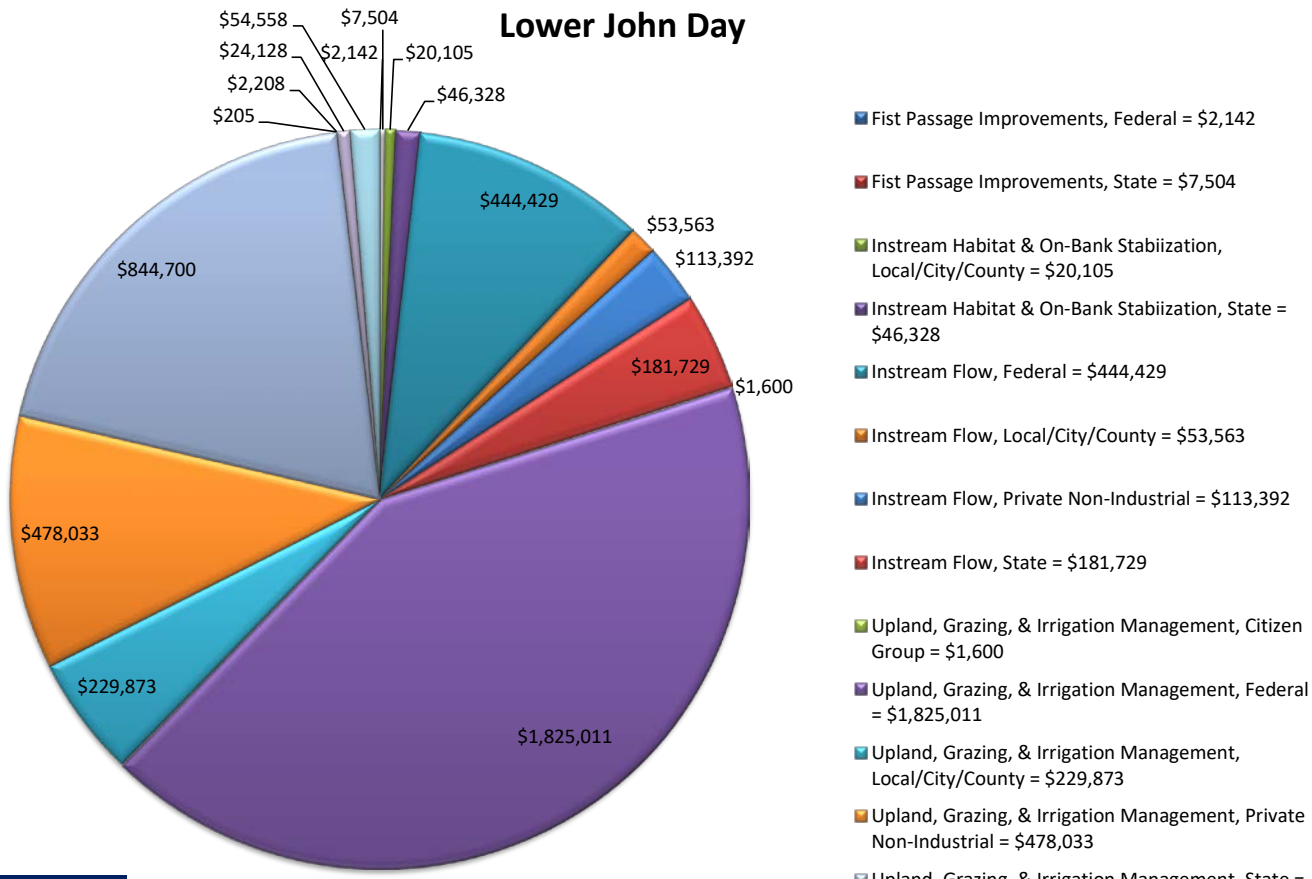
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Grande Ronde	Instream Flow	Local/City/County	$0	$0	**$0**
Lower Grande Ronde	Instream Flow	Private Non-industrial	$10,809	$1,610	**$12,419**
Lower Grande Ronde	Instream Flow	State	$12,299	$0	**$12,299**
TOTAL					**$24,718**



Total Project Cost: $24,718

LOWER JOHN DAY SUBBASIN

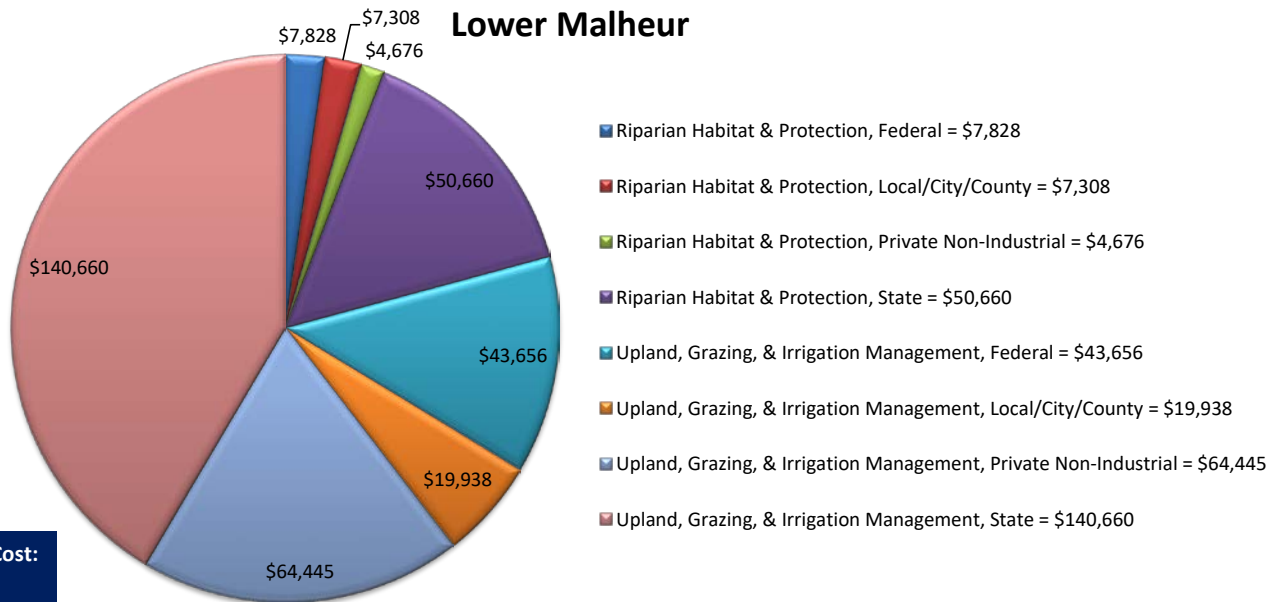
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower John Day	Fish Passage Improvements	Federal	$2,142	$0	**$2,142**
Lower John Day	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Lower John Day	Fish Passage Improvements	State	$7,504	$0	**$7 ,504**
Lower John Day	Instream Habitat and on-Bank Stabilization	Local/City/County	$20,105	$0	**$20,105**
Lower John Day	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$0	**$0**
Lower John Day	Instream Habitat and on-Bank Stabilization	State	$46,328	$0	**$46,328**
Lower John Day	Instream Flow	Federal	$424,304	$20,125	**$444,429**
Lower John Day	Instream Flow	Local/City/County	$15	$53,548	**$53,563**
Lower John Day	Instream Flow	Other	$0	$0	**$0**
Lower John Day	Instream Flow	Private Non-industrial	$13,142	$100,250	**$113,392**
Lower John Day	Instream Flow	State	$181,729	$0	**$181,729**
Lower John Day	Upland, Grazing, and Irrigation Management	Citizen Group	$0	$1,600	**$1,600**
Lower John Day	Upland, Grazing, and Irrigation Management	Federal	$1,742,860	$82,151	**$1,825,011**
Lower John Day	Upland, Grazing, and Irrigation Management	Local/City/County	$9,045	$220,828	**$229,873**
Lower John Day	Upland, Grazing, and Irrigation Management	Other	$0	$0	**$0**
Lower John Day	Upland, Grazing, and Irrigation Management	Private Non-industrial	$110,177	$ 367,856	**$478,033**
Lower John Day	Upland, Grazing, and Irrigation Management	State	$844,700	$0	**$844,700**
Lower John Day	Urban	Federal	$0	$205	**$205**
Lower John Day	Urban	Local/City/County	$0	$2,208	**$2,208**
Lower John Day	Urban	Private Non-industrial	$24,128	$0	**$24,128**
Lower John Day	Urban	State	$54,558	$0	**$54,558**
TOTAL					**$4,329,508**



Total Project Cost: $4,329,508

LOWER MALHEUR SUBBASIN

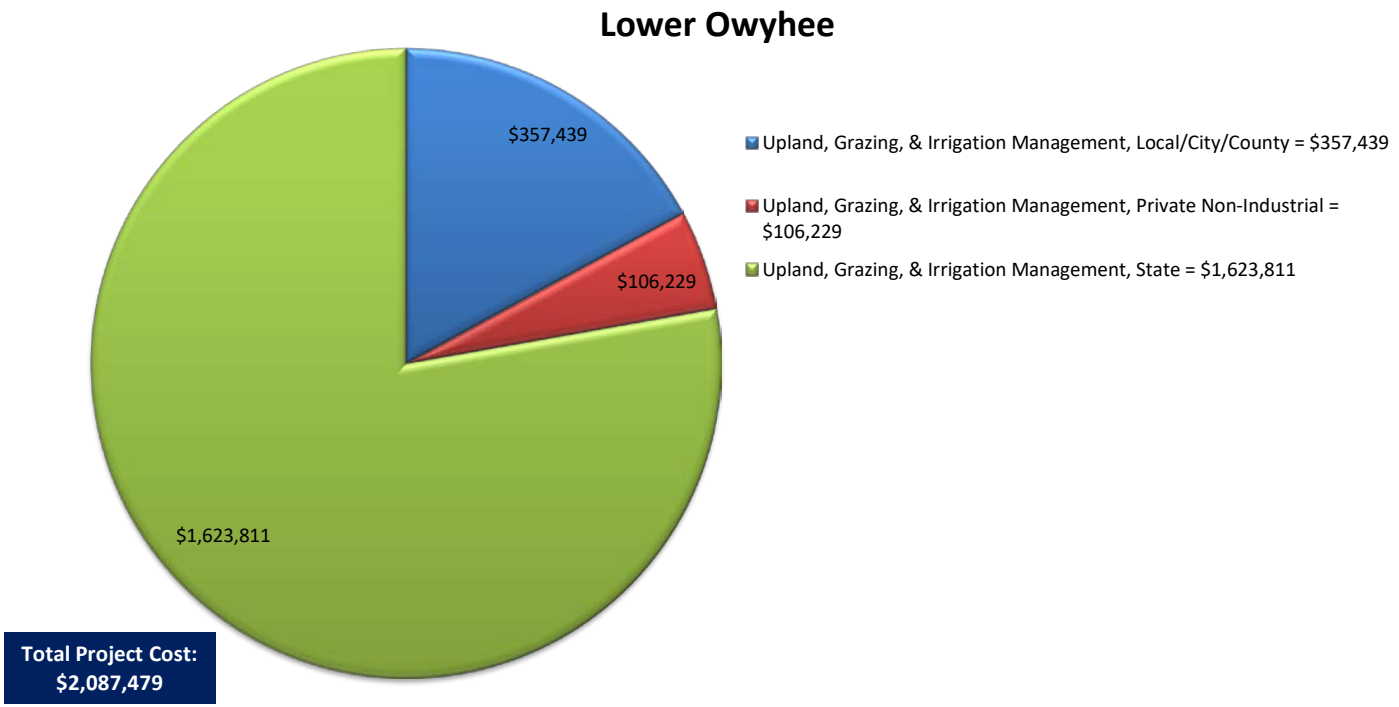
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Malheur	Riparian Habitat and Protection	Federal	$0	$7,828	**$7,828**
Lower Malheur	Riparian Habitat and Protection	Local/City/County	$0	$7,308	**$7,308**
Lower Malheur	Riparian Habitat and Protection	Private Non-industrial	$0	$4,676	**$4,676**
Lower Malheur	Riparian Habitat and Protection	State	$47,710	$2,950	**$50,660**
Lower Malheur	Upland, Grazing, and Irrigation Management	Federal	$0	$43,656	**$43,656**
Lower Malheur	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$19,938	**$19,938**
Lower Malheur	Upland, Grazing, and Irrigation Management	Private Non-industrial	$38,113	$26,332	**$64,445**
Lower Malheur	Upland, Grazing, and Irrigation Management	State	$134,760	$5,900	**$140,660**
TOTAL					**$339,171**



Total Project Cost: $339,171

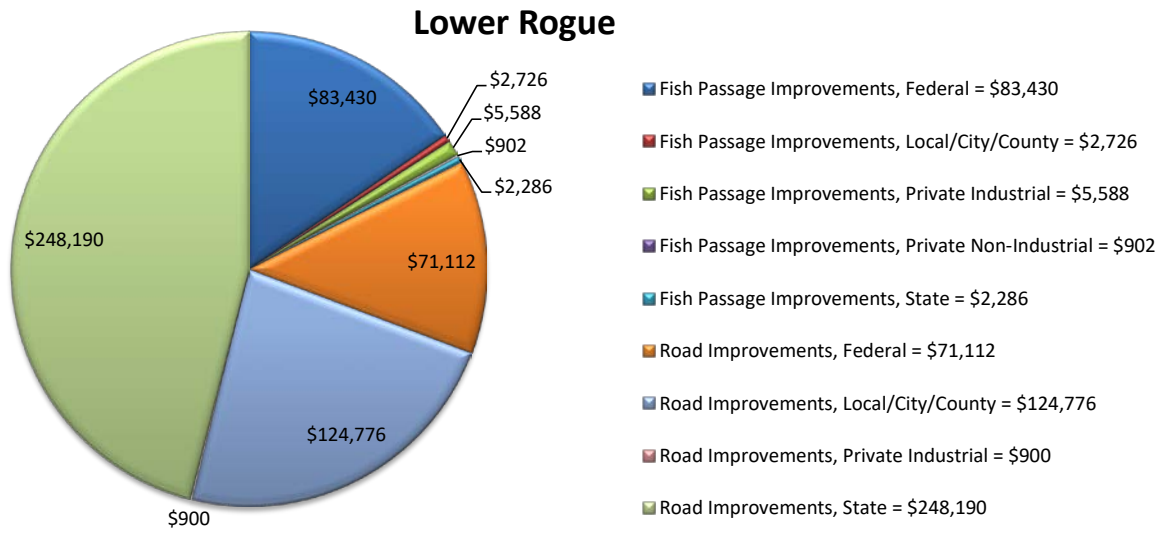
LOWER OWYHEE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Owyhee	Upland, Grazing, and Irrigation Management	Local/City/County	$4,885	$357,439	**$362,324**
Lower Owyhee	Upland, Grazing, and Irrigation Management	Private Non-industrial	$106,229	$0	**$106,229**
Lower Owyhee	Upland, Grazing, and Irrigation Management	State	$1,623,811	$0	**$1,623,811**
TOTAL					**$2,087,479**



LOWER ROGUE SUBBASIN

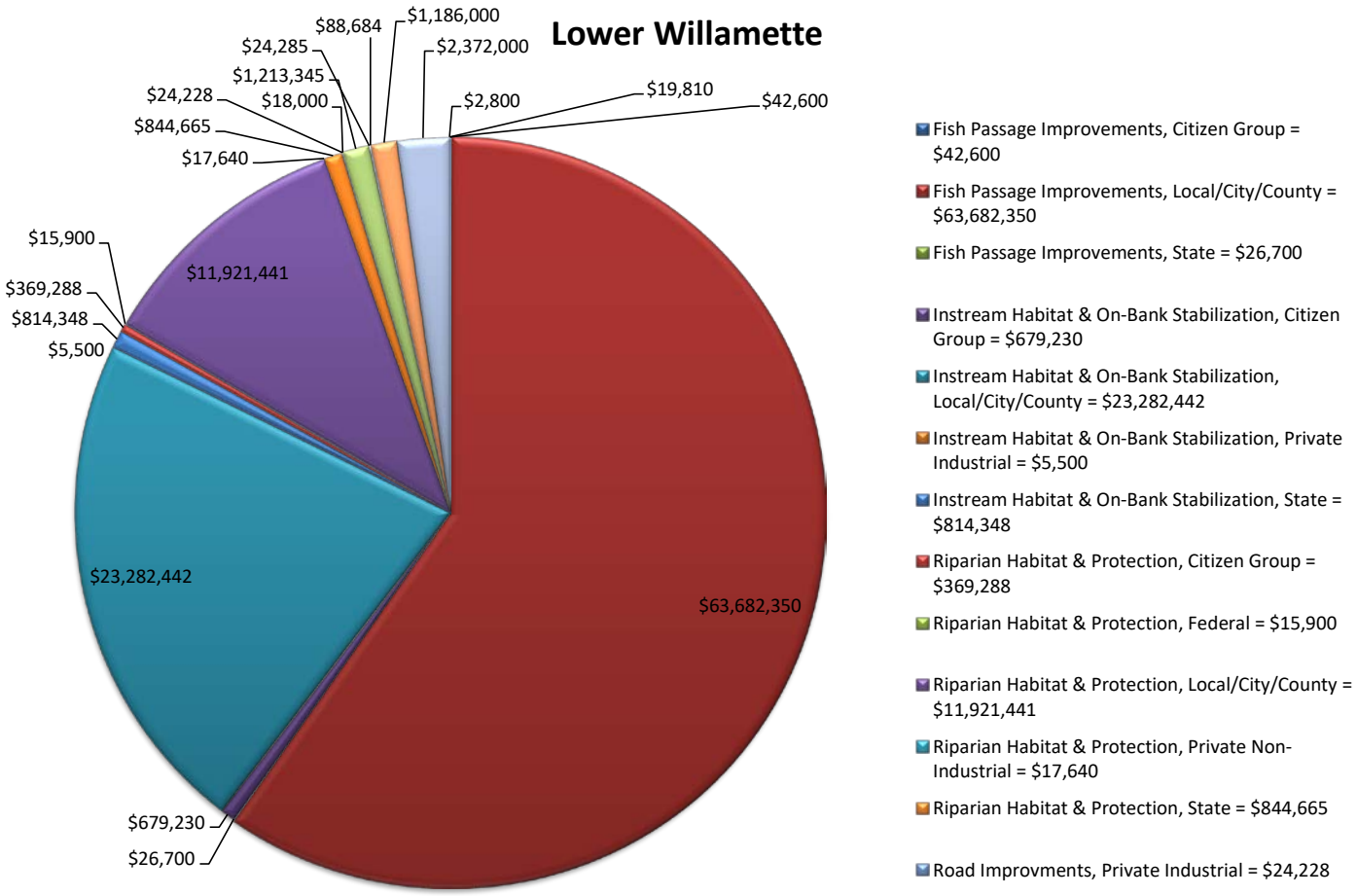
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Rogue	Fish Passage Improvements	Federal	$82,430	$0	**$82,430**
Lower Rogue	Fish Passage Improvements	Local/City/County	$0	$2,726	**$2,726**
Lower Rogue	Fish Passage Improvements	Private Industrial	$0	$5,588	**$5,588**
Lower Rogue	Fish Passage Improvements	Private Non-industrial	$902	$0	**$902**
Lower Rogue	Fish Passage Improvements	State	$2,286	$0	**$2,286**
Lower Rogue	Road Improvements	Federal	$71,112	$0	**$71,112**
Lower Rogue	Road Improvements	Local/City/County	$0	$124,766	**$124,766**
Lower Rogue	Road Improvements	Private Industrial	$0	$900	**$900**
Lower Rogue	Road Improvements	State	$248,190	$0	**$248,190**
TOTAL					**$538,910**



Total Project Cost: $538,910

LOWER WILLAMETTE SUBBASIN

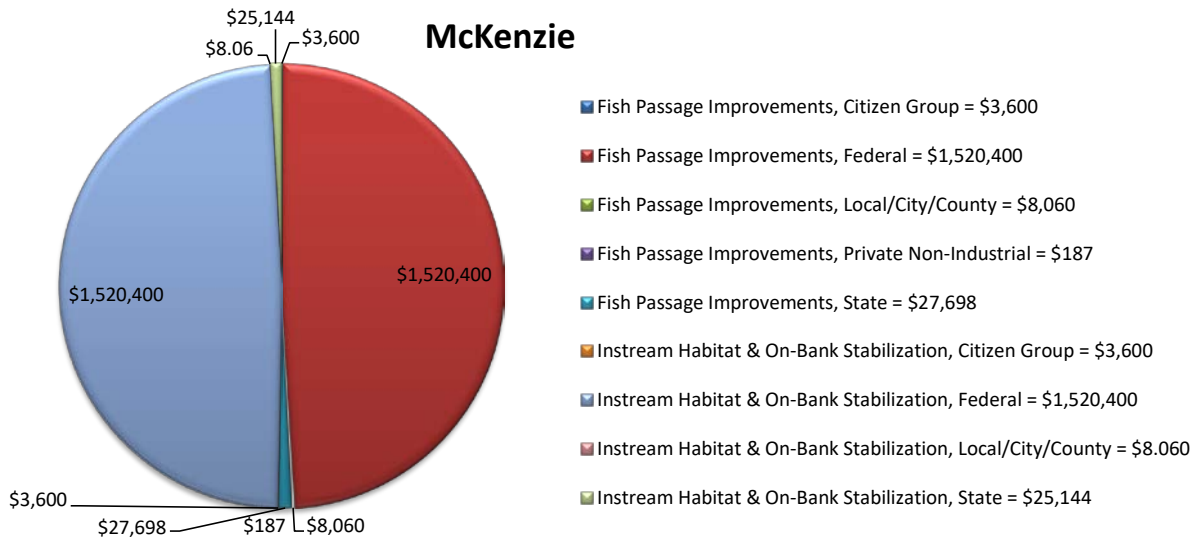
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Lower Willamette	Fish Passage Improvements	Citizen Group	$42,600	$0	**$42,600**
Lower Willamette	Fish Passage Improvements	Federal	$0	$0	**$0**
Lower Willamette	Fish Passage Improvements	Local/City/County	$47,380,830	$16,301,520	**$63,682,350**
Lower Willamette	Fish Passage Improvements	State	$20,000	$6,700	**$26,700**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Citizen Group	$679,230	$0	**$679,230**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Federal	$0	$0	**$0**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Local/City/County	$17,451,660	$5,830,782	**$23,282,442**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Other	$0	$0	**$0**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$5,500	**$5,500**
Lower Willamette	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$0	**$0**
Lower Willamette	Instream Habitat and on-Bank Stabilization	State	$799,948	$14,400	**$814,348**
Lower Willamette	Riparian Habitat and Protection	Citizen Group	$360,915	$8,373	**$369,288**
Lower Willamette	Riparian Habitat and Protection	Federal	$4,500	$11,400	**$15,900**
Lower Willamette	Riparian Habitat and Protection	Local/City/County	$8,828,909	$3,092,532	**$11,921,441**
Lower Willamette	Riparian Habitat and Protection	Other	$0	$0	**$0**
Lower Willamette	Riparian Habitat and Protection	Private Non-industrial	$0	$17,640	**$17,640**
Lower Willamette	Riparian Habitat and Protection	State	$831,915	$12,750	**$844,665**
Lower Willamette	Road Improvements	Private Industrial	$24,228	$0	**$24,228**
Lower Willamette	Upland, Grazing, and Irrigation Management	Federal	$6,000	$12,000	**$18,000**
Lower Willamette	Upland, Grazing, and Irrigation Management	Local/City/County	$1,199,665	$13,680	**$1,213,345**
Lower Willamette	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$24,285	**$24,285**
Lower Willamette	Upland, Grazing, and Irrigation Management	State	$88,684	$0	**$88,684**
Lower Willamette	Urban	Local/City/County	$1,186,000	$0	**$1,186,000**
Lower Willamette	Wetland and Estuary	Local/City/County	$2,372,000	$13,680	**$2,385,680**
Lower Willamette	Wetland and Estuary	Private Non-industrial	$0	$2,880	**$2,880**
Lower Willamette	Wetland and Estuary	State	$19,810	$0	**$19,810**
TOTAL					**$106,651,256**



Total Project Cost: $106,665,016

MCKENZIE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
McKenzie	Fish Passage Improvements	Citizen Group	$0	$3,600	**$3,600**
McKenzie	Fish Passage Improvements	Federal	$1,489,928	$30,472	**$1,520,400**
McKenzie	Fish Passage Improvements	Local/City/County	$0	$8,060	**$8,060**
McKenzie	Fish Passage Improvements	Private Non-industrial	$187	$0	**$187**
McKenzie	Fish Passage Improvements	State	$22,898	$4,800	**$27,698**
McKenzie	Instream Habitat and on-Bank Stabilization	Citizen Group	$0	$3,600	**$3,600**
McKenzie	Instream Habitat and on-Bank Stabilization	Federal	$1,489,928	$30,472	**$1,520,400**
McKenzie	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$8,060	**$8,060**
McKenzie	Instream Habitat and on-Bank Stabilization	State	$20,344	$4,800	**$25,144**
McKenzie	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
TOTAL					**$3,117,149**

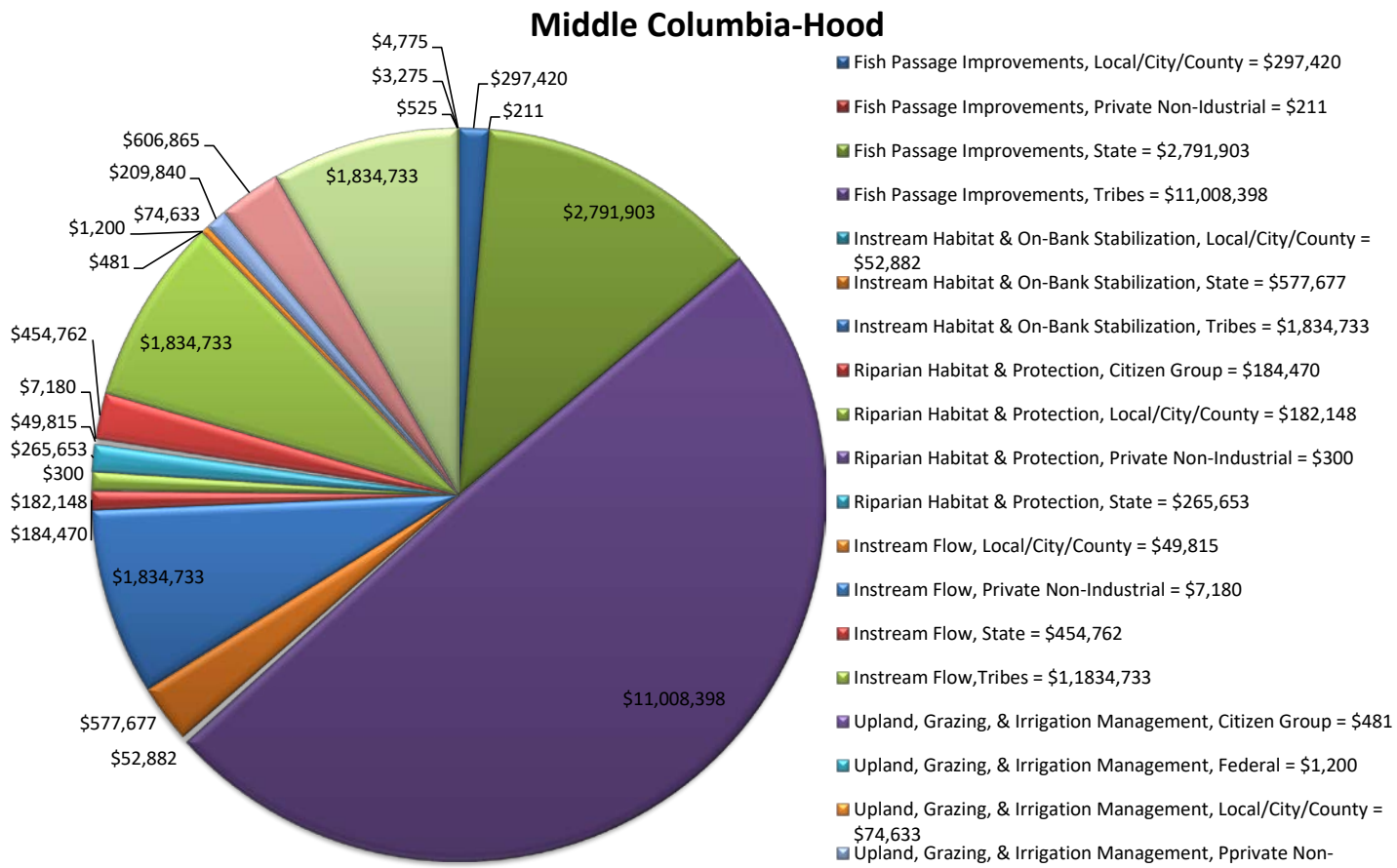


Total Project Cost: $3,117,149

MIDDLE COLUMBIA-HOOD SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Columbia-Hood	Fish Passage Improvements	Local/City/County	$99,888	$197,532	**$297,420**
Middle Columbia-Hood	Fish Passage Improvements	Private Non-industrial	$211	$0	**$211**
Middle Columbia-Hood	Fish Passage Improvements	State	$2,701,903	$0	**$2,701,903**
Middle Columbia-Hood	Fish Passage Improvements	Tribes	$10,948,398	$60,000	**$11,008,398**
Middle Columbia-Hood	Instream Habitat and on-Bank Stabilization	Local/City/County	$16,648	$36,234	**$52,882**
Middle Columbia-Hood	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$0	**$0**
Middle Columbia-Hood	Instream Habitat and on-Bank Stabilization	State	$494,285	$83,392	**$577,677**
Middle Columbia-Hood	Instream Habitat and on-Bank Stabilization	Tribes	$1,824,733	$10,000	**$1,834,733**
Middle Columbia-Hood	Riparian Habitat and Protection	Citizen Group	$154,968	$29,502	**$184,470**
Middle Columbia-Hood	Riparian Habitat and Protection	Local/City/County	$0	$182,148	**$182,148**
Middle Columbia-Hood	Riparian Habitat and Protection	Private Non-industrial	$300	$0	**$300**
Middle Columbia-Hood	Riparian Habitat and Protection	State	$254,658	$10,980	**$265,638**
Middle Columbia-Hood	Instream Flow	Local/City/County	$16,648	$33,167	**$49,815**
Middle Columbia-Hood	Instream Flow	Private Non-industrial	$4,162	$3,018	**$7,180**
Middle Columbia-Hood	Instream Flow	State	$454,762	$0	**$454,762**

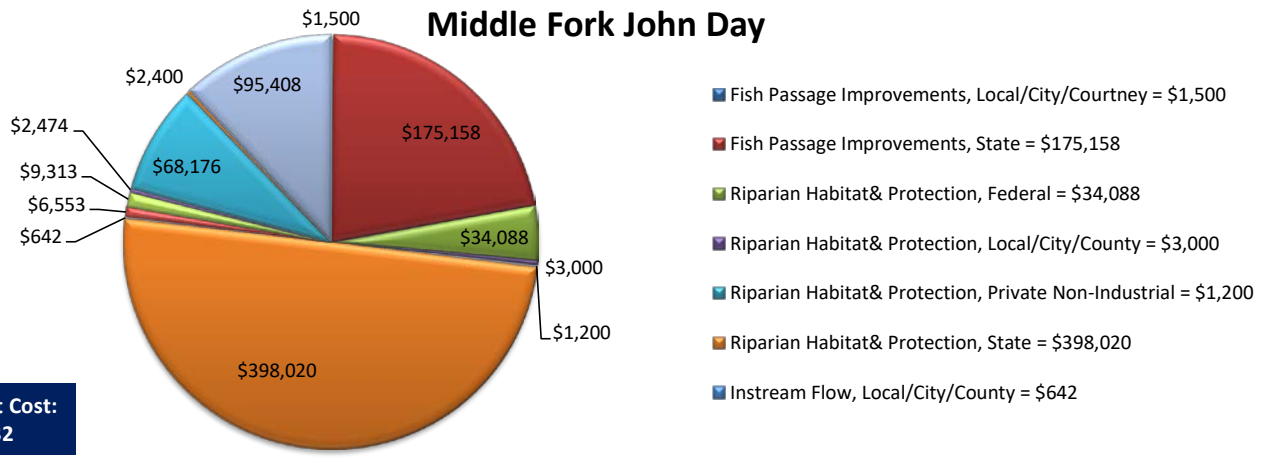
Middle Columbia-Hood	Instream Flow	Tribes	$1,824,733	$10,000	**$1,834,733**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	Citizen Group	$481	$0	**$481**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	Federal	$1,200	$0	**$1,200**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	Local/City/County	$40,158	$34,475	**$74,633**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	Private Non-industrial	$163,627	$46,213	**$209,840**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	State	$606,865	$0	**$606,865**
Middle Columbia-Hood	Upland, Grazing, and Irrigation Management	Tribes	$1,824,733	$10,000	**$1,834,733**
Middle Columbia-Hood	Urban	Local/City/County	$0	$525	**$525**
Middle Columbia-Hood	Urban	Private Non-industrial	$3,275	$0	**$3,275**
Middle Columbia-Hood	Urban	State	$4,775	$0	**$4,775**
TOTAL					**$22,278,612**



Total Project Cost: $22,278,612

MIDDLE FORK JOHN DAY SUBBASIN

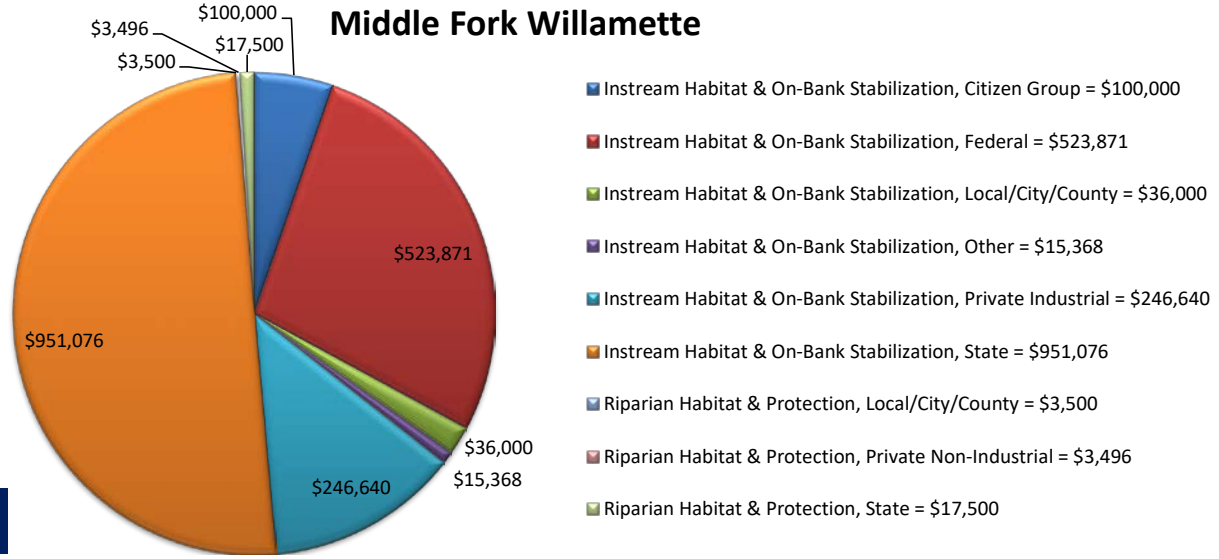
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Fork John Day	Fish Passage Improvements	Local/City/County	$0	$1,500	**$1,500**
Middle Fork John Day	Fish Passage Improvements	State	$139,108	$36,050	**$175,158**
Middle Fork John Day	Riparian Habitat and Protection	Federal	$0	$34,088	**$34,088**
Middle Fork John Day	Riparian Habitat and Protection	Local/City/County	$0	$3,000	**$3,000**
Middle Fork John Day	Riparian Habitat and Protection	Private Non-industrial	$0	$1,200	**$1,200**
Middle Fork John Day	Riparian Habitat and Protection	State	$325,920	$72,100	**$398,020**
Middle Fork John Day	Instream Flow	Local/City/County	$0	$642	**$642**
Middle Fork John Day	Instream Flow	Private Non-industrial	$0	$6,553	**$6,553**
Middle Fork John Day	Instream Flow	State	$9,313	$0	**$9,313**
Middle Fork John Day	Instream Flow	Tribes	$2,374	$0	**$2,374**
Middle Fork John Day	Upland, Grazing, and Irrigation Management	Federal	$0	$68,176	**$68,176**
Middle Fork John Day	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$2,400	**$2,400**
Middle Fork John Day	Upland, Grazing, and Irrigation Management	State	$95,408	$0	**$95,408**
TOTAL					**$797,932**



Total Project Cost: $797,932

MIDDLE FORK WILLAMETTE SUBBASIN

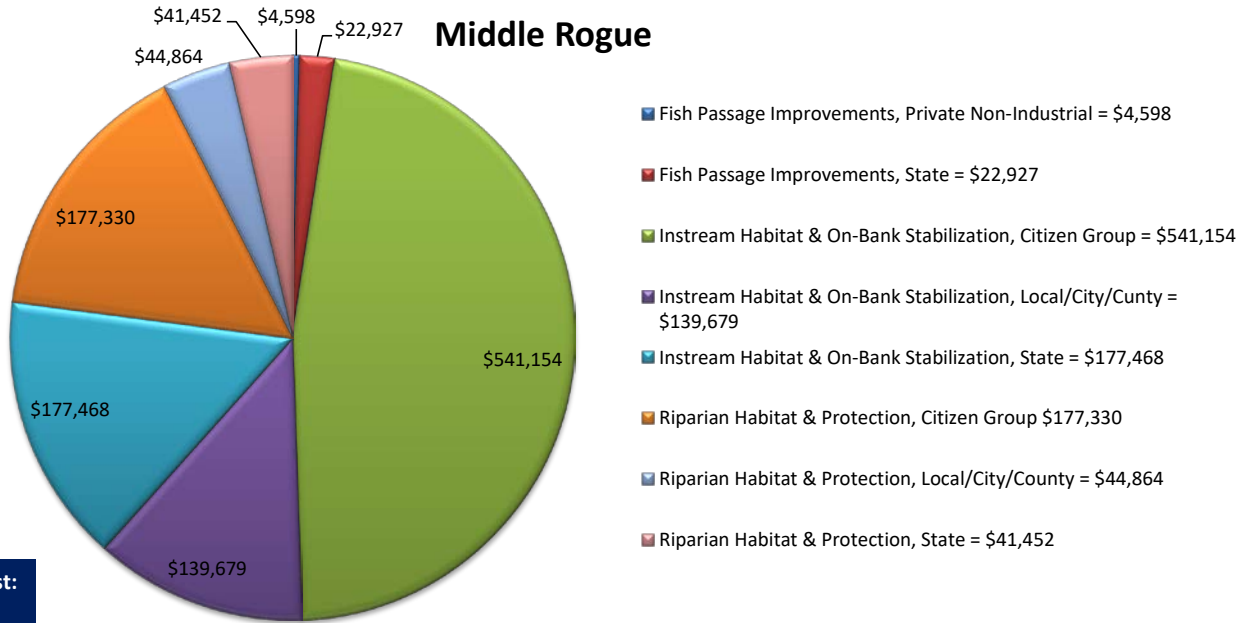
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	Citizen Group	$100,000	$0	**$100,000**
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	Federal	$0	$523,871	**$523,871**
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$36,000	**$36,000**
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	Other	$0	$15,368	**$15,368**
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$246,640	**$246,640**
Middle Fork Willamette	Instream Habitat and on-Bank Stabilization	State	$943,076	$8,000	**$951,076**
Middle Fork Willamette	Riparian Habitat and Protection	Local/City/County	$0	$3,500	**$3,500**
Middle Fork Willamette	Riparian Habitat and Protection	Private Non-industrial	$0	$3,496	**$3,496**
Middle Fork Willamette	Riparian Habitat and Protection	State	$17,500	$0	**$17,500**
TOTAL					**$1,897,451**



Total Project Cost: $1,897,451

MIDDLE ROGUE SUBBASIN

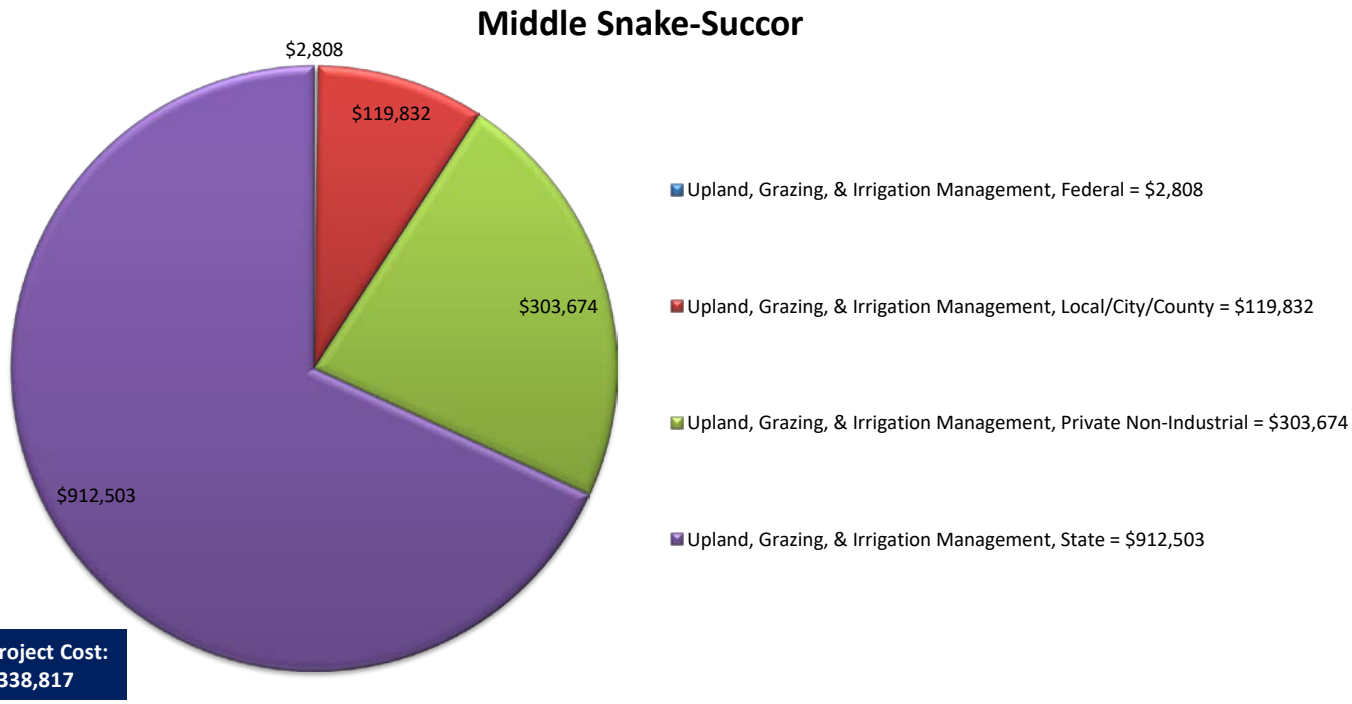
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Rogue	Fish Passage Improvements	Private Non-industrial	$4,598	$0	**$4,598**
Middle Rogue	Fish Passage Improvements	State	$22,927	$0	**$22,927**
Middle Rogue	Instream Habitat and on-Bank Stabilization	Citizen Group	$540,003	$1,151	**$541,154**
Middle Rogue	Instream Habitat and on-Bank Stabilization	Local/City/County	$125,087	$14,592	**$139,679**
Middle Rogue	Instream Habitat and on-Bank Stabilization	State	$176,468	$1,000	**$177,468**
Middle Rogue	Riparian Habitat and Protection	Citizen Group	$177,330	$0	**$177,330**
Middle Rogue	Riparian Habitat and Protection	Local/City/County	$40,000	$4,864	**$44,864**
Middle Rogue	Riparian Habitat and Protection	State	$41,452	$0	**$41,452**
TOTAL					**$1,149,472**



Total Project Cost: $1,149,472

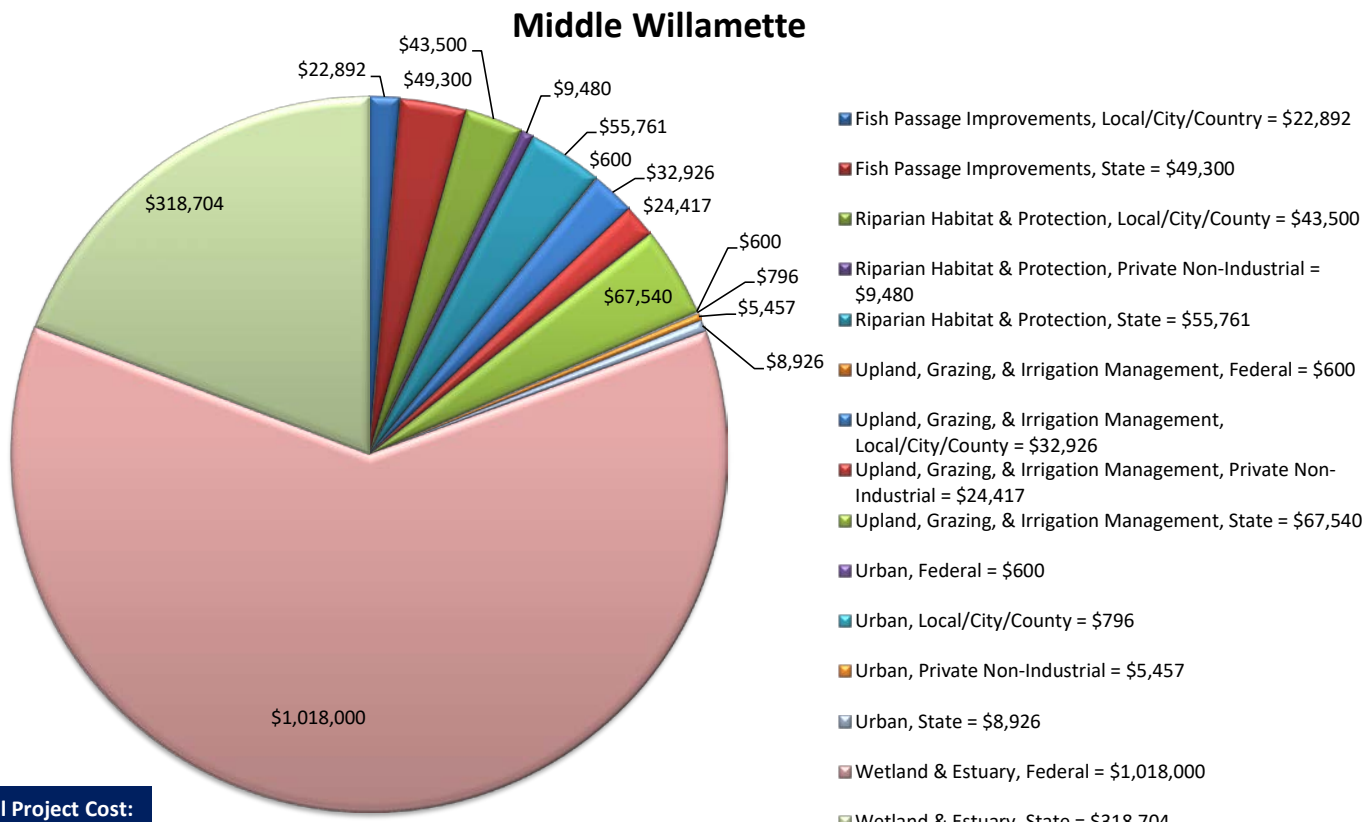
MIDDLE SNAKE-SUCCOR SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Snake-Succor	Upland, Grazing, and Irrigation Management	Federal	$0	$2,808	**$2,808**
Middle Snake-Succor	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$119,832	**$119,832**
Middle Snake-Succor	Upland, Grazing, and Irrigation Management	Private Non-industrial	$303,674	$25,974	**$329,648**
Middle Snake-Succor	Upland, Grazing, and Irrigation Management	State	$909,569	$2,934	**$912,503**
TOTAL					**$1,338,817**



MIDDLE WILLAMETTE SUBBASIN

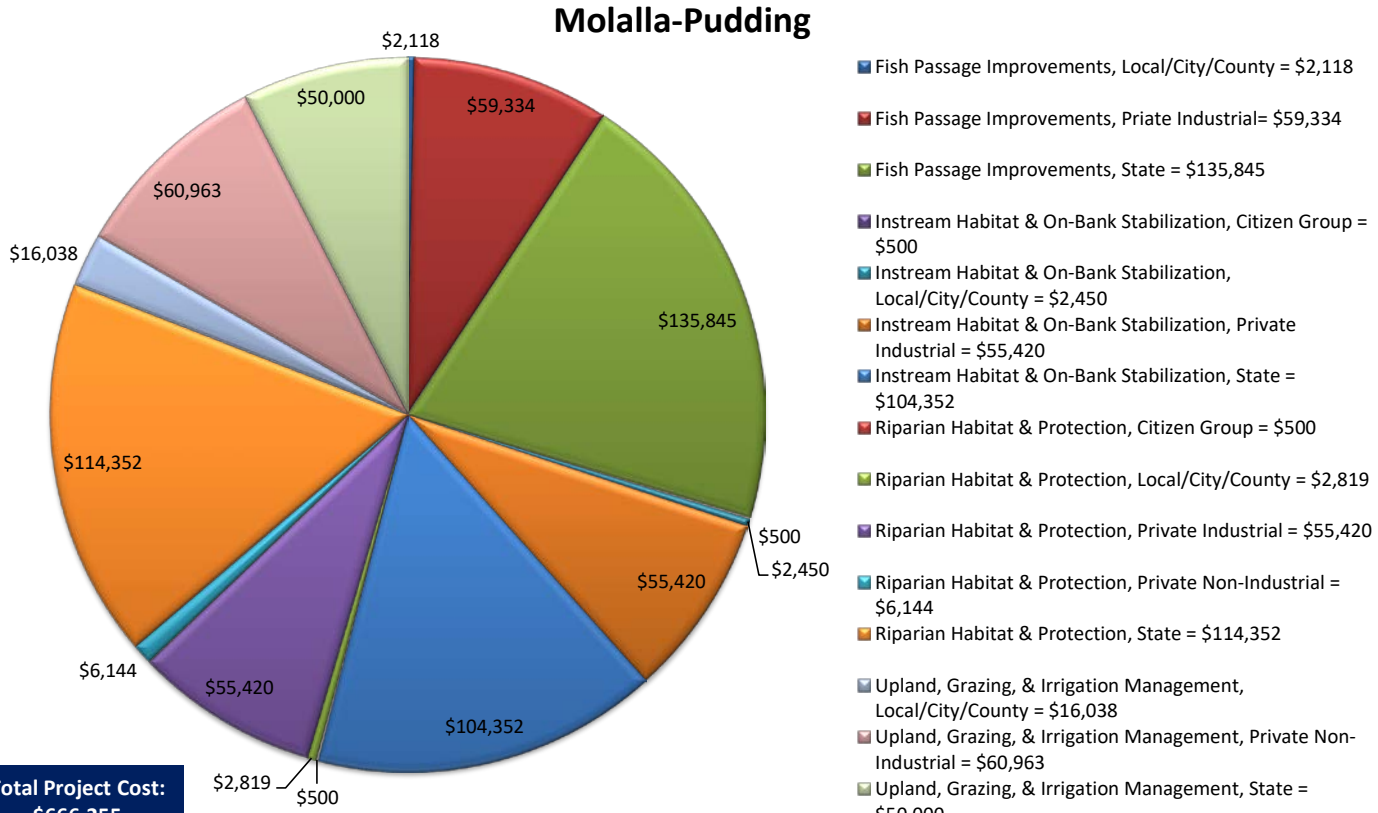
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Middle Willamette	Fish Passage Improvements	Local/City/County	$22,892	$0	**$22,892**
Middle Willamette	Fish Passage Improvements	State	$49,300	$0	**$49,300**
Middle Willamette	Riparian Habitat and Protection	Local/City/County	$43,500	$0	**$43,500**
Middle Willamette	Riparian Habitat and Protection	Private Non-industrial	$9,480	$0	**$9,480**
Middle Willamette	Riparian Habitat and Protection	State	$55,761	$0	**$55,761**
Middle Willamette	Upland, Grazing, and Irrigation Management	Federal	$0	$600	**$600**
Middle Willamette	Upland, Grazing, and Irrigation Management	Local/City/County	$32,130	$796	**$32,926**
Middle Willamette	Upland, Grazing, and Irrigation Management	Private Non-industrial	$22,979	$1,438	**$24,417**
Middle Willamette	Upland, Grazing, and Irrigation Management	State	$67,540	$0	**$67,540**
Middle Willamette	Urban	Federal	$0	$600	**$600**
Middle Willamette	Urban	Local/City/County	$0	$796	**$796**
Middle Willamette	Urban	Private Non-industrial	$4,019	$1,438	**$5,457**
Middle Willamette	Urban	State	$8,926	$0	**$8,926**
Middle Willamette	Wetland and Estuary	Citizen Group	$0	$0	**$0**
Middle Willamette	Wetland and Estuary	Federal	$1,018,000	$0	**$1,018,000**
Middle Willamette	Wetland and Estuary	Private Non-industrial	$0	$0	**$0**
Middle Willamette	Wetland and Estuary	State	$318,704	$0	**$318,704**
TOTAL					**$1,658,899**



Total Project Cost: $1,658,899

MOLALLA-PUDDING SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Molalla-Pudding	Fish Passage Improvements	Local/City/County	$2,118	$0	**$2,118**
Molalla-Pudding	Fish Passage Improvements	Private Industrial	$0	$59,334	**$59,334**
Molalla-Pudding	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Molalla-Pudding	Fish Passage Improvements	State	$135,845	$0	**$135,845**
Molalla-Pudding	Instream Habitat and on-Bank Stabilization	Citizen Group	$0	$500	**$500**
Molalla-Pudding	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$2,450	**$2,450**
Molalla-Pudding	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$55,420	**$55,420**
Molalla-Pudding	Instream Habitat and on-Bank Stabilization	State	$8,652	$5,700	**$104,352**
Molalla-Pudding	Riparian Habitat and Protection	Citizen Group	$0	$500	**$500**
Molalla-Pudding	Riparian Habitat and Protection	Local/City/County	$0	$2,819	**$2,819**
Molalla-Pudding	Riparian Habitat and Protection	Private Industrial	$0	$55,420	**$55,420**
Molalla-Pudding	Riparian Habitat and Protection	Private Non-industrial	$0	$6,144	**$6,144**
Molalla-Pudding	Riparian Habitat and Protection	State	$108,652	$5,700	**$114,352**
Molalla-Pudding	Upland, Grazing, and Irrigation Management	Local/City/County	$15,000	$1,038	**$16,038**
Molalla-Pudding	Upland, Grazing, and Irrigation Management	Private Non-industrial	$48,675	$12,288	**$60,963**
Molalla-Pudding	Upland, Grazing, and Irrigation Management	State	$50,000	$0	**$50,000**
TOTAL					**$666,255**

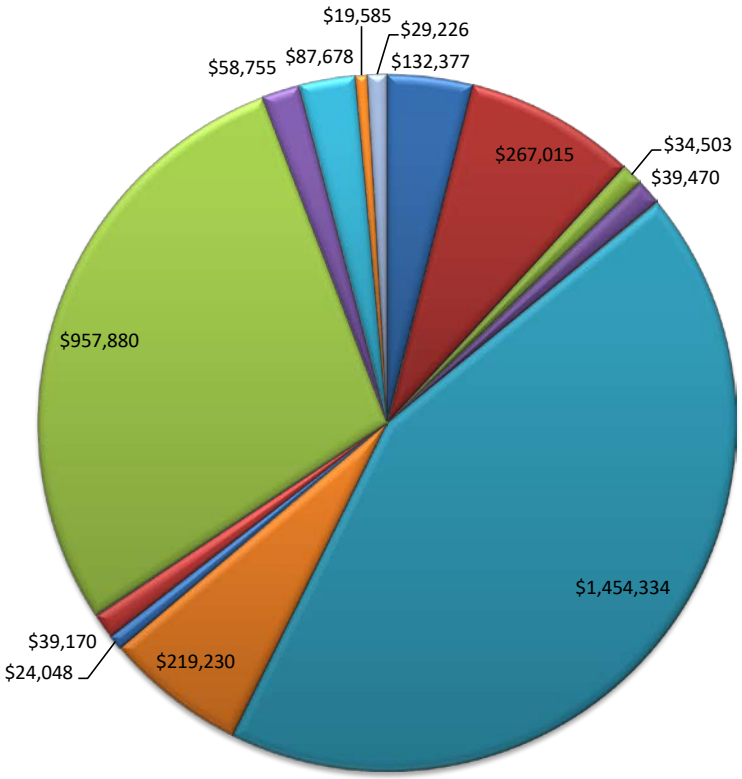


Total Project Cost: $666,255

NECANICUM SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Necanicum	Fish Passage Improvements	Citizen Group	$132,377	$0	**$132,377**
Necanicum	Fish Passage Improvements	Federal	$178,015	$89,000	**$267,015**
Necanicum	Fish Passage Improvements	Local/City/County	$0	$34,503	**$34,503**
Necanicum	Fish Passage Improvements	Private Industrial	$0	$39,470	**$39,470**
Necanicum	Fish Passage Improvements	State	$1,428,354	$25,980	**$1,454,334**
Necanicum	Instream Habitat and on-Bank Stabilization	Federal	$172,430	$46,800	**$219,230**
Necanicum	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$24,048	**$24,048**
Necanicum	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$39,170	**$39,170**
Necanicum	Instream Habitat and on-Bank Stabilization	State	$931,900	$25,980	**$957,880**
Necanicum	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Necanicum	Riparian Habitat and Protection	Private Industrial	$0	$58,755	**$58,755**
Necanicum	Riparian Habitat and Protection	State	$87,678	$0	**$87,678**
Necanicum	Road Improvements	Local/City/County	$0	$0	**$0**
Necanicum	Road Improvements	Private Industrial	$0	$19,585	**$19,585**
Necanicum	Road Improvements	State	$29,226	$0	**$29,226**
TOTAL					**$3,363,271**

Necanicum



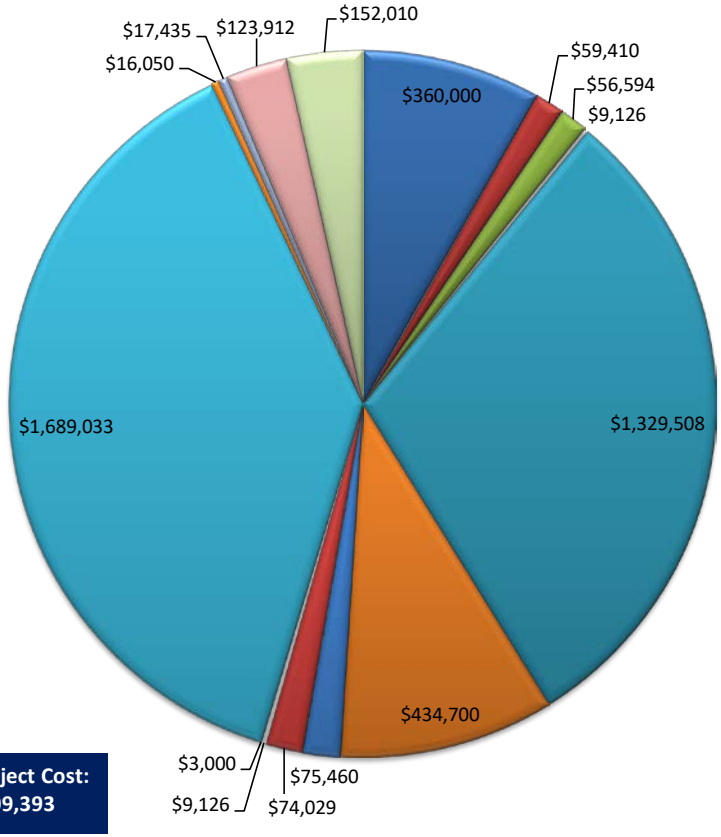
- Fish Passage Improvements, Citizen Group = $132,377
- Fish Passage Improvements, Federal = $267,015
- Fish Passage Improvements, Local/City/County = $34,503
- Fish Passage Improvements, Private Industrial = $39,470
- Fish Passage Improvements, State = $1,454,334
- Instream Habitat & On-Bank Stabilization, Fderal = $219,230
- Instream Habitat & On-Bank Stabilization, Local/City/County = $24,048
- Instream Habitat & On-Bank Stabilization, Private Industrial = $39,170
- Instream Habitat & On-Bank Stabilization, State = $957,880
- Riparian Habitat & Protection, Private Industrial = $58,755
- Riparian Habitat & Protection, State = $87,678
- Road Improvements, Private Industrial = $19,585
- Road Improvements, State = $29,226

Total Project Cost: $3,363,271

NEHALEM SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Nehalem	Fish Passage Improvements	Citizen Group	$360,000	$0	**$360,000**
Nehalem	Fish Passage Improvements	Federal	$49,410	$10,000	**$59,410**
Nehalem	Fish Passage Improvements	Local/City/County	$0	$56,594	**$56,594**
Nehalem	Fish Passage Improvements	Other	$0	$9,126	**$9,126**
Nehalem	Fish Passage Improvements	State	$1,329,508	$22,464	**$1,329,508**
Nehalem	Instream Habitat and on-Bank Stabilization	Citizen Group	$434,700	$0	**$434,700**
Nehalem	Instream Habitat and on-Bank Stabilization	Federal	$65,460	$10,000	**$75,460**
Nehalem	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$74,029	**$74,029**
Nehalem	Instream Habitat and on-Bank Stabilization	Other	$0	$9,126	**$9,126**
Nehalem	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$3,000	**$3,000**
Nehalem	Instream Habitat and on-Bank Stabilization	State	$1,642,692	$46,341	**$1,689,033**
Nehalem	Riparian Habitat and Protection	Federal	$16,050	$0	**$16,050**
Nehalem	Riparian Habitat and Protection	Local/City/County	$0	$17,435	**$17,435**
Nehalem	Riparian Habitat and Protection	State	$116,335	$7,577	**$123,912**
Nehalem	Road Improvements	State	$152,010	$0	**$152,010**
TOTAL					**$4,409,393**

Nehalem



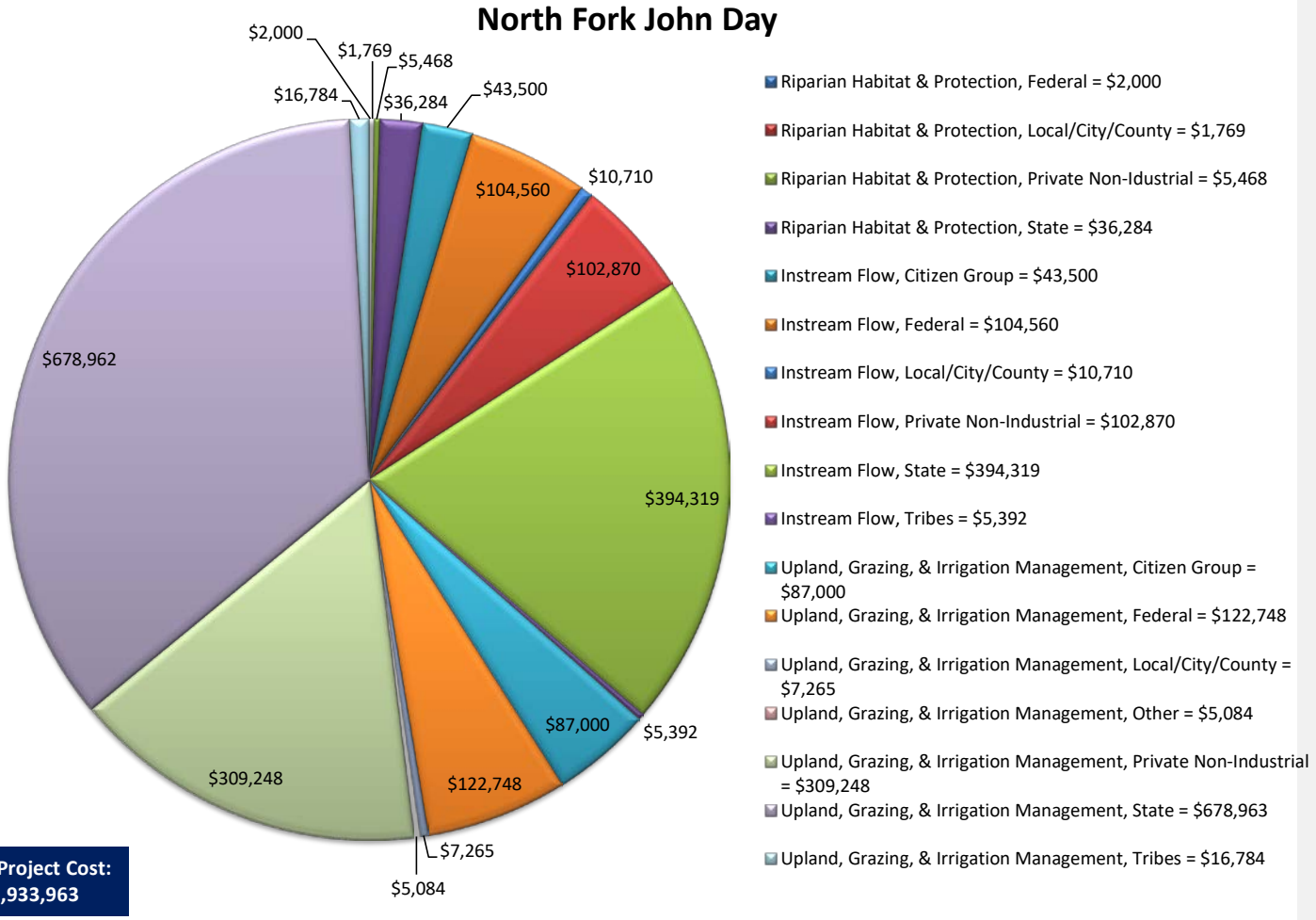
Total Project Cost: $4,409,393

- Fish Passage Improvements, Citizen Group = $360,000
- Fish Passage Improvements, Federal = $59,410
- Fish Passage Improvements, Locoal/City/County = $56,594
- Fish Passage Improvements, Other = $9,126
- Fish Passage Improvements, State = $1,329,508
- Instream Habitat & On-Bank Stabilization, Citizen Group = $434,700
- Instream Habitat & On-Bank Stabilization, Federal = $75,460
- Instream Habitat & On-Bank Stabilization,Local/City/County = $74,029
- Instream Habitat & On-Bank Stabilization, Other = $9,126
- Instream Habitat & On-Bank Stabilization, Private Industrial = $3,000
- Instream Habitat & On-Bank Stabilization, State = $1,689,033
- Riparian Habitat & Protection, Federal = $16,050
- Riparian Habitat & Protection, Local/City/County = $17,435
- Riparian Habitat & Protection, State = $123,912
- Road Improvements, State = $152,010

NORTH FORK JOHN DAY SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
North Fork John Day	Riparian Habitat and Protection	Federal	$0	$2,000	**$2,000**
North Fork John Day	Riparian Habitat and Protection	Local/City/County	$0	$1,769	**$1,769**
North Fork John Day	Riparian Habitat and Protection	Private Non-industrial	$999	$4,469	**$5,468**
North Fork John Day	Riparian Habitat and Protection	State	$36,284	$0	**$36,284**
North Fork John Day	Instream Flow	Citizen Group	$43,500	$0	**$43,500**
North Fork John Day	Instream Flow	Federal	$97,160	$7,400	**$104,560**
North Fork John Day	Instream Flow	Local/City/County	$0	$10,710	**$10,710**
North Fork John Day	Instream Flow	Private Non-industrial	$64,602	$38,268	**$102,870**
North Fork John Day	Instream Flow	State	$394,319	$0	**$394,319**
North Fork John Day	Instream Flow	Tribes	$5,392	$0	**$5,392**
North Fork John Day	Upland, Grazing, and Irrigation Management	Citizen Group	$87,000	$0	**$ 87,000**
North Fork John Day	Upland, Grazing, and Irrigation Management	Federal	$110,848	$11,900	**$122,748**
North Fork John Day	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$7,265	**$7,265**
North Fork John Day	Upland, Grazing, and Irrigation Management	Other	$0	$5,084	**$5,084**
North Fork John Day	Upland, Grazing, and Irrigation Management	Private Non-industrial	$146,650	$162,598	**$309,248**

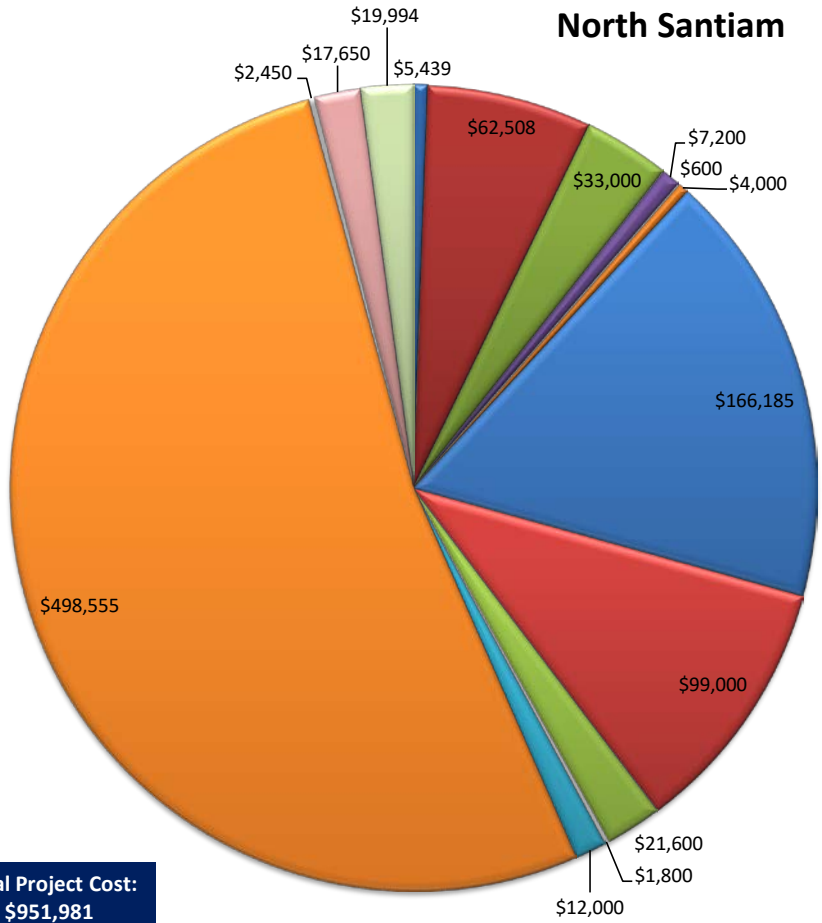
North Fork John Day	Upland, Grazing, and Irrigation Management	State	$678,962	$0	**$678,962**
North Fork John Day	Upland, Grazing, and Irrigation Management	Tribes	$16,784	$0	**$16,784**
TOTAL					**$1,933,963**



Total Project Cost: $1,933,963

NORTH SANTIAM SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
North Santiam	Fish Passage Improvements	Local/City/County	$0	$0	**$0**
North Santiam	Fish Passage Improvements	Private Non-industrial	$5,439	$0	**$5,439**
North Santiam	Fish Passage Improvements	State	$62,508	$0	**$62,508**
North Santiam	Instream Habitat and on-Bank Stabilization	Citizen Group	$3,000	$0	**$33,000**
North Santiam	Instream Habitat and on-Bank Stabilization	Federal	$0	$7,200	**$7,200**
North Santiam	Instream Habitat and on-Bank Stabilization	Local/City/County	$600	$0	**$600**
North Santiam	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$4,000	**$ 4,000**
North Santiam	Instream Habitat and on-Bank Stabilization	State	$165,385	$800	**$166,185**
North Santiam	Riparian Habitat and Protection	Citizen Group	$99,000	$0	**$99,000**
North Santiam	Riparian Habitat and Protection	Federal	$0	$21,600	**$21,600**
North Santiam	Riparian Habitat and Protection	Local/City/County	$1,800	$0	**$1,800**
North Santiam	Riparian Habitat and Protection	Private Non-industrial	$0	$12,000	**$12,000**
North Santiam	Riparian Habitat and Protection	State	$496,155	$2,400	**$498,555**
North Santiam	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$2,450	**$2,450**
North Santiam	Upland, Grazing, and Irrigation Management	Private Non-industrial	$17,650	$0	**$17,650**
North Santiam	Upland, Grazing, and Irrigation Management	State	$19,994	$0	**$19,994**
TOTAL					**$951,981**

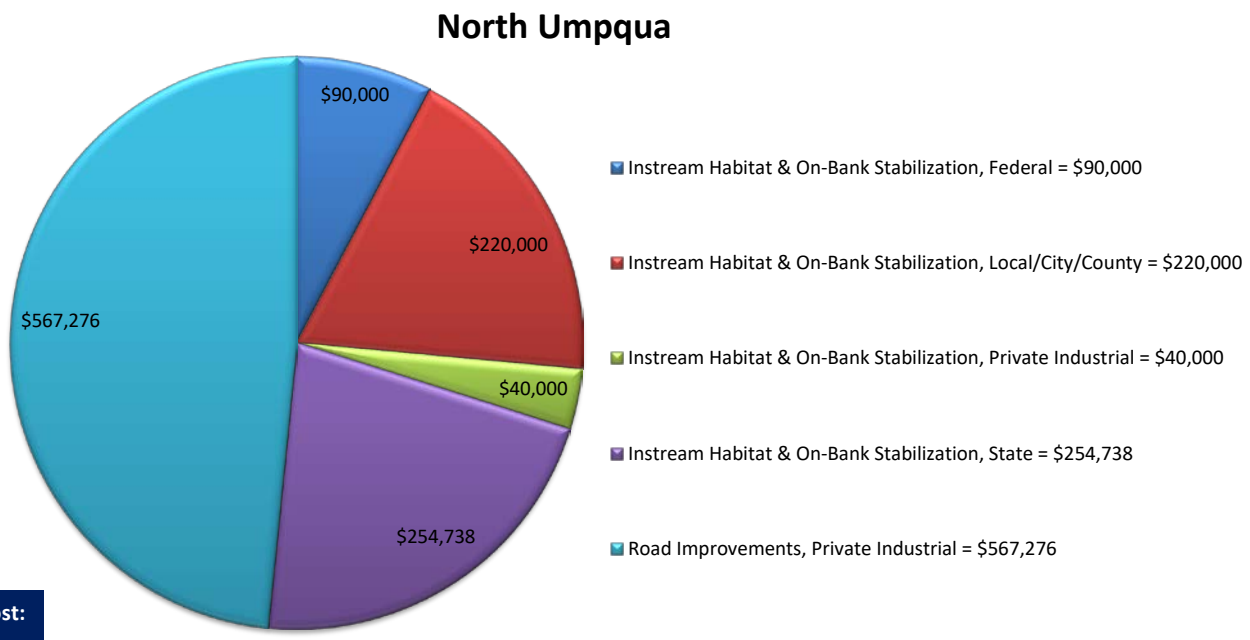


Total Project Cost: $951,981

- Fish Passage Improvements, Private Non-Industrial = $5,439
- Fish Passage Improvements, State = $62,508
- Instream Habitat & On-Bank Stablization, Citizen Group = $33,000
- Instream Habitat & On-Bank Stablization, Federal = $7,200
- Instream Habitat & On-Bank Stablization, Local/City/County = $600
- Instream Habitat & On-Bank Stablization, Private Non-Industrial = $4,000
- Instream Habitat & On-Bank Stablization, State = $166,185
- Riparian Habitat & Protection, Citizen Group - $99,000
- Riparian Habitat & Protection, Federal = $21,600
- Riparian Habitat & Protection, Local/City/County = $1,800
- Riparian Habitat & Protection, Private Non-Industrial = $12,000
- Riparian Habitat & Protection, State = $498,555
- Upland, Grazing, & Irrigation Management, Local/City/County = $2,450
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $17,650
- Upland, Grazing, & Irrigation Management, State = $19,994

NORTH UMPQUA

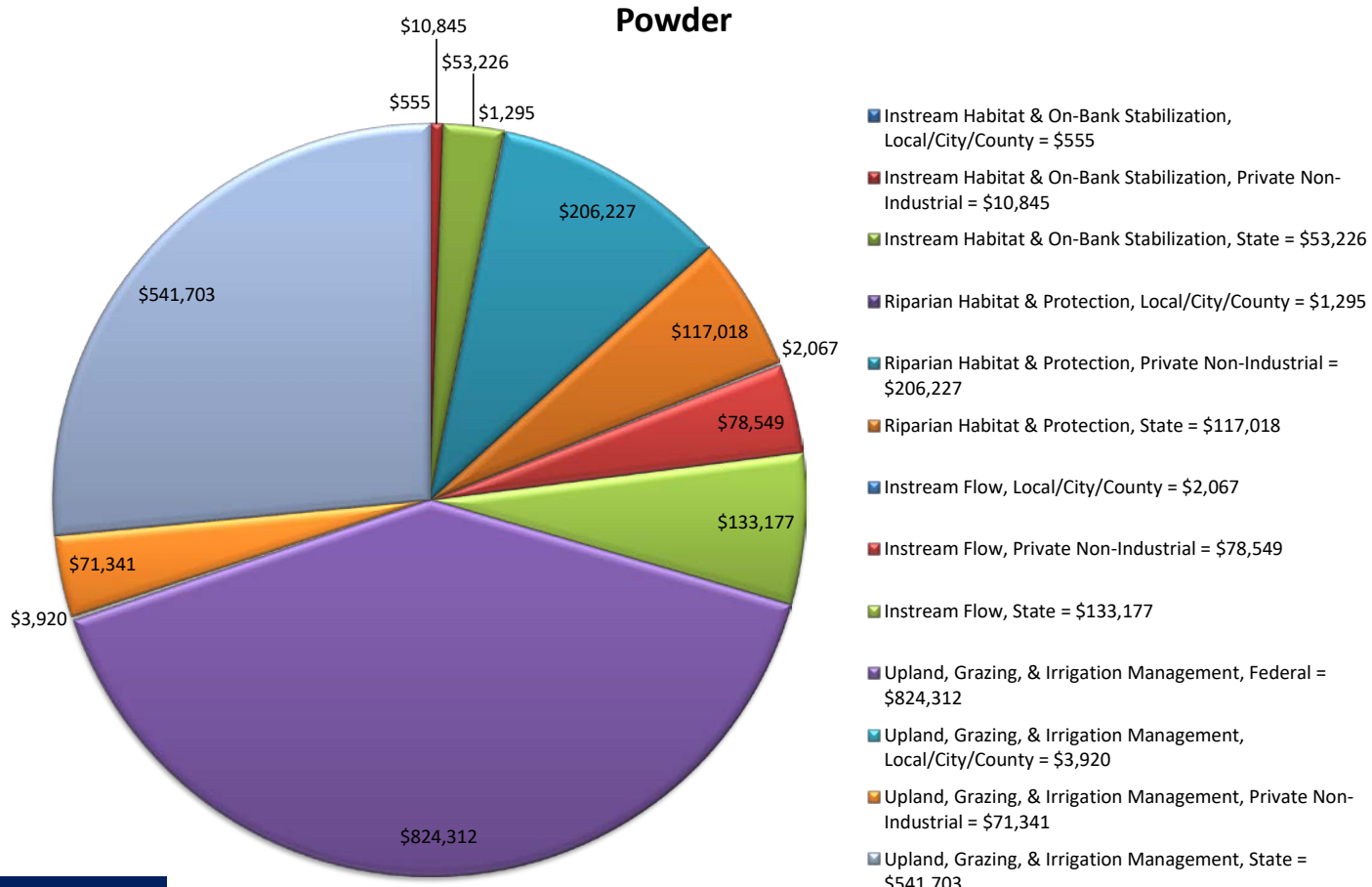
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
North Umpqua	Instream Habitat and on-Bank Stabilization	Federal	$0	$90,000	**$90,000**
North Umpqua	Instream Habitat and on-Bank Stabilization	Local/City/County	$220,000	$0	**$220,000**
North Umpqua	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$40,000	**$40,000**
North Umpqua	Instream Habitat and on-Bank Stabilization	State	$149,738	$105,000	**$254,738**
North Umpqua	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
North Umpqua	Road Improvements	Private Industrial	$567,276	$0	**$567,276**
TOTAL					**$1,172,014**



Total Project Cost: $1,172,014

POWDER SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Powder	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$555	**$555**
Powder	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$10,845	**$10,845**
Powder	Instream Habitat and on-Bank Stabilization	State	$53,226	$0	**$53,226**
Powder	Riparian Habitat and Protection	Local/City/County	$0	$1,295	**$1,295**
Powder	Riparian Habitat and Protection	Private Non-industrial	$85,978	$120,249	**$206,227**
Powder	Riparian Habitat and Protection	State	$117,018	$0	**$117,018**
Powder	Instream Flow	Local/City/County	$0	$2,067	**$2,067**
Powder	Instream Flow	Private Non-industrial	$28,369	$50,180	**$78,549**
Powder	Instream Flow	State	$133,177	$0	**$133,177**
Powder	Upland, Grazing, and Irrigation Management	Federal	$824,312	$0	**$824,312**
Powder	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$3,920	**$3,920**
Powder	Upland, Grazing, and Irrigation Management	Private Non-industrial	$24,869	$0	**$71,341**
Powder	Upland, Grazing, and Irrigation Management	State	$541,703	$0	**$541,703**
TOTAL					**$2,044,235**

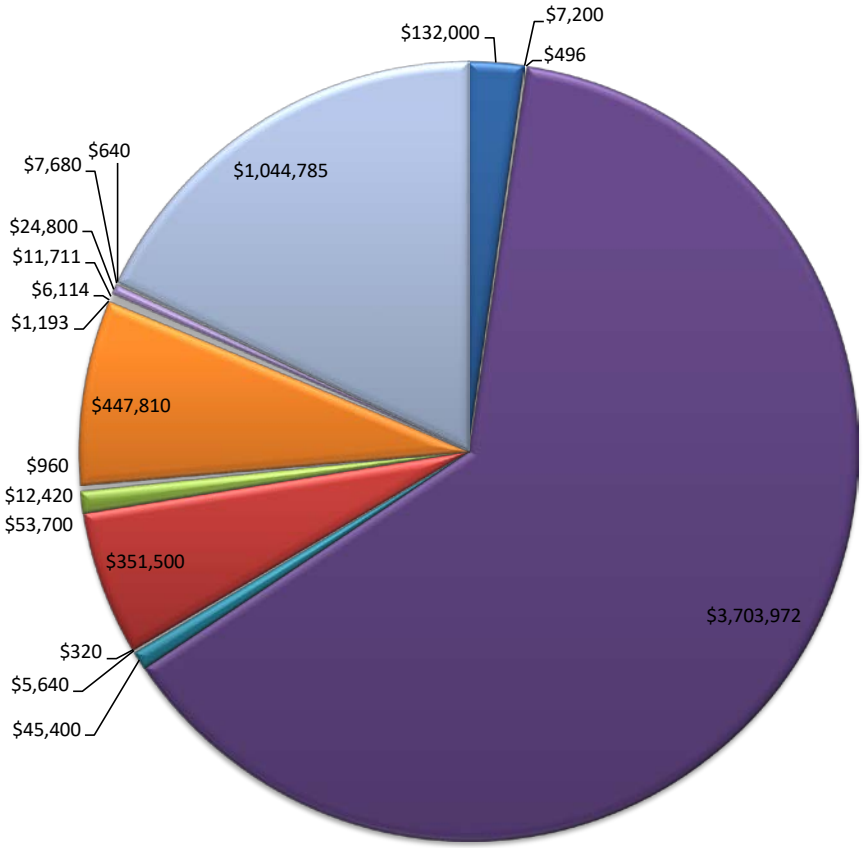


Total Project Cost: $2,044,235

SILETZ-YAQUINA SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Siletz-Yaquina	Fish Passage Improvements	Federal	$0	$132,000	**$132,000**
Siletz-Yaquina	Fish Passage Improvements	Local/City/County	$0	$7,200	**$7,200**
Siletz-Yaquina	Fish Passage Improvements	Private Industrial	$0	$0	**$0**
Siletz-Yaquina	Fish Passage Improvements	Private Non-industrial	$496	$0	**$496**
Siletz-Yaquina	Fish Passage Improvements	State	$3,697,572	$6,400	**$3,703,972**
Siletz-Yaquina	Instream Habitat and on-Bank Stabilization	Federal	$10,000	$35,400	**$45,400**
Siletz-Yaquina	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$5,640	**$5,640**
Siletz-Yaquina	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$0	**$0**
Siletz-Yaquina	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$320	**$320**
Siletz-Yaquina	Instream Habitat and on-Bank Stabilization	State	$2,334,200	$17,300	**$351,500**
Siletz-Yaquina	Riparian Habitat and Protection	Federal	$30,000	$23,700	**$53,700**
Siletz-Yaquina	Riparian Habitat and Protection	Local/City/County	$0	$12,420	**$12,420**
Siletz-Yaquina	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
Siletz-Yaquina	Riparian Habitat and Protection	Private Non-industrial	$0	$960	**$960**
Siletz-Yaquina	Riparian Habitat and Protection	State	$415,110	$32,700	**$447,810**
Siletz-Yaquina	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$1,193	**$1,193**
Siletz-Yaquina	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$ 6,114	**$6,114**
Siletz-Yaquina	Upland, Grazing, and Irrigation Management	State	$11,711	$0	**$11,711**
Siletz-Yaquina	Wetland and Estuary	Federal	$20,000	$4,800	**$24,800**
Siletz-Yaquina	Wetland and Estuary	Local/City/County	$0	$7,680	**$7,680**
Siletz-Yaquina	Wetland and Estuary	Private Non-industrial	$0	$640	**$640**
Siletz-Yaquina	Wetland and Estuary	State	$1,019,785	$25,000	**$1,044,785**
TOTAL					**$5,858,341**

Siletz-Yaquina



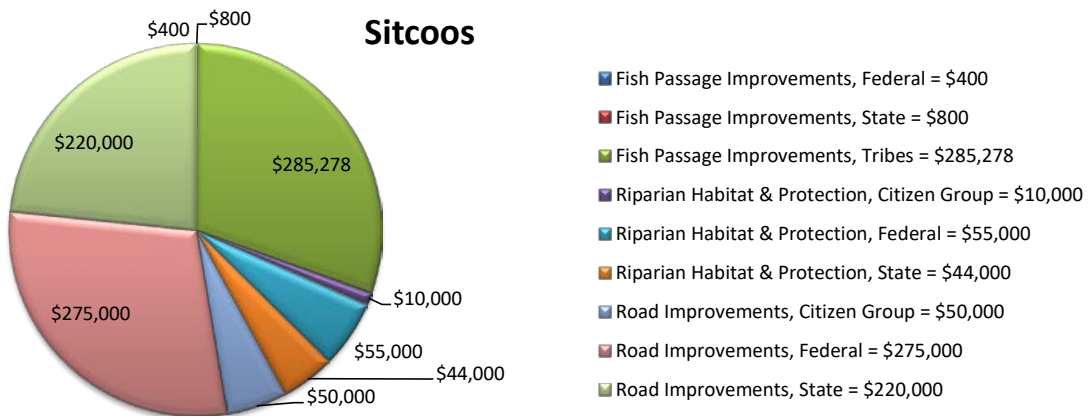
Total Project Cost: $5,858,341

- Fish Passage Improvements, Federal - $132,000
- Fish Passage Improvements, Local/City/County = $7,200
- Fish Passage Improvements, Private Non-Industrial = $496
- Fish Passage Improvements, State = $3,703,972
- Instream Habitat & On-Bank Stabilization, Federal = $45,400
- Instream Habitat & On-Bank Stabilization, Local/City/County = $5,640
- Instream Habitat & On-Bank Stabilization, Private Non-Industrial = $320
- Instream Habitat & On-Bank Stabilization, State = $351,500
- Riparian Habitat & Protection, Federal = $53,700
- Riparian Habitat & Protection, Local/City/County = $12,420
- Riparian Habitat & Protection, Private Non-Industrial = $960
- Riparian Habitat & Protection, State = $447,810
- Upland,Grazing, & Irrigation Management, Local/City/County = $1,193
- Upland,Grazing, & Irrigation Management, Private Non-Idustiral = $6,114
- Upland,Grazing, & Irrigation Management, State = $11,711
- Wetland & Estuary, Federal = $24,800
- Wetland & Estuary, Local/City/County = $7,680
- Wetland & Estuary, Private Non-Idustrial = $640
- Wetland & Estuary, State - $1,044,785

SILTCOOS SUBBASIN

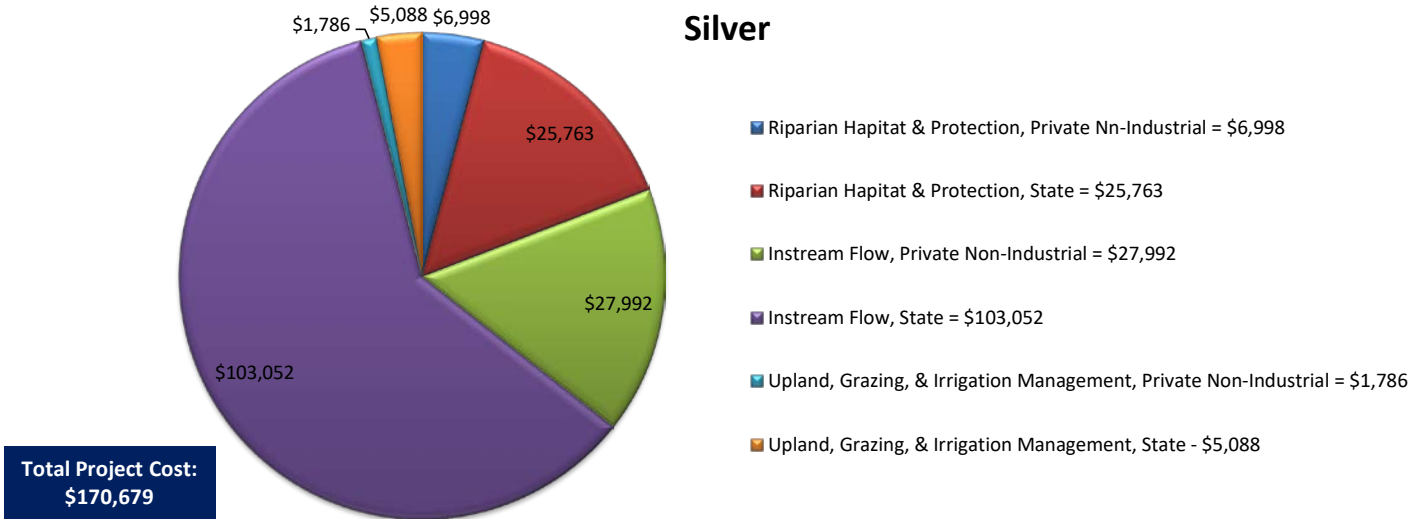
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Siltcoos	Fish Passage Improvements	Federal	$0	$400	**$400**
Siltcoos	Fish Passage Improvements	State	$0	$800	**$800**
Siltcoos	Fish Passage Improvements	Tribes	$255,150	$30,128	**$285,278**
Siltcoos	Riparian Habitat and Protection	Citizen Group	$0	$10,000	**$10,000**
Siltcoos	Riparian Habitat and Protection	Federal	$55,000	$0	**$55,000**
Siltcoos	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Siltcoos	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
Siltcoos	Riparian Habitat and Protection	State	$44,000	$0	**$44,000**
Siltcoos	Riparian Habitat and Protection	Tribes	$0	$0	**$0**
Siltcoos	Road Improvements	Citizen Group	$0	$0	**$50,000**
Siltcoos	Road Improvements	Federal	$275,000	$0	**$275,000**
Siltcoos	Road Improvements	Local/City/County	$0	$0	**$0**
Siltcoos	Road Improvements	State	$220,000	$0	**$220,000**
Siltcoos	Road Improvements	Tribes	$0	$0	**$0**
TOTAL					**$940,478**

Total Project Cost: $940,478



SILVER SUBBASIN

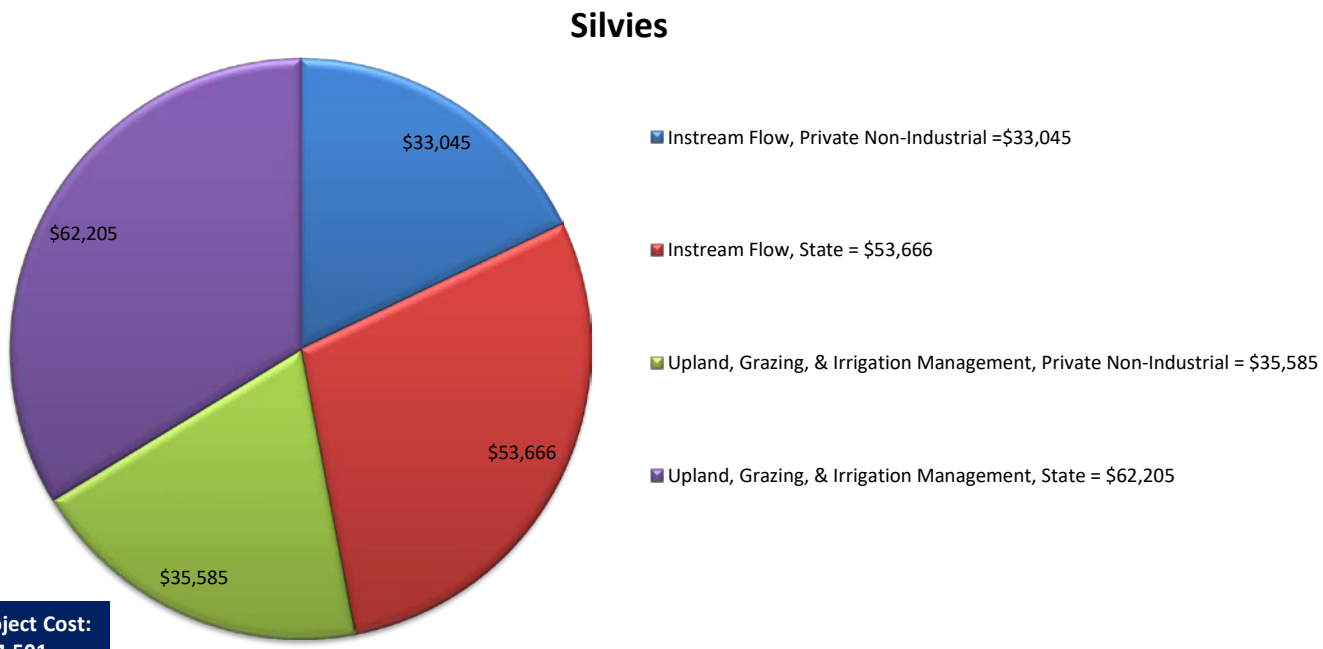
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Silver	Riparian Habitat and Protection	Local/City/County	$	$	**$0**
Silver	Riparian Habitat and Protection	Private Non-industrial	$	$6,998	**$6,998**
Silver	Riparian Habitat and Protection	State	$25,763	$	**$25,763**
Silver	Instream Flow	Local/City/County		$	**$0**
Silver	Instream Flow	Private Non-industrial	$	$27,992	**$27,992**
Silver	Instream Flow	State	$103,052	$	**$103,052**
Silver	Upland, Grazing, and Irrigation Management	Local/City/County	$	$	**$0**
Silver	Upland, Grazing, and Irrigation Management	Private Non-industrial	$	$1,786	**$1,786**
Silver	Upland, Grazing, and Irrigation Management	State	$5,088	$	**$5,088**
TOTAL					**$170,679**



Total Project Cost: $170,679

SILVIES SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Silvies	Instream Flow	Local/City/County	$ -	$ -	**$ 0**
Silvies	Instream Flow	Private Non-industrial	$ -	$ 33,045	**$ 33,045**
Silvies	Instream Flow	State	$ 53,666	$ -	**$ 53,666**
Silvies	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ -	**$ 0**
Silvies	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ -	$ 35,585	**$ 35,585**
Silvies	Upland, Grazing, and Irrigation Management	State	$ 62,205	$ -	**$ 62,205**
TOTAL					**$ 184,501**



Total Project Cost: $184,501

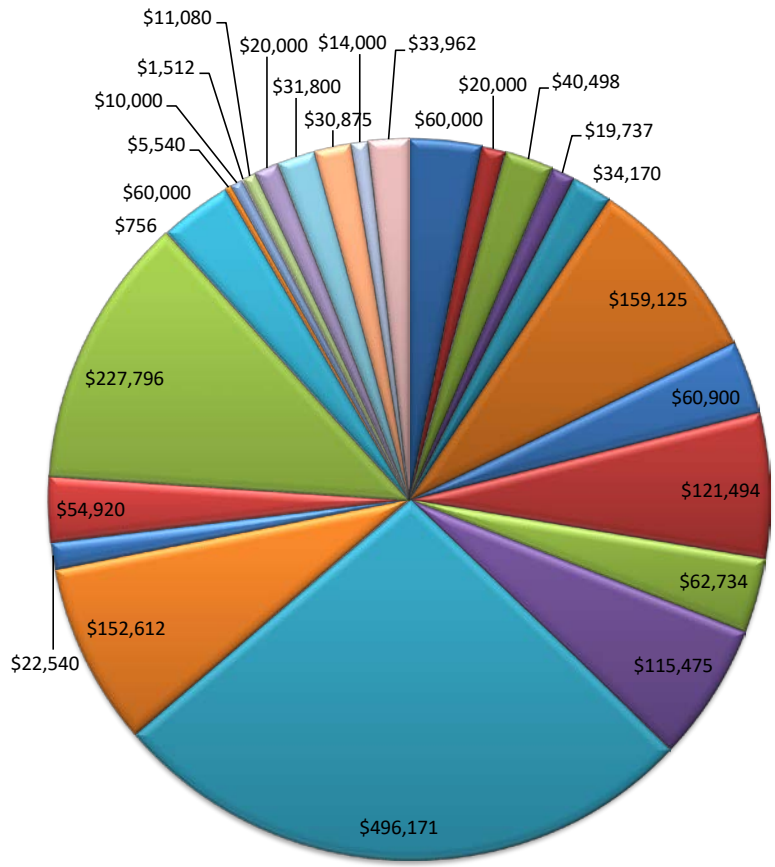
SIUSLAW SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Siuslaw	Fish Passage Improvements	Private Industrial	$ 60,000	$ -	**$ 60,000**
Siuslaw	Instream Habitat and on-Bank Stabilization	Citizen Group	$ 20,000	$ -	**$ 20,000**
Siuslaw	Instream Habitat and on-Bank Stabilization	Federal	$ 36,653	$ 3,845	**$ 40,498**

Siuslaw	Instream Habitat and on-Bank Stabilization	Local/City/County	$ 7,645	$ 12,092	**$ 19,737**
Siuslaw	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ 4,230	$ 29,940	**$ 34,170**
Siuslaw	Instream Habitat and on-Bank Stabilization	State	$ 159,125	$ -	**$ 159,125**
Siuslaw	Riparian Habitat and Protection	Citizen Group	$ 60,900	$ -	**$ 60,900**
Siuslaw	Riparian Habitat and Protection	Federal	$ 109,959	$ 11,535	**$ 121,494**
Siuslaw	Riparian Habitat and Protection	Local/City/County	$ 22,935	$ 39,799	**$ 62,734**
Siuslaw	Riparian Habitat and Protection	Private Industrial	$ -	$ -	**$ 0**
Siuslaw	Riparian Habitat and Protection	Private Non-industrial	$ 4,690	$ 110,785	**$ 115,475**
Siuslaw	Riparian Habitat and Protection	State	$ 496,171	$ -	**$ 496,171**
Siuslaw	Instream Flow	Federal	$ 146,612	$ 6,000	**$ 152,612**
Siuslaw	Instream Flow	Local/City/County	$ 12,544	$ 9,996	**$ 22,540**
Siuslaw	Instream Flow	Private Non-industrial	$ 920	$ 54,000	**$ 54,920**
Siuslaw	Instream Flow	State	$ 227,796	$ -	**$ 227,796**
Siuslaw	Road Improvements	Local/City/County	$ -	$ 756	**$ 756**
Siuslaw	Road Improvements	Private Industrial	$ 60,000	$ -	**$ 60,000**
Siuslaw	Road Improvements	Private Non-industrial	$ 4,000	$ 1,540	**$ 5,540**
Siuslaw	Road Improvements	State	$ 10,000	$ -	**$ 10,000**

Siuslaw	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 1,512	**$ 1,512**
Siuslaw	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 8,000	$ 3,080	**$ 11,080**
Siuslaw	Upland, Grazing, and Irrigation Management	State	$ 20,000	$ -	**$ 20,000**
Siuslaw	Wetland and Estuary	Citizen Group	$ -	$ 31,800	**$ 31,800**
Siuslaw	Wetland and Estuary	Federal	$ 30,875	$ -	**$ 30,875**
Siuslaw	Wetland and Estuary	Local/City/County	$ -	$ 14,000	**$ 14,000**
Siuslaw	Wetland and Estuary	State	$ 33,962	$ -	**$ 33,962**
TOTAL					**$ 1,867,697**

Siuslaw



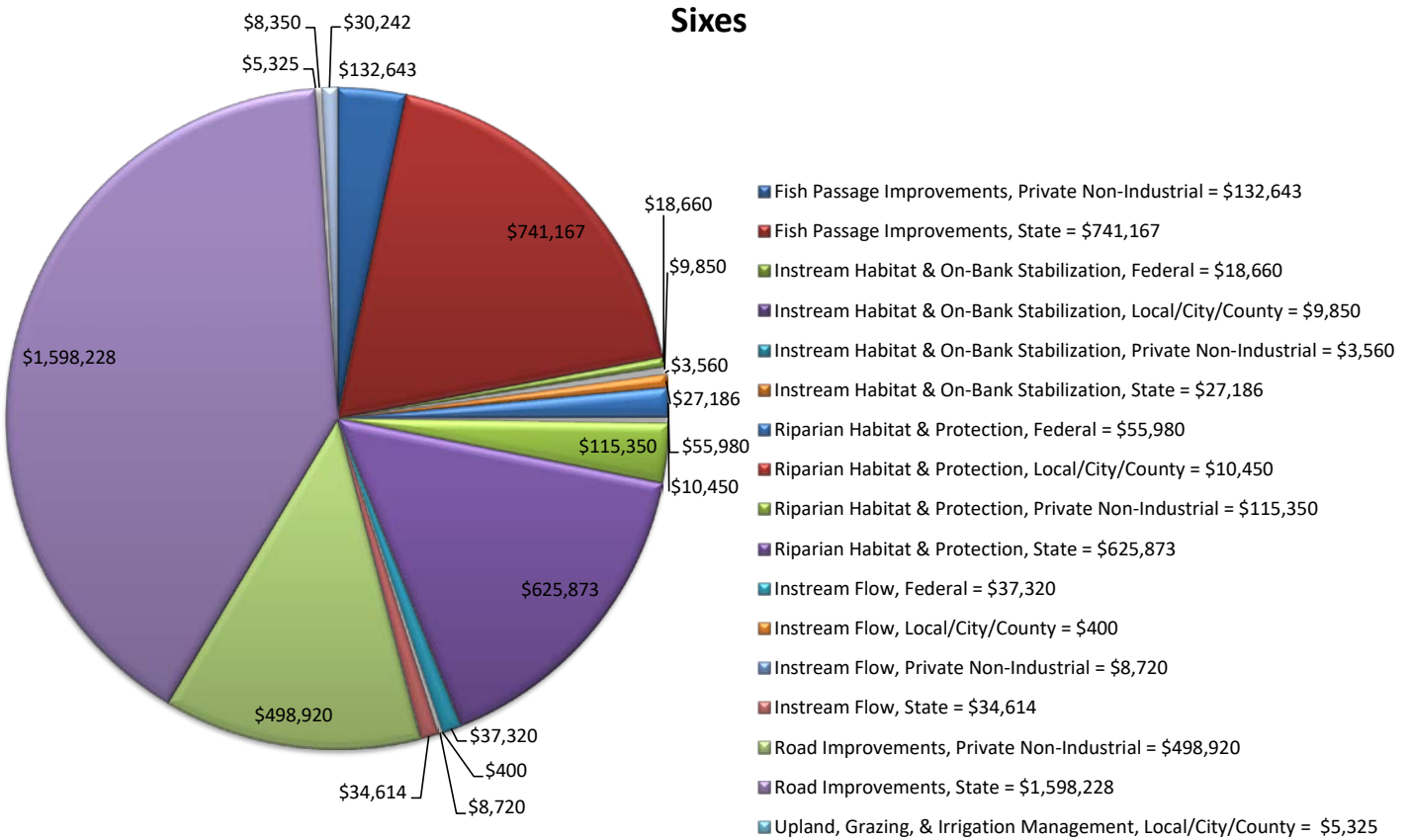
Total Project Cost: $1,867,697

- Fish Passage Improvements, Private Industiral = $60,000
- Instream Habitat & On-Bank Stabiization, Citizen Group = $20,000
- Instream Habitat & On-Bank Stabiization, Federal = $40,498
- Instream Habitat & On-Bank Stabiization, Local/City/County = $19,737
- Instream Habitat & On-Bank Stabiization, Private Non-Industrial = $34,170
- Instream Habitat & On-Bank Stabiization, State = $159,125
- Riparian Habitat & Protection, Citizen Group = $60,900
- Riparian Habitat & Protection, Federal = $121,494
- Riparian Habitat & Protection, Local/City/County = $62,734
- Riparian Habitat & Protection, Private Non-Industrial = $115,475
- Riparian Habitat & Protection, State = $496,171
- Instream Flow, Federal = $152,612
- Instream Flow, Local/City/County = $22,540
- Instream Flow, Private Non-Industrial = $54,920
- Instream Flow, State = $227,796
- Road Improvments, Local/City/Countyy = $756
- Road Improvments, Private Industrial = $60,000
- Road Improvments, Private Non-Industrial =$5,540
- Road Improvments, State = $10,000
- Upland Grazing, & Irrigation Management, Local/City/County = $1,512
- Upland Grazing, & Irrigation Management, Private Non-Industrial = $11,080
- Upland Grazing, & Irrigation Management, State = $20,000
- Wetland & Estuary, Citizen Group = $31,800
- Wetland & Estuary, Federal = $30,875
- Wetland & Estuary, Local/City/County = $14,000
- Wetland & Estuary, State = $33,962

SIXES SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Sixes	Fish Passage Improvements	Local/City/County	$ -	$ -	**$ 0**
Sixes	Fish Passage Improvements	Private Non-industrial	$ 2,643	$ 130,000	**$ 132,643**
Sixes	Fish Passage Improvements	State	$ 741,167	$ -	**$ 741,167**
Sixes	Instream Habitat and on-Bank Stabilization	Federal	$ 18,660	$ -	**$ 18,660**
Sixes	Instream Habitat and on-Bank Stabilization	Local/City/County	$ 9,850	$ -	**$ 9,850**
Sixes	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ -	$ 3,560	**$ 3,560**
Sixes	Instream Habitat and on-Bank Stabilization	State	$ 27,186	$ -	**$ 27,186**
Sixes	Riparian Habitat and Protection	Federal	$ 55,980	$ -	**$ 55,980**
Sixes	Riparian Habitat and Protection	Local/City/County	$ 10,450	$ -	**$ 10,450**
Sixes	Riparian Habitat and Protection	Private Non-industrial	$ 7,570	$ 107,780	**$ 115,350**
Sixes	Riparian Habitat and Protection	State	$ 625,873	$ -	**$ 625,873**
Sixes	Instream Flow	Federal	$ 37,320	$ -	**$ 37,320**
Sixes	Instream Flow	Local/City/County	$ 400	$ -	**$ 400**
Sixes	Instream Flow	Private Non-industrial	$ 4,000	$ 4,720	**$ 8,720**
Sixes	Instream Flow	State	$ 34,614	$ -	**$ 34,614**

Sixes	Road Improvements	Local/City/County	$ -	$ -	**$ 0**
Sixes	Road Improvements	Private Non-industrial	$ 95,160	$ 403,760	**$ 498,920**
Sixes	Road Improvements	State	$ 1,598,228	$ -	**$ 1,598,228**
Sixes	Upland, Grazing, and Irrigation Management	Local/City/County	$ 5,325	$ -	**$ 5,325**
Sixes	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 4,000	$ 4,350	**$ 8,350**
Sixes	Upland, Grazing, and Irrigation Management	State	$ 30,242	$ -	**$ 30,242**
TOTAL					**$3,962,838**

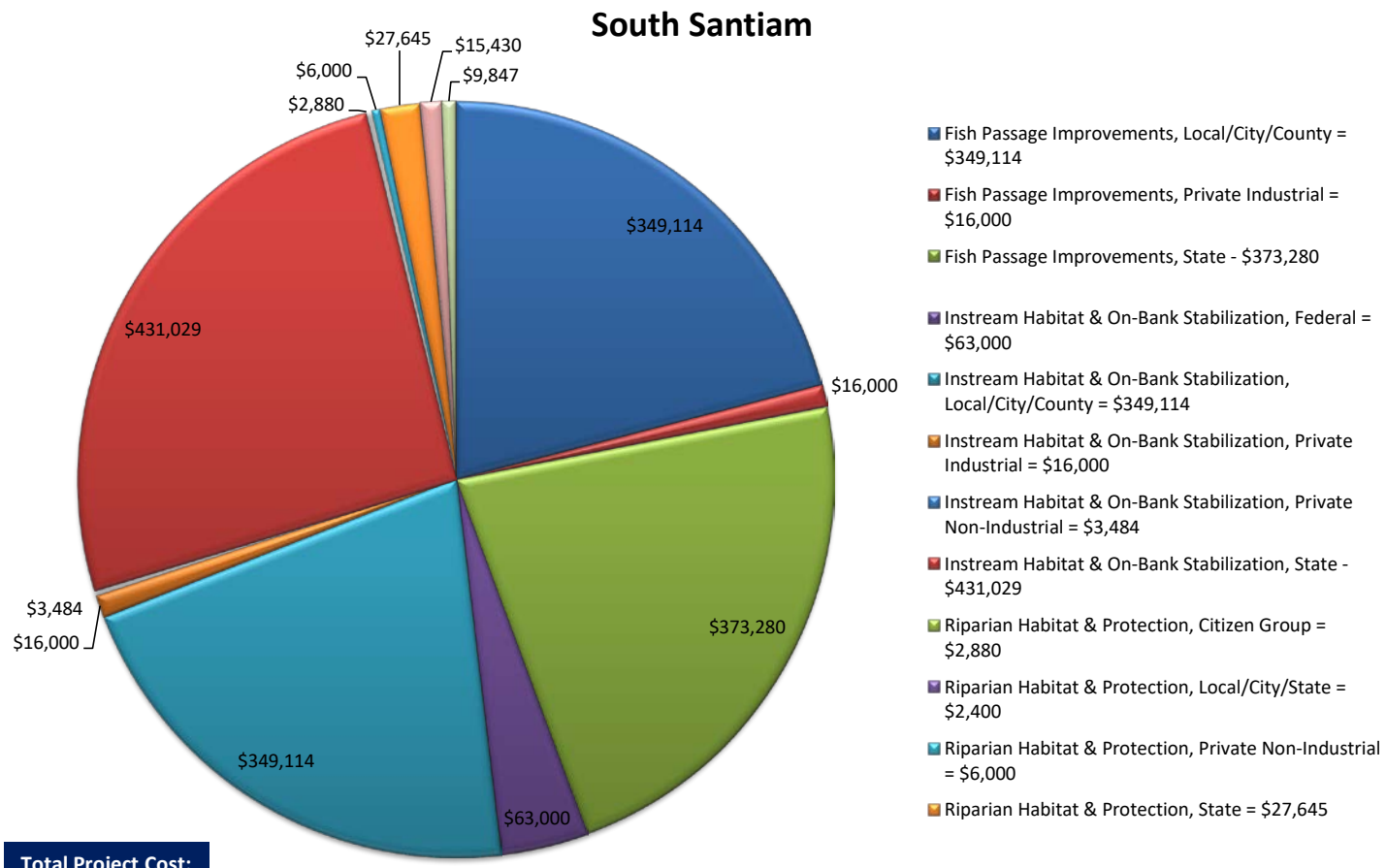


Total Project Cost: $3,962,838

SOUTH SANTIAM SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
South Santiam	Fish Passage Improvements	Local/City/County	$ 349,114	$ -	**$ 349,114**
South Santiam	Fish Passage Improvements	Private Industrial	$ -	$ 16,000	**$ 16,000**
South Santiam	Fish Passage Improvements	Private Non-industrial	$ -	$ -	**$ 0**
South Santiam	Fish Passage Improvements	State	$ 373,280	$ -	**$ 373,280**
South Santiam	Instream Habitat and on-Bank Stabilization	Federal	$ 2,000	$ 61,000	**$ 63,000**
South Santiam	Instream Habitat and on-Bank Stabilization	Local/City/County	$ 349,114	$ -	**$ 349,114**
South Santiam	Instream Habitat and on-Bank Stabilization	Private Industrial	$ -	$ 16,000	**$ 16,000**
South Santiam	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ 2,420	$ 1,064	**$ 3,484**
South Santiam	Instream Habitat and on-Bank Stabilization	State	$ 431,029	$ -	**$ 431,029**
South Santiam	Riparian Habitat and Protection	Citizen Group	$ -	$ 2,880	**$ 2,880**
South Santiam	Riparian Habitat and Protection	Local/City/County	$ -	$ 2,400	**$ 2,400**
South Santiam	Riparian Habitat and Protection	Private Non-industrial	$ -	$ 6,000	**$ 6,000**
South Santiam	Riparian Habitat and Protection	State	$ 27,645	$ -	**$ 27,645**
South Santiam	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 636	**$ 636**
South Santiam	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 15,430	$ -	**$ 15,430**

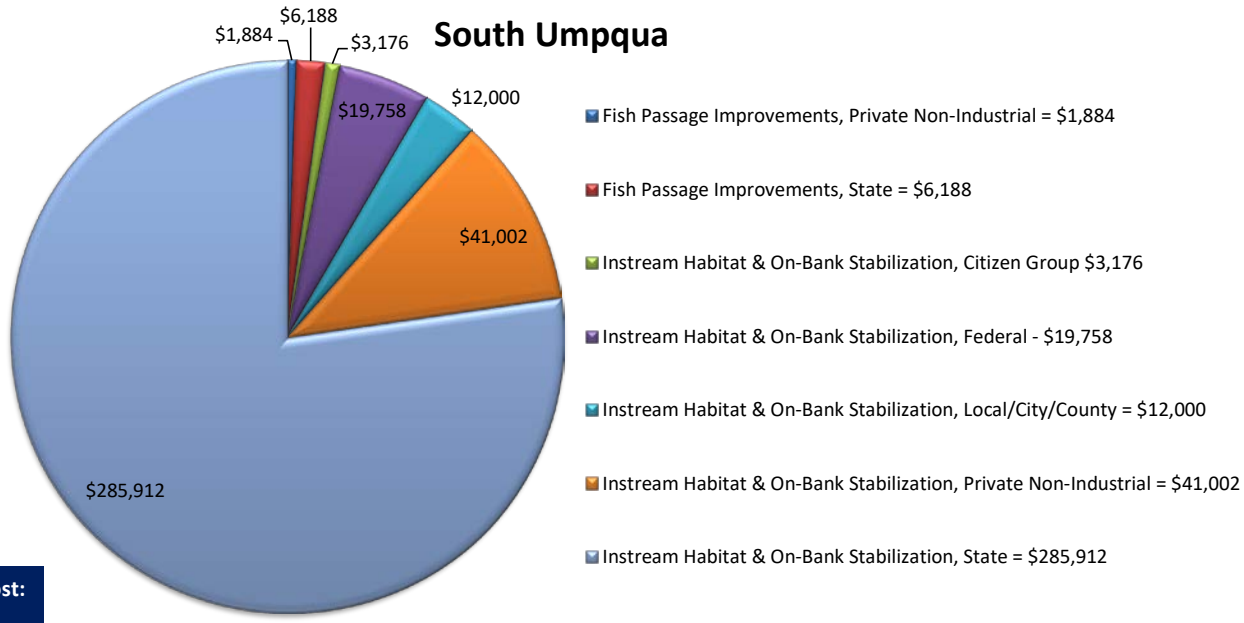
South Santiam	Upland, Grazing, and Irrigation Management	State	$ 9,847	$ -	**$ 9,847**
TOTAL					**$ 1,665,859**



Total Project Cost: $1,665,859

SOUTH UMPQUA SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
South Umpqua	Fish Passage Improvements	Private Non-industrial	$ 1,884	$ -	**$ 1,884**
South Umpqua	Fish Passage Improvements	State	$ 6,188	$ -	**$ 6,188**
South Umpqua	Instream Habitat and on-Bank Stabilization	Citizen Group	$ 3,176	$ -	**$ 3,176**
South Umpqua	Instream Habitat and on-Bank Stabilization	Federal	$ 19,758	$ -	**$ 19,758**
South Umpqua	Instream Habitat and on-Bank Stabilization	Local/City/County	$ 12,000	$ -	**$ 12,000**
South Umpqua	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ -	$ 41,002	**$ 41,002**
South Umpqua	Instream Habitat and on-Bank Stabilization	State	$ 248,112	$ 37,800	**$ 285,912**
South Umpqua	Riparian Habitat and Protection	Private Industrial	$ -	$ -	**$ -**
TOTAL					**$ 369,920**



Total Project Cost: $369,920

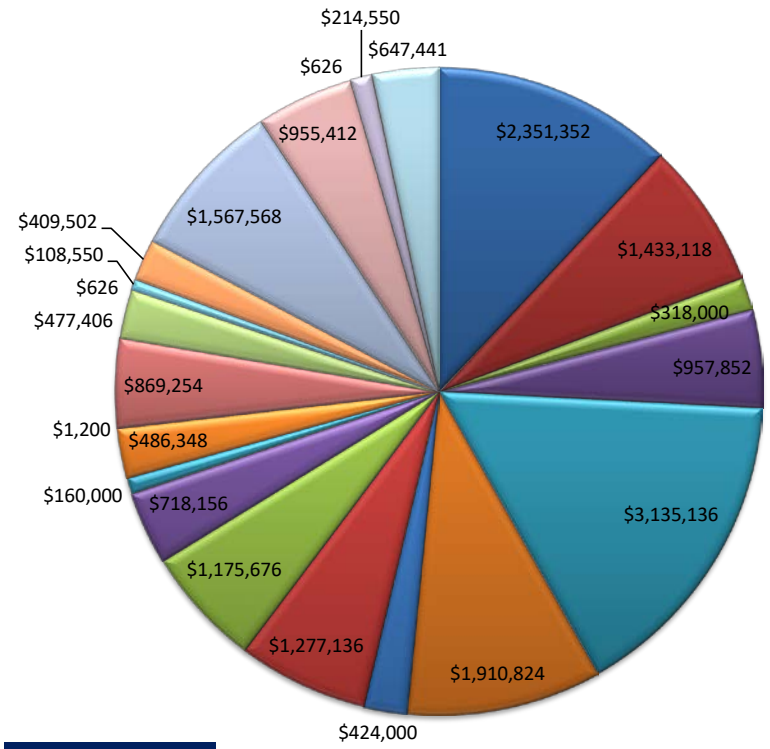
SPRAGUE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Sprague	Fish Passage Improvements	Citizen Group	$ 2,351,352	$ -	**$ 2,351,352**
Sprague	Fish Passage Improvements	Federal	$ 1,067,670	$ 365,448	**$ 1,433,118**
Sprague	Fish Passage Improvements	Private Non-industrial	$ 48,000	$ 270,000	**$ 318,000**

Sprague	Fish Passage Improvements	State	$ 957,852	$ -	**$ 957,852**
Sprague	Instream Habitat and on-Bank Stabilization	Citizen Group	$ 3,135,136	$ -	**$ 3,135,136**
Sprague	Instream Habitat and on-Bank Stabilization	Federal	$ 1,423,560	$ 487,264	**$ 1,910,824**
Sprague	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ 64,000	$ 360,000	**$ 424,000**
Sprague	Instream Habitat and on-Bank Stabilization	State	$ 1,277,136	$ -	**$ 1,277,136**
Sprague	Riparian Habitat and Protection	Citizen Group	$ 1,175,676	$ -	**$ 1,175,676**
Sprague	Riparian Habitat and Protection	Federal	$ 534,432	$ 183,724	**$ 718,156**
Sprague	Riparian Habitat and Protection	Private Non-industrial	$ 24,000	$ 136,000	**$ 160,000**
Sprague	Riparian Habitat and Protection	State	$ 486,348	$ -	**$ 486,348**
Sprague	Riparian Habitat and Protection	Tribes	$ -	$ 1,200	**$ 1,200**
Sprague	Instream Flow	Citizen Group	$ 869,254	$ -	**$ 869,254**
Sprague	Instream Flow	Federal	$ 355,890	$ 121,816	**$ 477,706**
Sprague	Instream Flow	Local/City/County	$ -	$ 626	**$ 626**
Sprague	Instream Flow	Private Non-industrial	$ 16,000	$ 92,550	**$ 108,550**
Sprague	Instream Flow	State	$ 409,502	$ -	**$ 409,502**
Sprague	Upland, Grazing, and Irrigation Management	Citizen Group	$ 1,567,568	$ -	**$ 1,567,568**

Sprague	Upland, Grazing, and Irrigation Management	Federal	$ 711,780	$ 243,632	**$ 955,412**
Sprague	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 626	**$ 626**
Sprague	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 32,000	$ 182,550	**$ 214,550**
Sprague	Upland, Grazing, and Irrigation Management	State	$ 647,441	$ -	**$ 647,441**
TOTAL					**$ 19,599,733**

Sprague

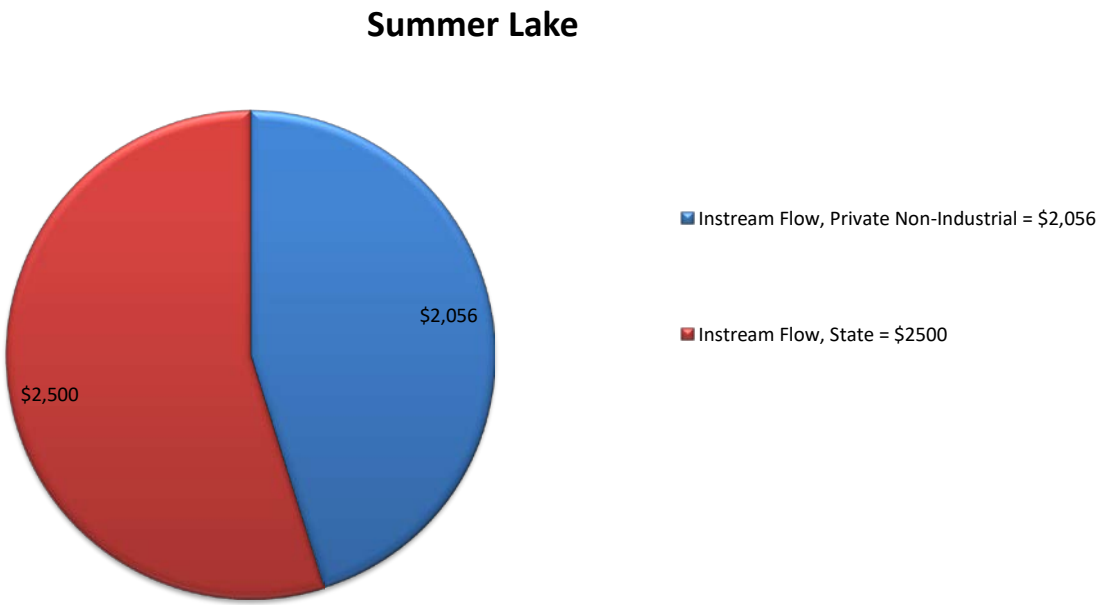


Total Project Cost: $19,599,733

- Fish Passage Improvements, Citizen Group = $2,351,352
- Fish Passage Improvements, Federal = $1,433,118
- Fish Passage Improvements, Private Non-Industrial = $318,000
- Fish Passage Improvements, State = $957,852
- Instream Habitat & On-Bank Stabilization, Citizen Group - $3,135,136
- Instream Habitat & On-Bank Stabilization, Federal = $1,910,824
- Instream Habitat & On-Bank Stabilization, Private Non-Industrial = $424,000
- Instream Habitat & On-Bank Stabilization, State = $1,277,136
- Riparian Habitat & Protection, Citizen Group = $1,175,676
- Riparian Habitat & Protection, Federal = $718,156
- Riparian Habitat & Protection, Private Non-Industrial = $160,000
- Riparian Habitat & Protection, State = $486,348
- Riparian Habitat & Protection, Tribes = $1,200
- Instream Flow, Citizen Group - $869,254
- Instream Flow, Federal = $477,406
- Instream Flow, Local/City/County = $626
- Instream Flow, Private Non-Industrial = $108,550
- Instream Flow, State = $409,502
- Upland, Grazing, & Irrigation Management, Citizen Group = $1,567,568

SUMMER LAKE SUBBASIN

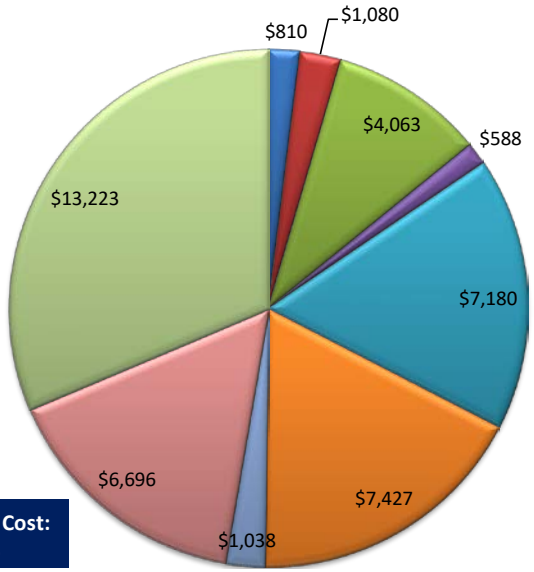
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Summer Lake	Instream Flow	Local/City/County	$ -	$ -	**$0**
Summer Lake	Instream Flow	Private Non-industrial	$ -	$ 2,056	**$2,056**
Summer Lake	Instream Flow	State	$ 2,500	$ -	**$2,500**
TOTAL					**$4,556**



Total Project Cost: $4,556

TROUT SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Trout	Instream Habitat and on-Bank Stabilization	Local/City/County	$ -	$ 810	**$ 810**
Trout	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ -	$ 1,080	**$ 1,080**
Trout	Instream Habitat and on-Bank Stabilization	State	$ 3,979	$ 84	**$ 4,063**
Trout	Instream Flow	Local/City/County	$ -	$ 588	**$ 588**
Trout	Instream Flow	Private Non-industrial	$ -	$ 7,180	**$ 7,180**
Trout	Instream Flow	State	$ 7,427	$ -	**$ 7,427**
Trout	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 1,038	**$ 1,038**
Trout	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ -	$ 6,696	**$ 6,696**
Trout	Upland, Grazing, and Irrigation Management	State	$ 13,223	$ -	**$ 13,223**
TOTAL					**$ 42,105**



Trout

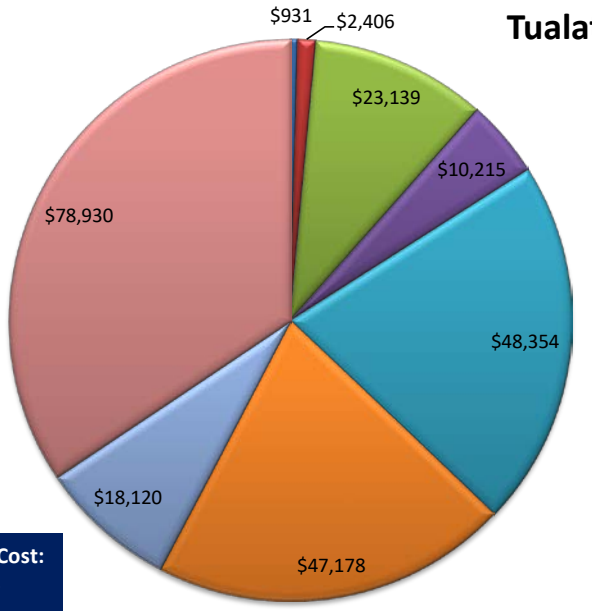
- Instream Habitat & On-Bank Stabilization, Local/City/County = $810
- Instream Habitat & On-Bank Stabilization, Private Non-Industrial = $1,080
- Instream Habitat & On-Bank Stabilization, State = $4,063
- Instream Flow, Local/City/County = $588
- Instream Flow, Private Non-Industrial = $7,180
- Instream Flow, State = $7,427
- Upland, Grazing, & Irrigation Management, Local/City/County = $1,038
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $6,696
- Upland, Grazing, & Irrigation Management, State = $13,223

Total Project Cost: $42,105

TUALATIN SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Tualatin	Fish Passage Improvements	Local/City/County	$ -	$ -	**$ 0**
Tualatin	Fish Passage Improvements	Private Non-industrial	$ 931	$ -	**$ 931**
Tualatin	Fish Passage Improvements	State	$ 2,406	$ -	**$ 2,406**
Tualatin	Riparian Habitat and Protection	Local/City/County	$ -	$ 23,139	**$ 23,139**
Tualatin	Riparian Habitat and Protection	Private Non-industrial	$ -	$ 10,215	**$ 10,215**

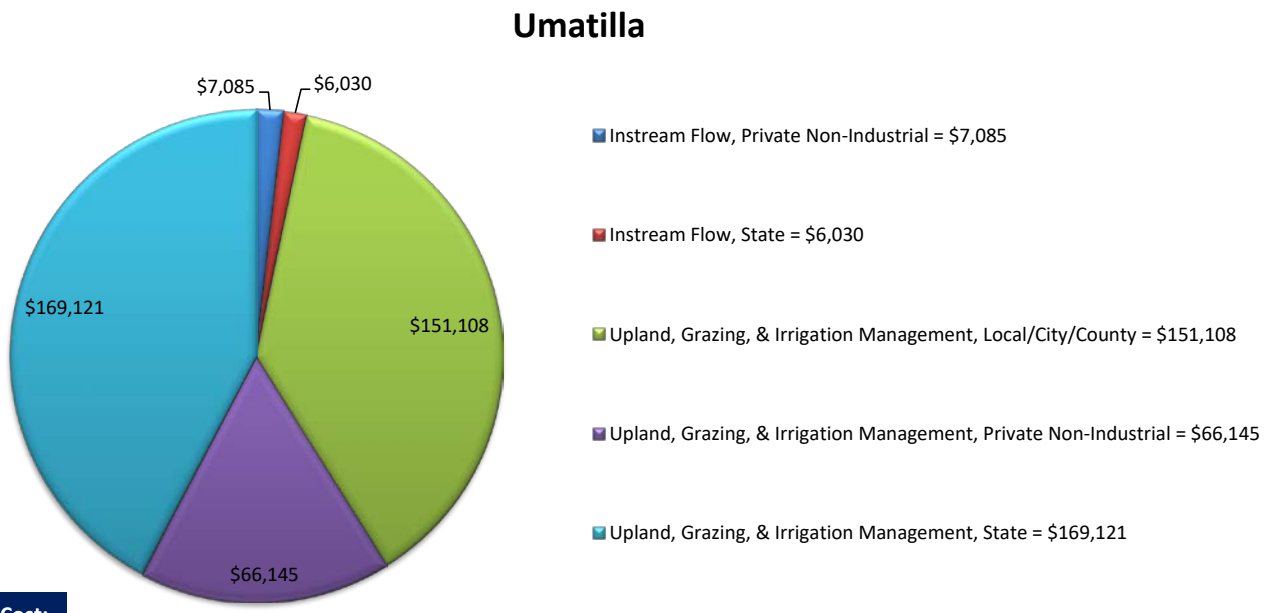
Tualatin	Riparian Habitat and Protection	State	$ 48,354	$ -	**$ 48,354**
Tualatin	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 47,178	**$ 47,178**
Tualatin	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 3,900	$ 14,220	**$ 18,120**
Tualatin	Upland, Grazing, and Irrigation Management	State	$ 78,930	$ -	**$ 78,930**
TOTAL					**$ 229,273**



Total Project Cost: $229,273

UMATILLA SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Umatilla	Instream Flow	Local/City/County	$ -	$ -	**$ -**
Umatilla	Instream Flow	Private Non-industrial	$ -	$ 7,085	**$ 7,085**
Umatilla	Instream Flow	State	$ 6,030	$ -	**$ 6,030**
Umatilla	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 151,108	**$ 151,108**
Umatilla	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 12,788	$ 53,357	**$ 66,145**
Umatilla	Upland, Grazing, and Irrigation Management	State	$ 169,121	$ -	**$ 169,121**
TOTAL					**$ 399,489**



Total Project Cost: $399,489

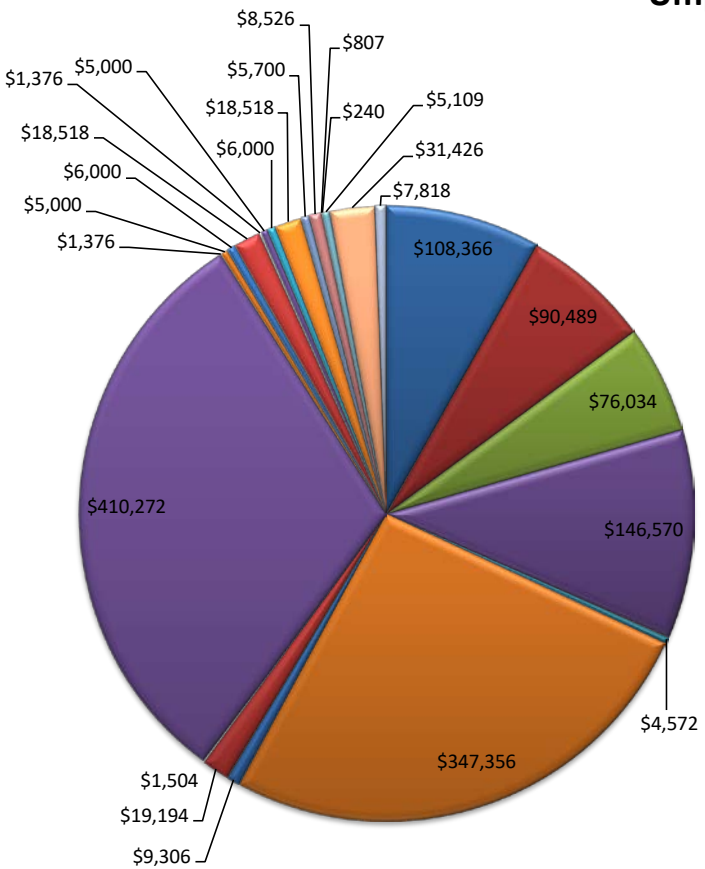
UMPQUA SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Umpqua	Fish Passage Improvements	Federal	$ 108,366	$ -	**$ 108,366**
Umpqua	Fish Passage Improvements	Local/City/County	$ 69,889	$ 20,600	**$ 90,489**
Umpqua	Fish Passage Improvements	Private Industrial	$ 27,000	$ 49,034	**$ 76,034**

Umpqua	Fish Passage Improvements	Private Non-industrial	$ -	$ -	**$ 0**
Umpqua	Fish Passage Improvements	State	$ 144,229	$ 2,341	**$ 146,570**
Umpqua	Instream Habitat and on-Bank Stabilization	Citizen Group	$ 4,572	$ -	**$ 4,572**
Umpqua	Instream Habitat and on-Bank Stabilization	Federal	$ 291,936	$ 55,420	**$ 347,356**
Umpqua	Instream Habitat and on-Bank Stabilization	Local/City/County	$ 9,000	$ 306	**$ 9,306**
Umpqua	Instream Habitat and on-Bank Stabilization	Private Industrial	$ -	$ 19,194	**$ 19,194**
Umpqua	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$ -	$ 1,504	**$ 1,504**
Umpqua	Instream Habitat and on-Bank Stabilization	State	$ 364,108	$ 46,164	**$ 410,272**
Umpqua	Riparian Habitat and Protection	Citizen Group	$ 1,376	$ -	**$ 1,376**
Umpqua	Riparian Habitat and Protection	Local/City/County	$ 5,000	$ -	**$ 5,000**
Umpqua	Riparian Habitat and Protection	Private Industrial	$ -	$ -	**$ 0**
Umpqua	Riparian Habitat and Protection	Private Non-industrial	$ -	$ 6,000	**$ 6,000**
Umpqua	Riparian Habitat and Protection	State	$ 18,518	$ -	**$ 18,518**
Umpqua	Instream Flow	Citizen Group	$ 1,376	$ -	**$ 1,376**
Umpqua	Instream Flow	Local/City/County	$ 5,000	$ -	**$ 5,000**
Umpqua	Instream Flow	Private Non-industrial	$ -	$ 6,000	**$ 6,000**
Umpqua	Instream Flow	State	$ 18,518	$ -	**$ 18,518**
Umpqua	Road Improvements	Local/City/County	$ -	$ -	**$ 0**

Umpqua	Road Improvements	Private Non-industrial	$ -	$ 5,700	**$ 5,700**
Umpqua	Road Improvements	State	$ 8,526	$ -	**$ 8,526**
Umpqua	Upland, Grazing, and Irrigation Management	Local/City/County	$ 20	$ 787	**$ 807**
Umpqua	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ 240	$ -	**$ 240**
Umpqua	Upland, Grazing, and Irrigation Management	State	$ 4,867	$ 242	**$ 5,109**
Umpqua	Wetland and Estuary	Local/City/County	$ 30,862	$ 600	**$ 31,462**
Umpqua	Wetland and Estuary	Private Non-industrial	$ -	$ -	**$ 0**
Umpqua	Wetland and Estuary	State	$ 7,418	$ 400	**$ 7,818**
TOTAL					**$ 1,335,007**

Umpqua

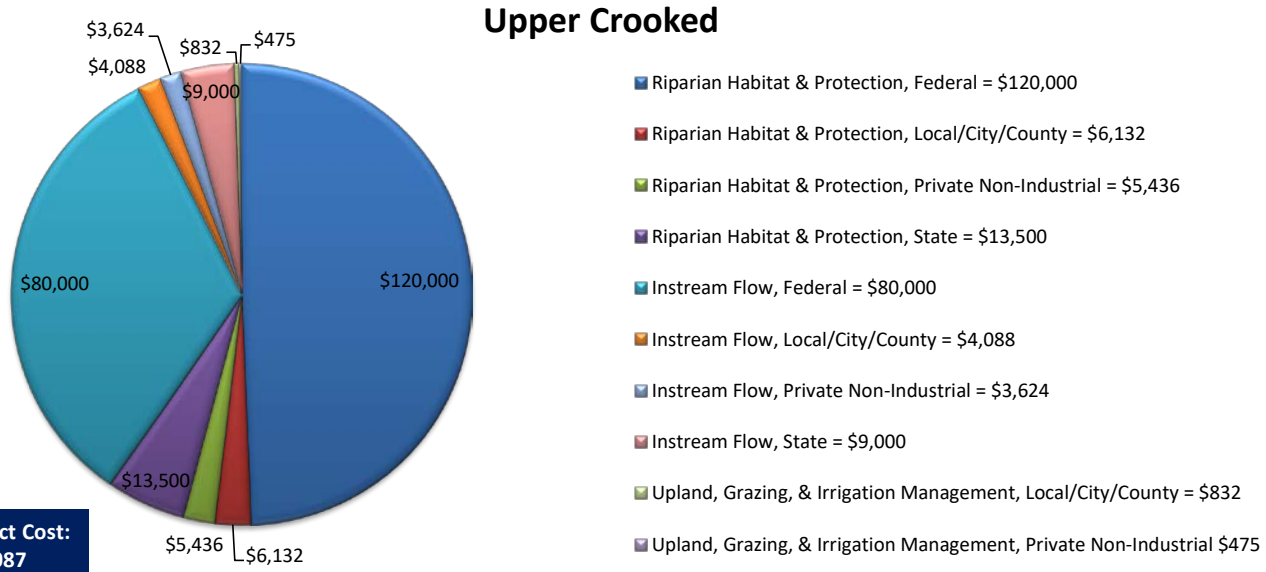


Total Project Cost: $1,335,007

- Fish Passage Improvements, Federal = $108,366
- Fish Passage Improvements, Local/City/County = $90,489
- Fish Passage Improvements, Private Industrial = $76,034
- Fish Passage Improvements, State = $146,570
- Instream Habitat & On-Bank Stabiization, Citizen Group = $4,572
- Instream Habitat & On-Bank Stabiization, Federal = $347,356
- Instream Habitat & On-Bank Stabiization, Local/City/County = $9,306
- Instream Habitat & On-Bank Stabiization, Private Industrial = $19,194
- Instream Habitat & On-Bank Stabiization, Private Non-Industrial = $1,504
- Instream Habitat & On-Bank Stabiization, State = $410,272
- Riparian Habitat & Protection, Citizen Group = $1,376
- Riparian Habitat & Protection, Local/City/County = $5,000
- Riparian Habitat & Protection, Private Non-Industrial = $6,000
- Riparian Habitat & Protection, State = $18,518
- Instream Flow, Citizen Group = $1,376
- Instream Flow, Local/City/County= $5,000
- Instream Flow, Private Non-Industiral = $6,000
- Instream Flow, State = $18,518
- Road Improvements, Private Non-Industrial = $5,700
- Road Improvements, State = $8,526
- Upland, Grazing & Irrigation Management, Local/City/County = $807
- Upland, Grazing & Irrigation Management, Private Non-Industrial = $240
- Upland, Grazing & Irrigation Management, State = $5,109
- Wetland & Estuary, Local/Cit/County = $31,426
- Wetland & Estuary, State = $7,818

UPPER CROOKED SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Crooked	Riparian Habitat and Protection	Federal	$ 120,000	$ -	**$ 120,000**
Upper Crooked	Riparian Habitat and Protection	Local/City/County	$ 132	$ 6,000	**$ 6,132**
Upper Crooked	Riparian Habitat and Protection	Private Non-industrial	$ -	$ 5,436	**$ 5,436**
Upper Crooked	Riparian Habitat and Protection	State	$ 13,500	$ -	**$ 13,500**
Upper Crooked	Instream Flow	Federal	$ 80,000	$ -	**$ 80,000**
Upper Crooked	Instream Flow	Local/City/County	$ 88	$ 4,000	**$ 4,088**
Upper Crooked	Instream Flow	Private Non-industrial	$ -	$ 3,624	**$ 3,624**
Upper Crooked	Instream Flow	State	$ 9,000	$ -	**$ 9,000**
Upper Crooked	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 832	**$ 832**
Upper Crooked	Upland, Grazing, and Irrigation Management	Private Non-industrial	$ -	$ 475	**$ 475**
TOTAL					**$243,087**



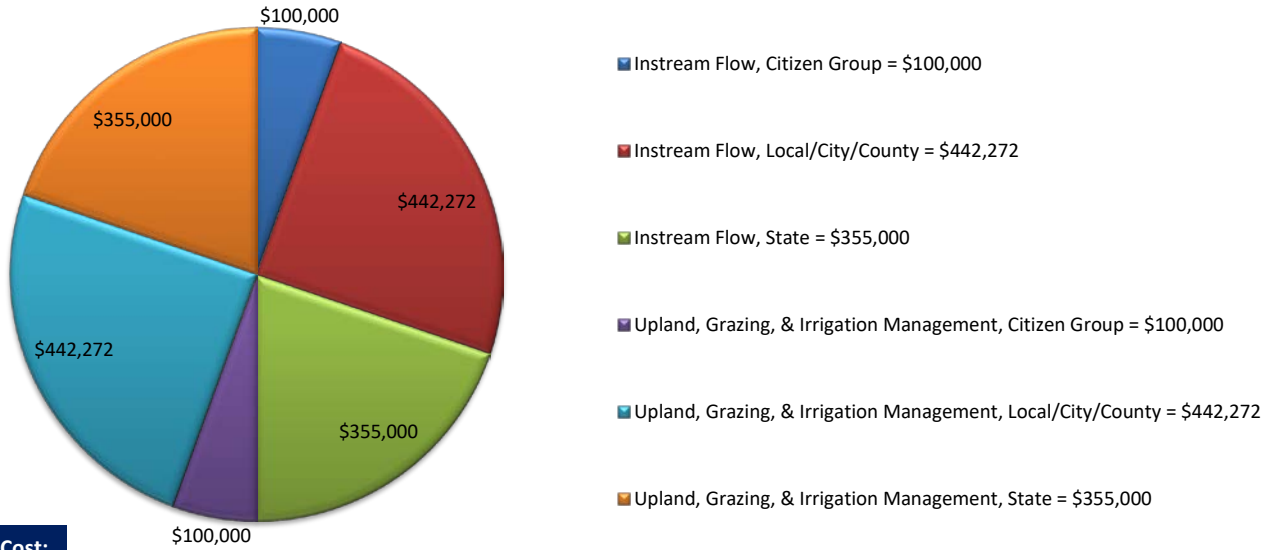
Total Project Cost: $243,087

UPPER DESCHUTES SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Deschutes	Instream Flow	Citizen Group	$ 100,000	$ -	**$ 100,000**
Upper Deschutes	Instream Flow	Local/City/County	$ -	$ 442,272	**$ 442,272**
Upper Deschutes	Instream Flow	State	$ 355,000	$ -	**$ 355,000**
Upper Deschutes	Upland, Grazing, and Irrigation Management	Citizen Group	$ 100,000	$ -	**$ 100,000**
Upper Deschutes	Upland, Grazing, and Irrigation Management	Local/City/County	$ -	$ 442,272	**$ 442,272**

Upper Deschutes	Upland, Grazing, and Irrigation Management	State	$ 355,000	$ -	**$ 355,000**
TOTAL					**$1,794,544**

Upper Deschutes



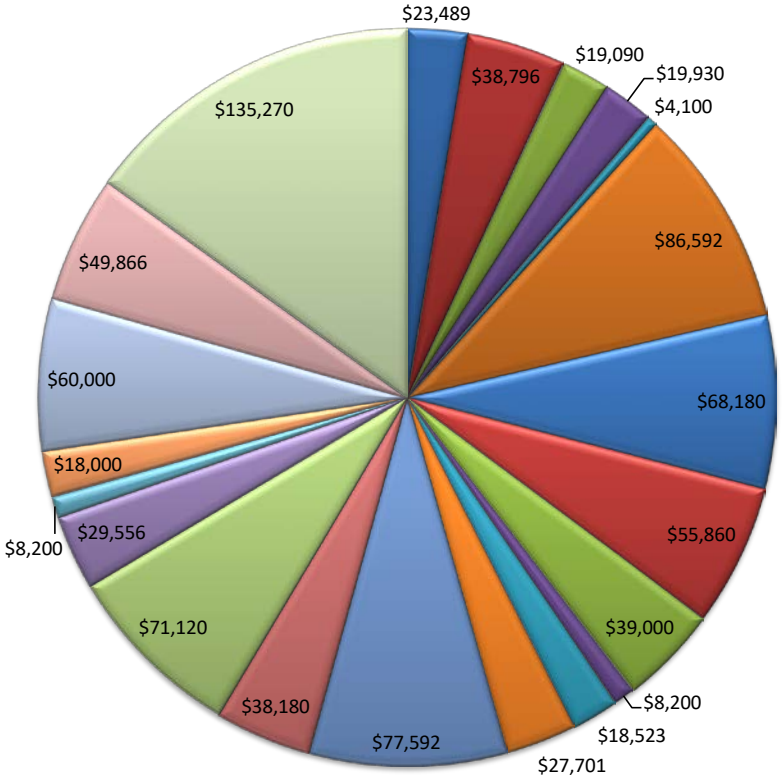
Total Project Cost: $1,794,544

UPPER GRANDE RONDE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Grande Ronde	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Upper Grande Ronde	Fish Passage Improvements	State	$23,489	$0	**$23,489**
Upper Grande Ronde	Instream Habitat and on-Bank Stabilization	Federal	$38,796	$0	**$38,796**
Upper Grande Ronde	Instream Habitat and on-Bank Stabilization	Local/City/County	$19,090	$0	**$19,090**
Upper Grande Ronde	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$19,930	**$19,930**
Upper Grande Ronde	Instream Habitat and on-Bank Stabilization	State	$0	$0	**$0**
Upper Grande Ronde	Instream Habitat and on-Bank Stabilization	Tribes	$4,100	$0	**$4,100**
Upper Grande Ronde	Riparian Habitat and Protection	Federal	$86,592	$0	**$86,592**
Upper Grande Ronde	Riparian Habitat and Protection	Local/City/County	$68,180	$0	**$68,180**
Upper Grande Ronde	Riparian Habitat and Protection	Private Non-industrial	$16,000	$39,860	**$55,860**
Upper Grande Ronde	Riparian Habitat and Protection	State	$39,000	$0	**$39,000**
Upper Grande Ronde	Riparian Habitat and Protection	Tribes	$8,200	$0	**$8,200**
Upper Grande Ronde	Instream Flow	Local/City/County	$0	$0	**$0**
Upper Grande Ronde	Instream Flow	Private Non-industrial	$0	$18,523	**$18,523**
Upper Grande Ronde	Instream Flow	State	$27,701	$0	**$27,701**
Upper Grande Ronde	Road Improvements	Federal	$77,592	$0	**$77,592**
Upper Grande Ronde	Road Improvements	Local/City/County	$38,180	$0	**$38,180**
Upper Grande Ronde	Road Improvements	Private Non-industrial	$0	$71,120	**$71,120**
Upper Grande Ronde	Road Improvements	State	$29,556	$0	**$29,556**
Upper Grande Ronde	Road Improvements	Tribes	$8,200	$0	**$8,200**
Upper Grande Ronde	Upland, Grazing, and Irrigation Management	Federal	$18,000	$0	**$18,000**
Upper Grande Ronde	Upland, Grazing, and Irrigation Management	Local/City/County	$60,000	$0	**$60,000**
Upper Grande Ronde	Upland, Grazing, and Irrigation Management	Private Non-industrial	$46,130	$3,736	**$49,866**

Upper Grande Ronde	Upland, Grazing, and Irrigation Management	State	$135,270	$0	**$135,270**
TOTAL					**$897,245**

Upper Grande Ronde



- Fish Passage Improvments, State = $23,489
- Instream Habitat & On-Bank Stabilization , Federal = $38,796
- Instream Habitat & On-Bank Stabilization, Local/City/County = $19,090
- Instream Habitat & On-Bank Stabilization, Private Non-Industrial = $19,930
- Instream Habitat & On-Bank Stabilization, Tribes = $4,100
- Riparian Habitat & Protection, Federal = $86,592
- Riparian Habitat & Protection, Local/City/County = $68,180
- Riparian Habitat & Protection, Private Non-Industrial = $55,860
- Riparian Habitat & Protection, State = $39,000
- Riparian Habitat & Protection, Tribes = $8,200
- Instream Flow, Private Non-Industrial = $18,523
- Instream Flow, State = $27,701
- Road Improvements, Federal = $77,592
- Road Improvements, Local/City/County = $38,180
- Road Improvements, Private Non-Industrial = $71,120
- Road Improvements, State = $29,556
- Road Improvements, Tribes = $8,200
- Upland, Grazing, & Irrigation Management, Federal = $18,000
- Upland, Grazing, & Irrigation Management, Local/City/County = $60,000
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $49,866
- Upland, Grazing, & Irrigation Management, State = $135,270

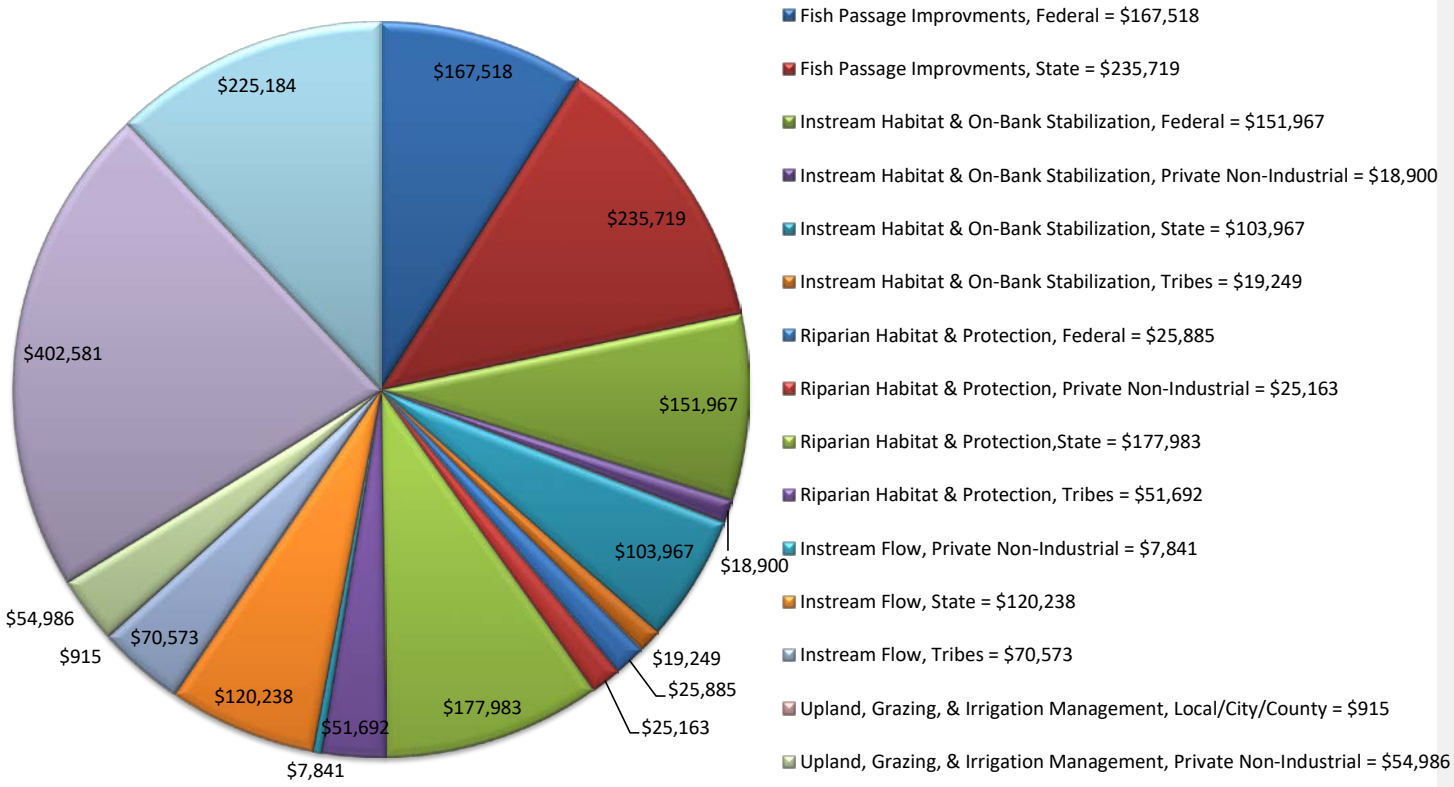
Total Project Cost: $897,245

UPPER JOHN DAY SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper John Day	Fish Passage Improvements	Federal	$167,518	$0	**$167,518**
Upper John Day	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Upper John Day	Fish Passage Improvements	State	$235,719	$0	**$235,719**
Upper John Day	Instream Habitat and on-Bank Stabilization	Federal	$151,967	$0	**$151,967**
Upper John Day	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Upper John Day	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$18,900	**$ 18,900**
Upper John Day	Instream Habitat and on-Bank Stabilization	State	$71,987	$31,980	**$ 103,967**
Upper John Day	Instream Habitat and on-Bank Stabilization	Tribes	$17,749	$1,500	**$19,249**
Upper John Day	Riparian Habitat and Protection	Federal	$25,885	$0	**$25,885**
Upper John Day	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Upper John Day	Riparian Habitat and Protection	Private Non-industrial	$0	$25,163	**$ 25,163**
Upper John Day	Riparian Habitat and Protection	State	$146,003	$31,980	**$177,983**
Upper John Day	Riparian Habitat and Protection	Tribes	$0	$51,692	**$51,692**
Upper John Day	Instream Flow	Local/City/County	$0	$0	**$0**
Upper John Day	Instream Flow	Private Non-industrial	$7,391	$450	**$7,841**
Upper John Day	Instream Flow	State	$120,238	$0	**$120,238**
Upper John Day	Instream Flow	Tribes	$8,173	$62,400	**$70,573**
Upper John Day	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$915	**$915**
Upper John Day	Upland, Grazing, and Irrigation Management	Private Non-industrial	$20	$54,966	**$54,986**
Upper John Day	Upland, Grazing, and Irrigation Management	State	$402,581	$0	**$402,581**

Upper John Day	Upland, Grazing, and Irrigation Management	Tribes	$0	$225,184	**$225,184**
TOTAL					**$1,860,361**

Upper John Day



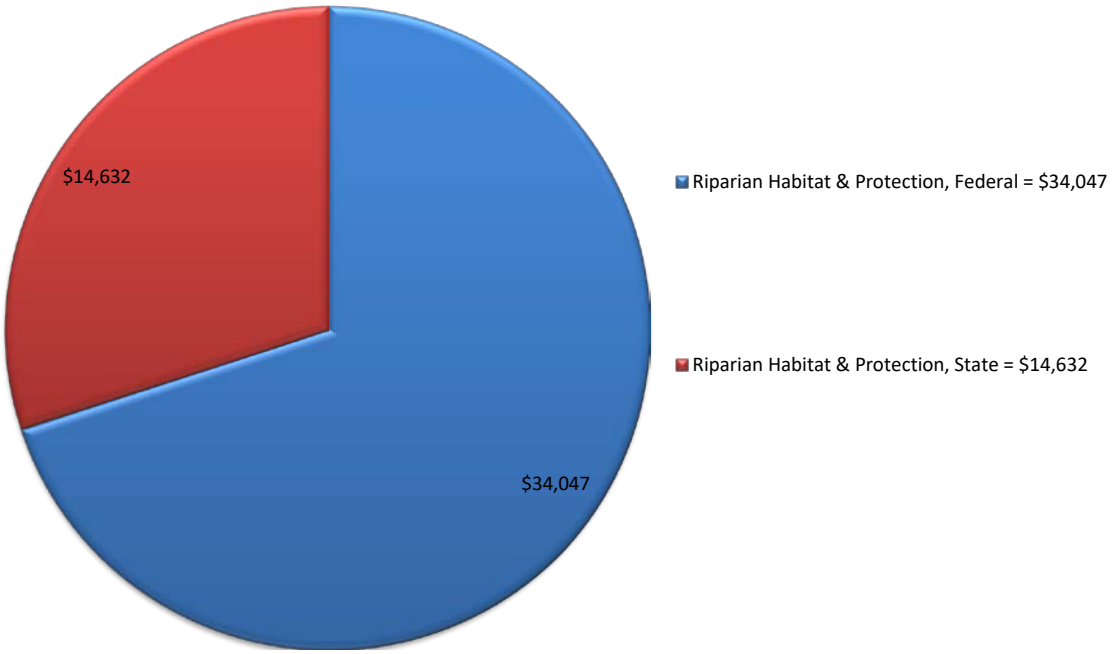
- Fish Passage Improvments, Federal = $167,518
- Fish Passage Improvments, State = $235,719
- Instream Habitat & On-Bank Stabilization, Federal = $151,967
- Instream Habitat & On-Bank Stabilization, Private Non-Industrial = $18,900
- Instream Habitat & On-Bank Stabilization, State = $103,967
- Instream Habitat & On-Bank Stabilization, Tribes = $19,249
- Riparian Habitat & Protection, Federal = $25,885
- Riparian Habitat & Protection, Private Non-Industrial = $25,163
- Riparian Habitat & Protection,State = $177,983
- Riparian Habitat & Protection, Tribes = $51,692
- Instream Flow, Private Non-Industrial = $7,841
- Instream Flow, State = $120,238
- Instream Flow, Tribes = $70,573
- Upland, Grazing, & Irrigation Management, Local/City/County = $915
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $54,986
- Upland, Grazing, & Irrigation Management, State = $402,581
- Upland, Grazing, & Irrigation Management, Tribes = $225,184

Total Project Cost: $1,860,361

UPPER KLAMATH SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Klamath	Riparian Habitat and Protection	Citizen Group	$0	$0	**$0**
Upper Klamath	Riparian Habitat and Protection	Federal	$34,047	$0	**$34,047**
Upper Klamath	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Upper Klamath	Riparian Habitat and Protection	State	$14,362	$0	**$14,362**
TOTAL					**$48,679**

Upper Klamath



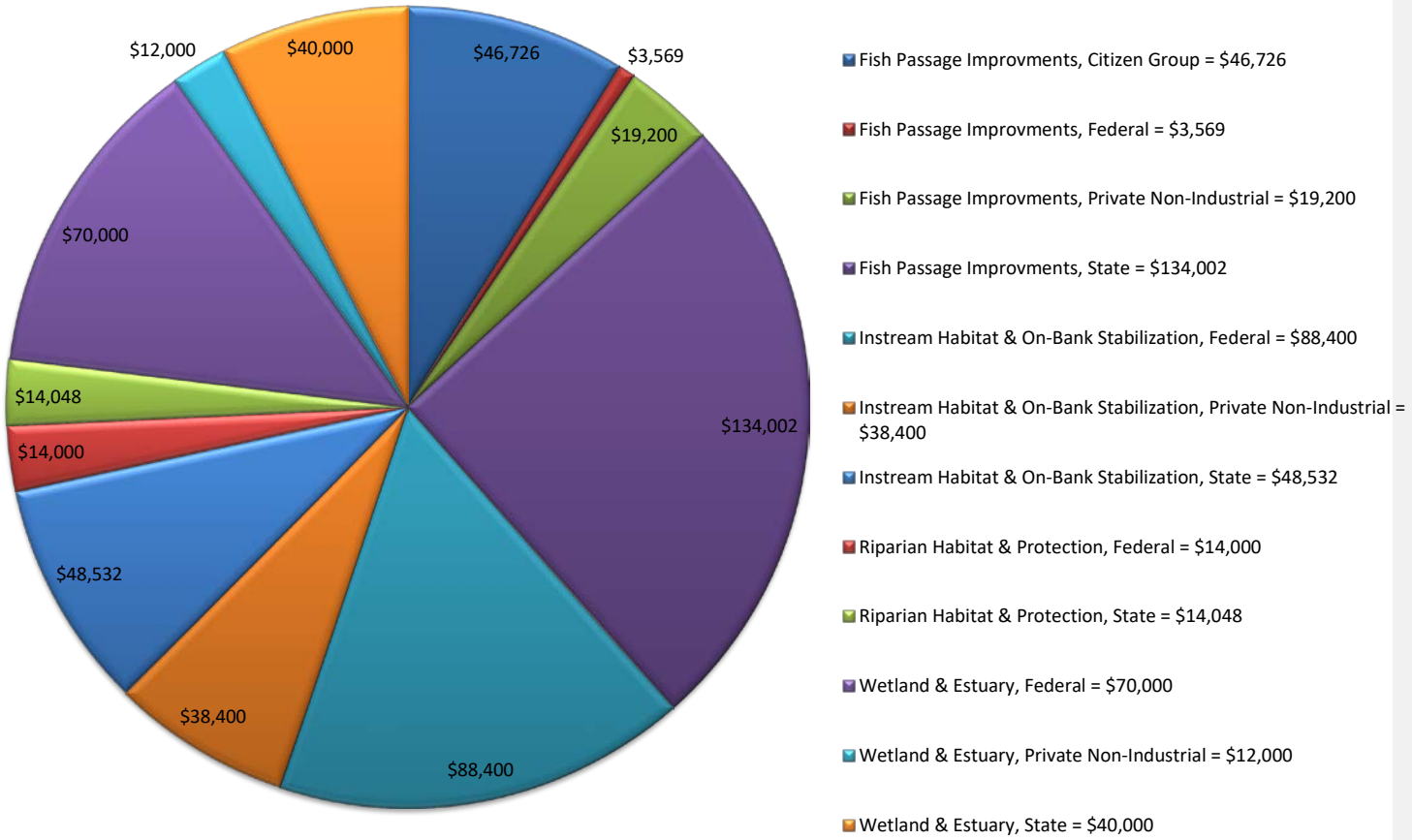
Total Project Cost: $48,679

UPPER KLAMATH LAKE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Klamath Lake	Fish Passage Improvements	Citizen Group	$46,723	$0	**$46,723**
Upper Klamath Lake	Fish Passage Improvements	Federal	$53,569	$0	**$ 3,569**
Upper Klamath Lake	Fish Passage Improvements	Private Non-industrial	$0	$19,200	**$19,200**
Upper Klamath Lake	Fish Passage Improvements	State	$134,002	$0	**$134,002**
Upper Klamath Lake	Instream Habitat and on-Bank Stabilization	Citizen Group	$0	$0	**$0**
Upper Klamath Lake	Instream Habitat and on-Bank Stabilization	Federal	$88,400	$0	**$88,400**
Upper Klamath Lake	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$38,400	**$38,400**
Upper Klamath Lake	Instream Habitat and on-Bank Stabilization	State	$48,532	$0	**$48,532**
Upper Klamath Lake	Riparian Habitat and Protection	Citizen Group	$0	$0	**$0**
Upper Klamath Lake	Riparian Habitat and Protection	Federal	$14,000	$0	**$14,000**
Upper Klamath Lake	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Upper Klamath Lake	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Upper Klamath Lake	Riparian Habitat and Protection	State	$14,048	$0	**$14,048**
Upper Klamath Lake	Wetland and Estuary	Federal	$70,000	$0	**$70,000**
Upper Klamath Lake	Wetland and Estuary	Private Non-industrial	$0	$12,000	**$12,000**

Upper Klamath Lake	Wetland and Estuary	State	$40,000	$0	**$40,000**
TOTAL					**$528,877**

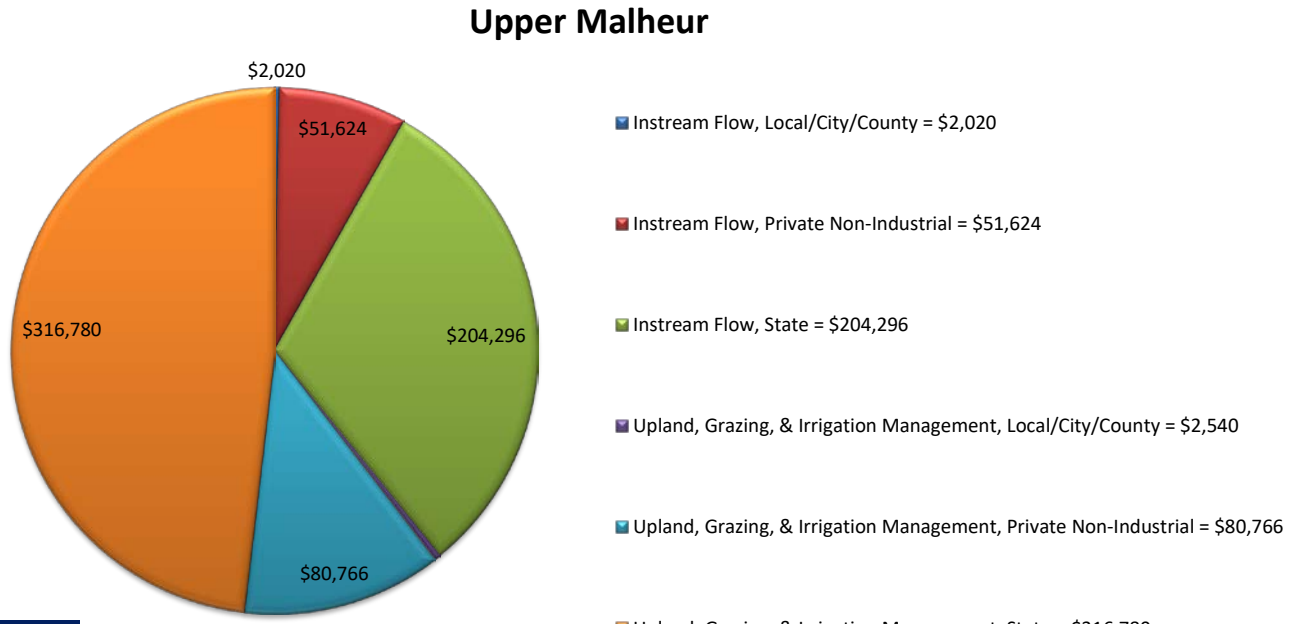
Upper Klamath Lake



Total Project Cost: $528,887

UPPER MALHEUR SUBBASIN

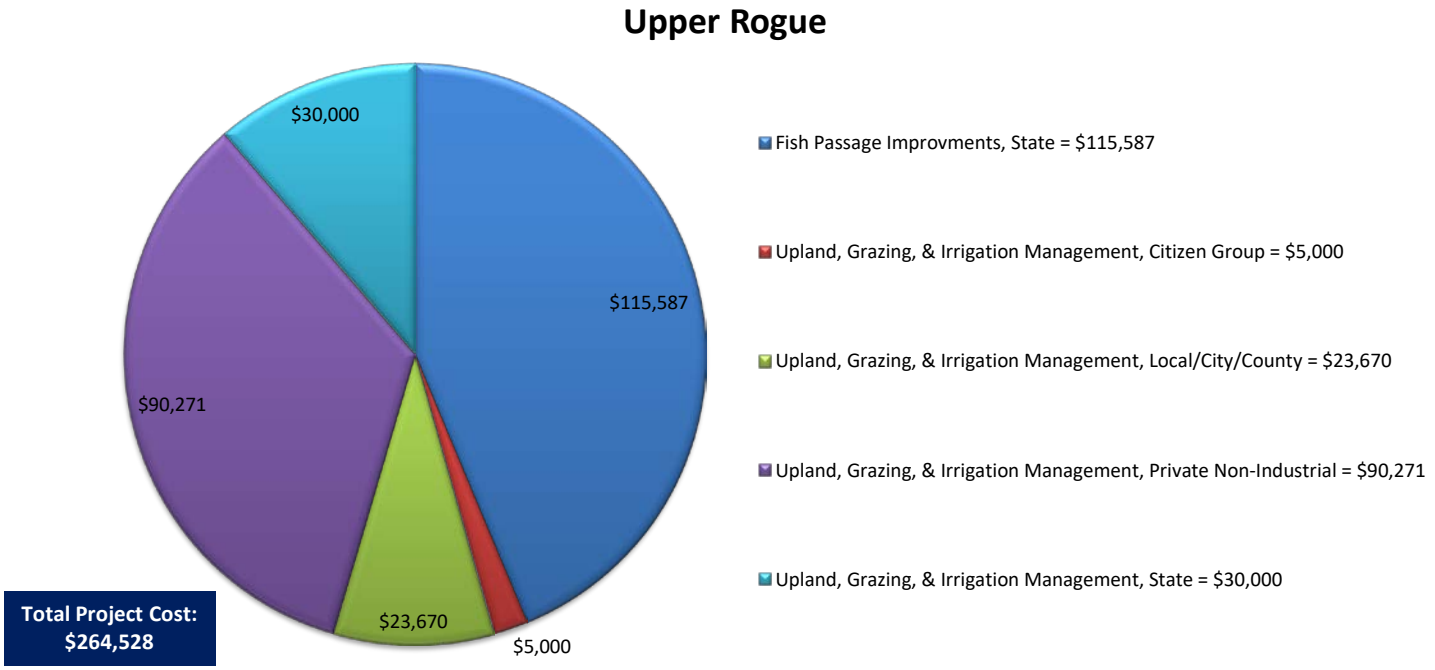
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Malheur	Instream Flow	Local/City/County	$0	$2,020	**$2,020**
Upper Malheur	Instream Flow	Private Non-industrial	$0	$51,624	**$51,624**
Upper Malheur	Instream Flow	State	$204,296	$0	**$204,296**
Upper Malheur	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$2,540	**$2,540**
Upper Malheur	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$80,766	**$80,766**
Upper Malheur	Upland, Grazing, and Irrigation Management	State	$0	$0	**$316,780**
TOTAL					**$658,026**



Total Project Cost: $658,026

UPPER ROGUE SUBBASIN

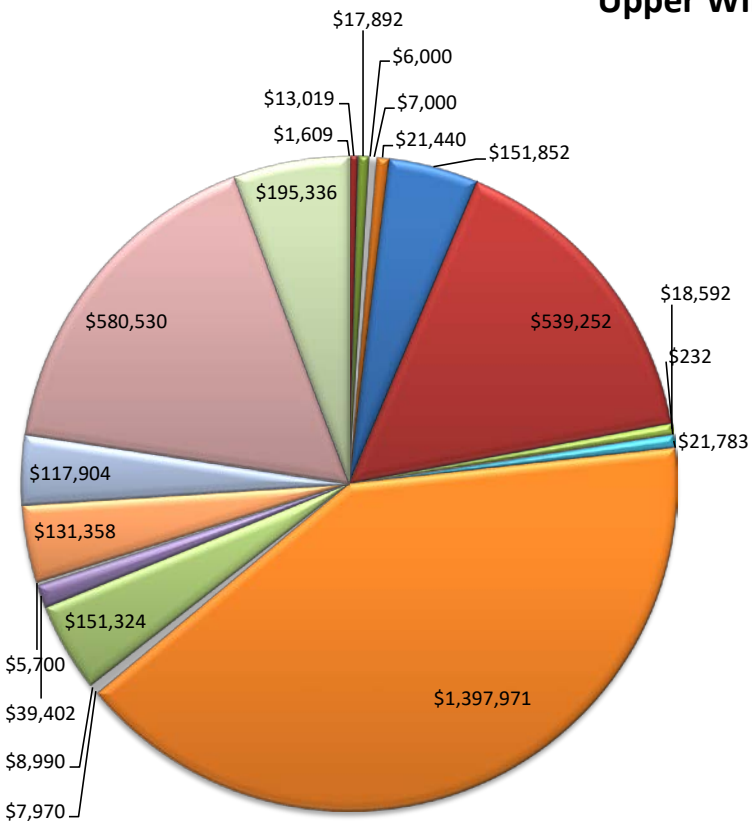
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Rogue	Fish Passage Improvements	Private Non-industrial	$0	$0	**$0**
Upper Rogue	Fish Passage Improvements	State	$115,587	$0	**$115,587**
Upper Rogue	Upland, Grazing, and Irrigation Management	Citizen Group	$5,000	$0	**$5,000**
Upper Rogue	Upland, Grazing, and Irrigation Management	Local/City/County	$22,500	$1,170	**$23,670**
Upper Rogue	Upland, Grazing, and Irrigation Management	Private Non-industrial	$1,141	$59,130	**$90,271**
Upper Rogue	Upland, Grazing, and Irrigation Management	State	$30,000	$0	**$30,000**
TOTAL					**$264,528**



UPPER WILLAMETTE SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Upper Willamette	Fish Passage Improvements	Private Non-industrial	$1,609	$0	**$1,609**
Upper Willamette	Fish Passage Improvements	State	$13,019	$0	**$13,019**
Upper Willamette	Instream Habitat and on-Bank Stabilization	Citizen Group	$17,892	$0	**$17,892**
Upper Willamette	Instream Habitat and on-Bank Stabilization	Federal	$0	$6,000	**$6,000**
Upper Willamette	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Upper Willamette	Instream Habitat and on-Bank Stabilization	Other	$0	$7,000	**$7,000**
Upper Willamette	Instream Habitat and on-Bank Stabilization	Private Industrial	$0	$21,440	**$21,440**
Upper Willamette	Instream Habitat and on-Bank Stabilization	State	$149,852	$2,000	**$151,852**
Upper Willamette	Riparian Habitat and Protection	Citizen Group	$510,819	$28,433	**$539,252**
Upper Willamette	Riparian Habitat and Protection	Federal	$18,592	$0	**$18,592**
Upper Willamette	Riparian Habitat and Protection	Local/City/County	$232	$0	**$232**
Upper Willamette	Riparian Habitat and Protection	Private Industrial	$0	$0	**$0**
Upper Willamette	Riparian Habitat and Protection	Private Non-industrial	$0	$21,783	**$21,783**
Upper Willamette	Riparian Habitat and Protection	State	$1,322,521	$75,450	**$1,397,971**
Upper Willamette	Instream Flow	Citizen Group	$0	$7,970	**$7,970**
Upper Willamette	Instream Flow	Local/City/County	$0	$0	**$0**
Upper Willamette	Instream Flow	Private Non-industrial	$0	$8,990	**$8,990**
Upper Willamette	Instream Flow	State	$151,324	$0	**$151,324**
Upper Willamette	Upland, Grazing, and Irrigation Management	Federal	$39,402	$0	**$39,402**
Upper Willamette	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$5,700	**$5,700**
Upper Willamette	Upland, Grazing, and Irrigation Management	Private Non-industrial	$89,287	$42,071	**$131,358**
Upper Willamette	Upland, Grazing, and Irrigation Management	State	$117,904	$0	**$117,904**
Upper Willamette	Wetland and Estuary	Citizen Group	$0	$0	**$0**
Upper Willamette	Wetland and Estuary	Federal	$580,530	$0	**$580,530**
Upper Willamette	Wetland and Estuary	Private Non-industrial	$0	$0	**$0**
Upper Willamette	Wetland and Estuary	State	$195,336	$0	**$195,336**
TOTAL					**$3,435,156**

Upper Willamette

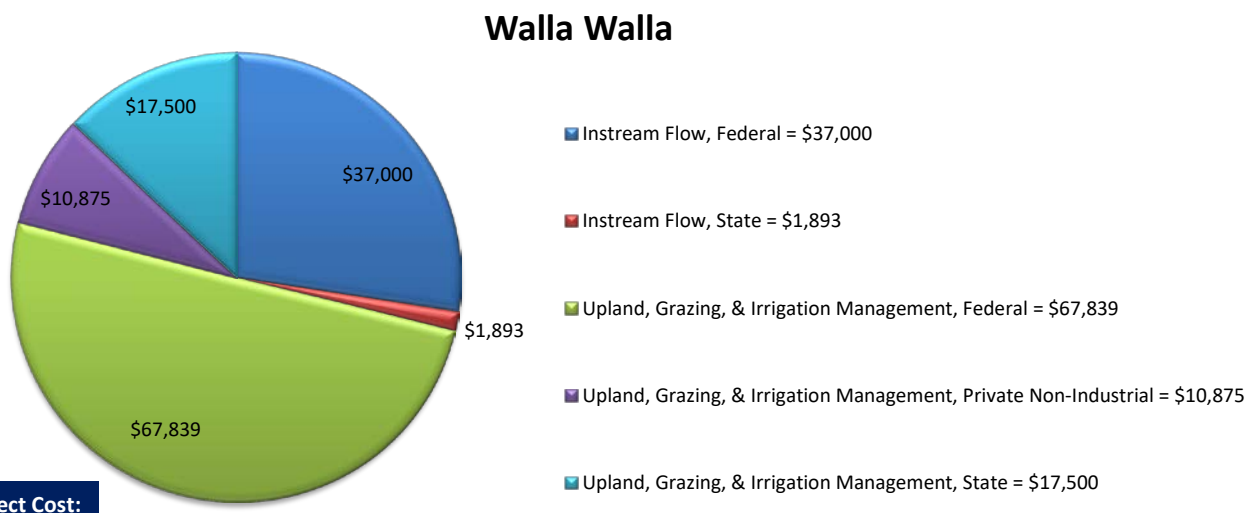


- Fish Passage Improvments, Private Non-Industrial = $1,609
- Fish Passage Improvments, State = $13,019
- Instream Habitat & On-Bank Stabilization, Citizen Group = $17,892
- Instream Habitat & On-Bank Stabilization, Federal = $6,000
- Instream Habitat & On-Bank Stabilization , Other = $7,000
- Instream Habitat & On-Bank Stabilization, Private Industiral = $21,440
- Instream Habitat & On-Bank Stabilization, State = $151,852
- Riparian Habitat & Protection, Citizen Group = $539,252
- Riparian Habitat & Protection, Federal = $18,592
- Riparian Habitat & Protection, Local/City/County = $232
- Riparian Habitat & Protection, Private Non-Industrial = $21,783
- Riparian Habitat & Protection, State = $1,397,971
- Instream Flow, Citizen Group = $7,970
- Instream Flow, Private Non-Industrial = $8,990
- Instream Flow, State = $151,324
- Upland, Grazing, & Irrigation Management, Federal = $39,402
- Upland, Grazing, & Irrigation Management, Local/City/County = $5,700
- Upland, Grazing, & Irrigation Management, Private Non-Industrial = $131,358
- Upland, Grazing, & Irrigation Management, State = $117,904
- Wetland & Estuary, Federal = $580,530
- Wetland & Estuary, State = $195,336

Total Project Cost: $3,435,156

WALLA WALLA SUBBASIN

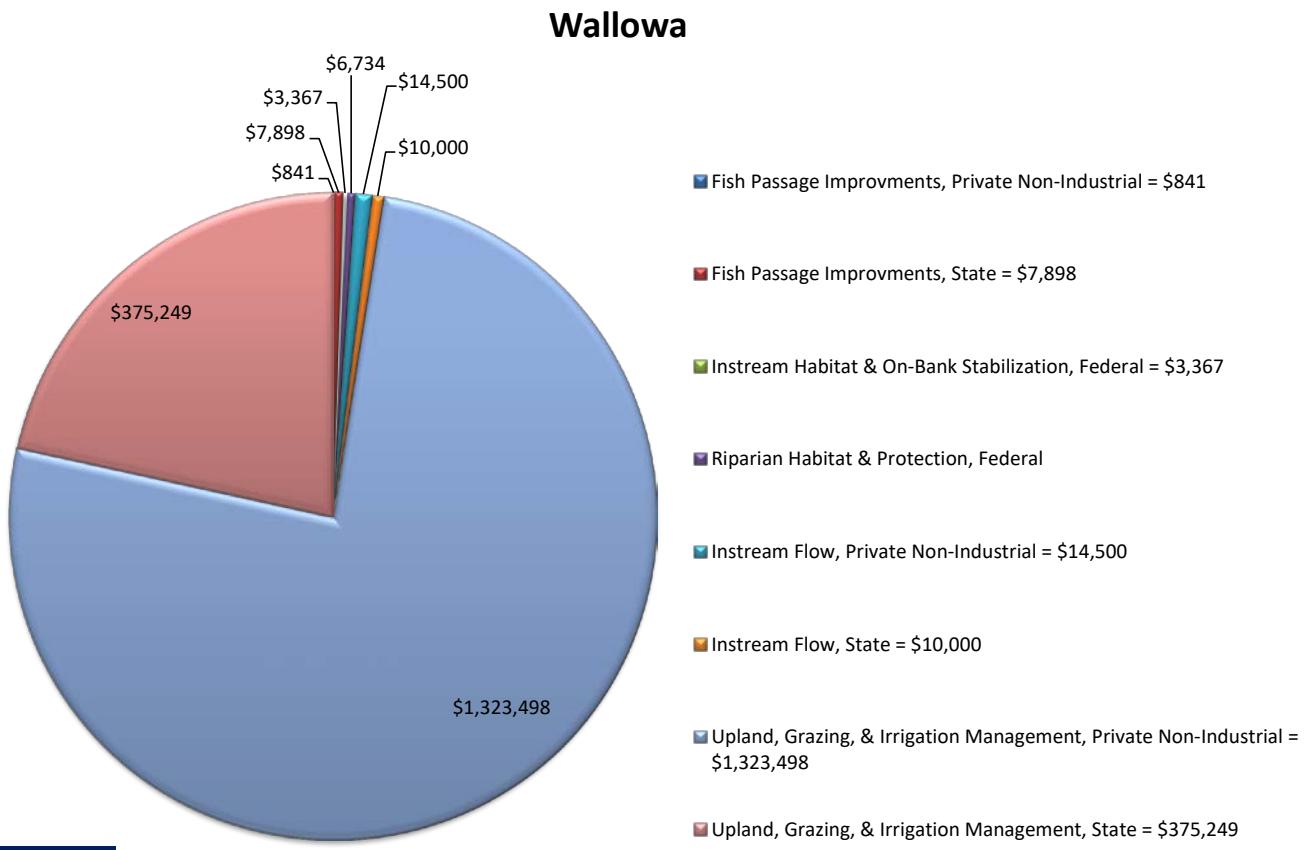
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Walla Walla	Instream Flow	Federal	$37,000	$0	**$37,000**
Walla Walla	Instream Flow	Local/City/County	$0	$0	**$0**
Walla Walla	Instream Flow	Private Non-industrial	$0	$0	**$0**
Walla Walla	Instream Flow	State	$1,893	$0	**$1,893**
Walla Walla	Upland, Grazing, and Irrigation Management	Federal	$67,839	$0	**$67,839**
Walla Walla	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$0	**$0**
Walla Walla	Upland, Grazing, and Irrigation Management	Private Non-industrial	$10,875	$0	**$10,875**
Walla Walla	Upland, Grazing, and Irrigation Management	State	$17,500	$0	**$17,500**
TOTAL					**$135,107**



Total Project Cost: $135,107

WALLOWA SUBBASIN

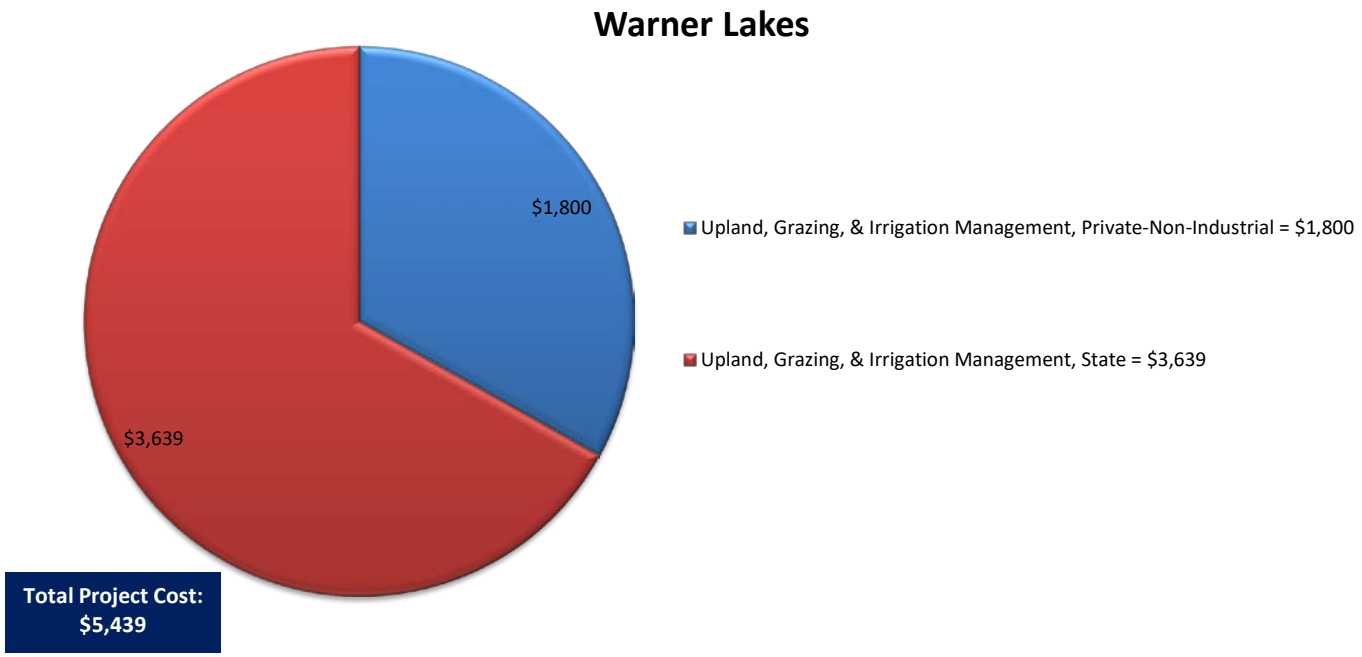
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Wallowa	Fish Passage Improvements	Local/City/County	$0	$0	**$0**
Wallowa	Fish Passage Improvements	Private Non-industrial	$841	$00	**$841**
Wallowa	Fish Passage Improvements	State	$5,785	$2,113	**$7,898**
Wallowa	Instream Habitat and on-Bank Stabilization	Federal	$3,367	$0	**$3,367**
Wallowa	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$0	**$0**
Wallowa	Instream Habitat and on-Bank Stabilization	State	$0	$0	**$0**
Wallowa	Riparian Habitat and Protection	Federal	$6,734	$0	**$6,734**
Wallowa	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Wallowa	Riparian Habitat and Protection	State	$0	$0	**$0**
Wallowa	Instream Flow	Local/City/County	$0	$0	**$0**
Wallowa	Instream Flow	Private Non-industrial	$14,500	$0	**$14,500**
Wallowa	Instream Flow	State	$10,000	$0	**$10,000**
Wallowa	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$0	**$0**
Wallowa	Upland, Grazing, and Irrigation Management	Private Non-industrial	$1,323,498	$0	**1,323,498**
Wallowa	Upland, Grazing, and Irrigation Management	State	$374,672	$577	**$375,249**
TOTAL					**$1,742,087**



Total Project Cost: $1,742,087

WARNER LAKES SUBBASIN

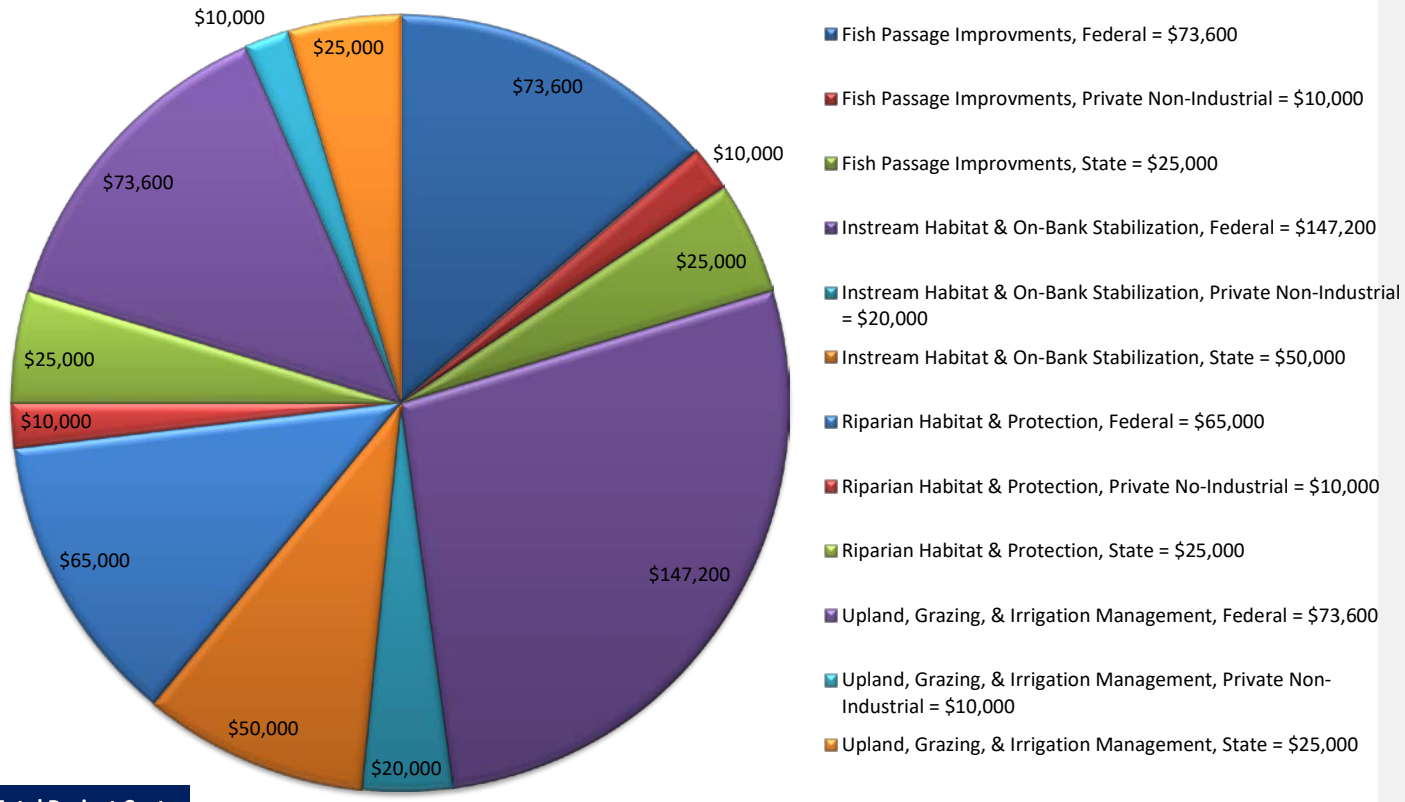
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Warner Lakes	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$0	**$0**
Warner Lakes	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$1,800	**$1,800**
Warner Lakes	Upland, Grazing, and Irrigation Management	State	$3,639	$0	**$3,639**
TOTAL					**$5,439**



WILLIAMSON SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Williamson	Fish Passage Improvements	Federal	$65,600	$8,000	**$73,600**
Williamson	Fish Passage Improvements	Private Non-industrial	$0	$10,000	**$10,000**
Williamson	Fish Passage Improvements	State	$25,000	$0	**$ 25,000**
Williamson	Instream Habitat and on-Bank Stabilization	Federal	$131,200	$16,000	**$147,200**
Williamson	Instream Habitat and on-Bank Stabilization	Private Non-industrial	$0	$20,000	**$20,000**
Williamson	Instream Habitat and on-Bank Stabilization	State	$50,000	$0	**$50,000**
Williamson	Riparian Habitat and Protection	Federal	$65,600	$8,000	**$73,600**
Williamson	Riparian Habitat and Protection	Private Non-industrial	$0	$10,000	**$10,000**
Williamson	Riparian Habitat and Protection	State	$25,000	$0	**$25,000**
Williamson	Upland, Grazing, and Irrigation Management	Federal	$65,600	$8,000	**$73,600**
Williamson	Upland, Grazing, and Irrigation Management	Private Non-industrial	$0	$10,000	**$10,000**
Williamson	Upland, Grazing, and Irrigation Management	State	$25,000	$0	**$25,000**
TOTAL					**$543,000**

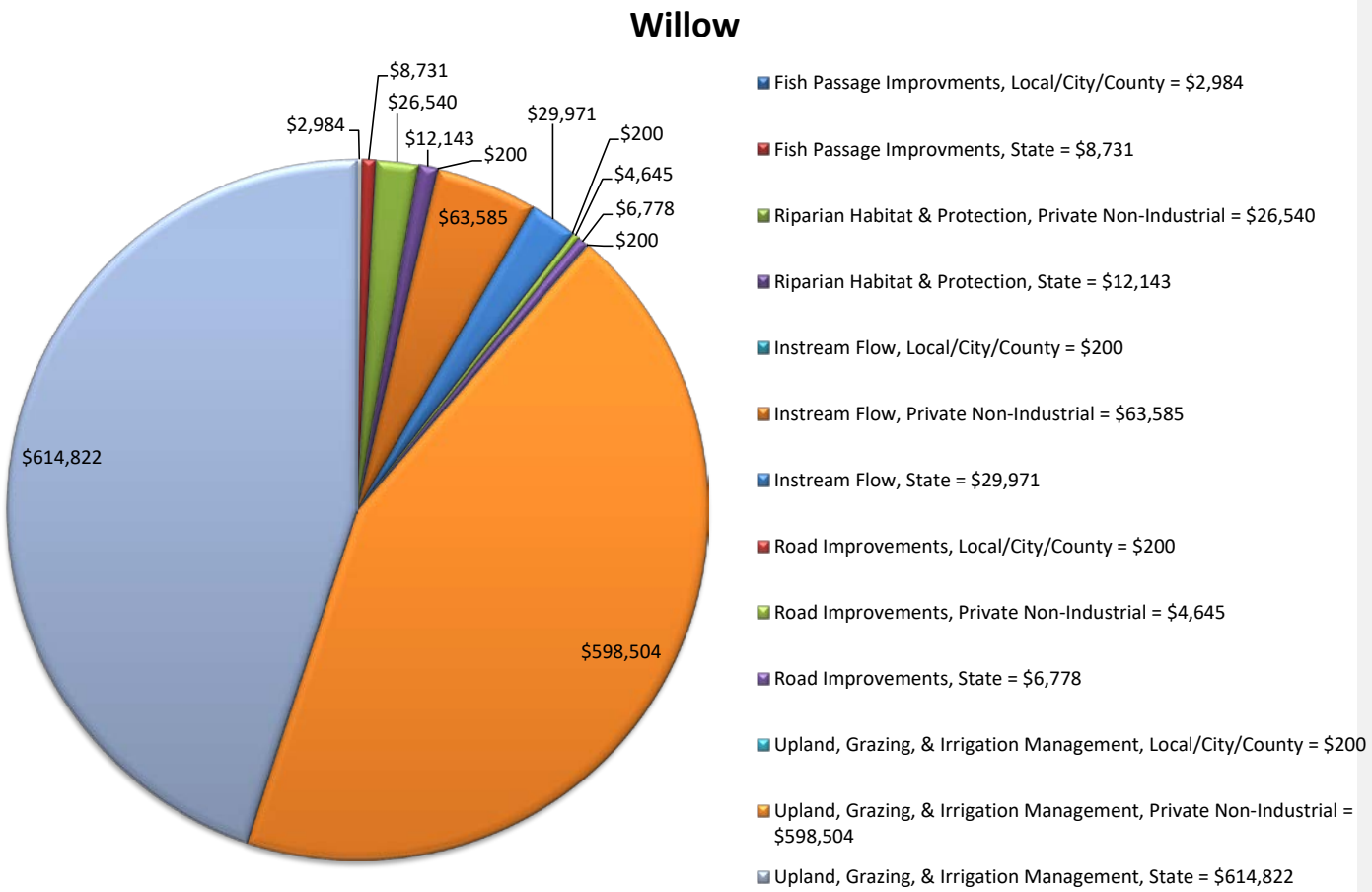
Williamson



Total Project Cost: $543,000

WILLOW SUBBASIN

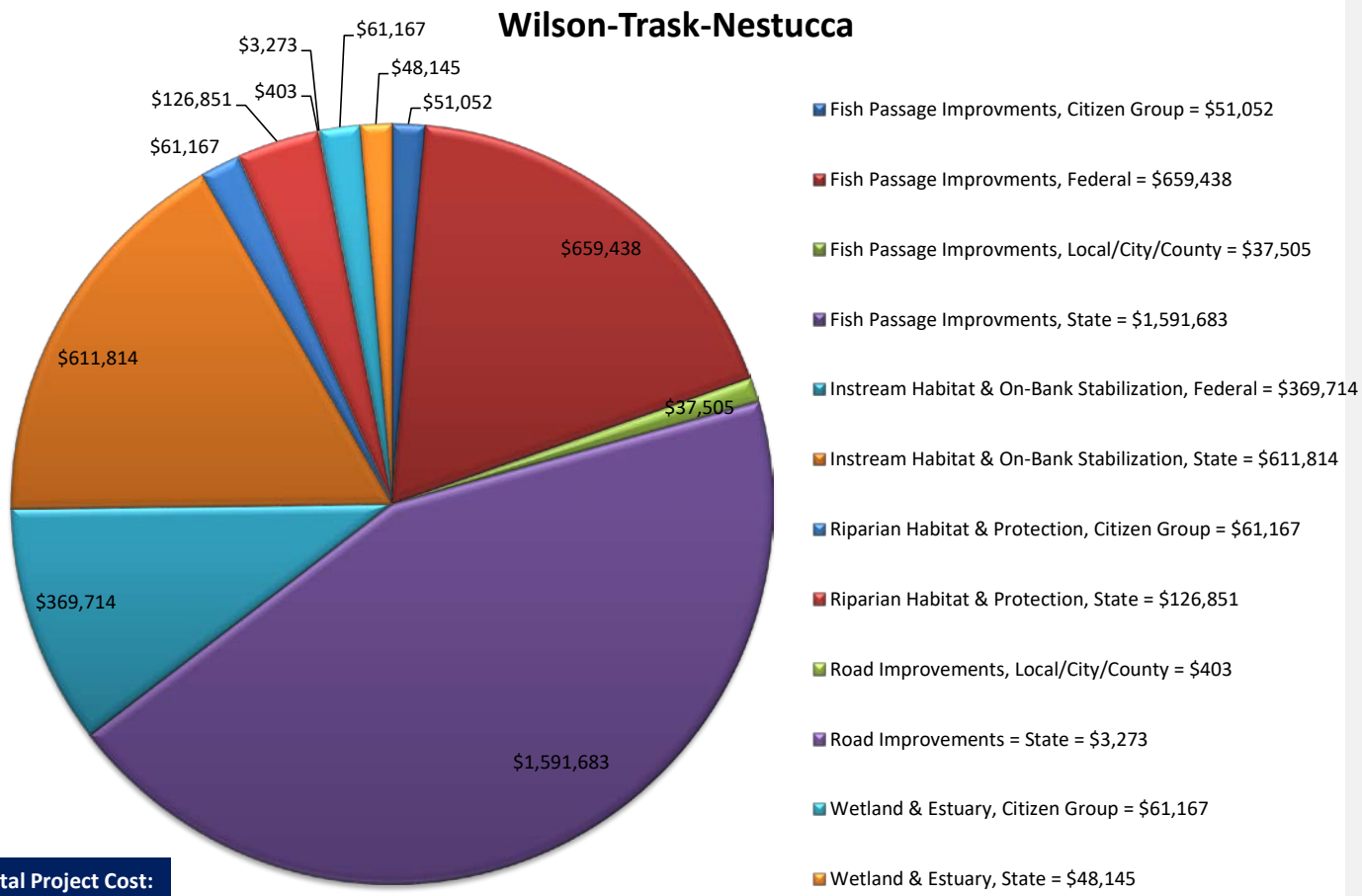
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Willow	Fish Passage Improvements	Local/City/County	$0	$2,984	**$2,984**
Willow	Fish Passage Improvements	State	$8,731	$0	**$8,731**
Willow	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Willow	Riparian Habitat and Protection	Private Non-industrial	$3,100	$23,440	**$26,540**
Willow	Riparian Habitat and Protection	State	$12,143	$0	**$12,143**
Willow	Instream Flow	Local/City/County	$0	$200	**$200**
Willow	Instream Flow	Private Non-industrial	$6,200	$57,385	**$63,585**
Willow	Instream Flow	State	$29,971	$0	**$29,971**
Willow	Road Improvements	Local/City/County	$0	$200	**$200**
Willow	Road Improvements	Private Non-industrial	$0	$4,645	**$4,645**
Willow	Road Improvements	State	$6,778	$0	**$6,778**
Willow	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$200	**$200**
Willow	Upland, Grazing, and Irrigation Management	Private Non-industrial	$598,504	$308,664	**$598,504**
Willow	Upland, Grazing, and Irrigation Management	State	$614,822	$0	**$614,822**
TOTAL					**$1,369,303**



Total Project Cost: $1,369,303

WILSON-TRASK-NESTUCCA SUBBASIN

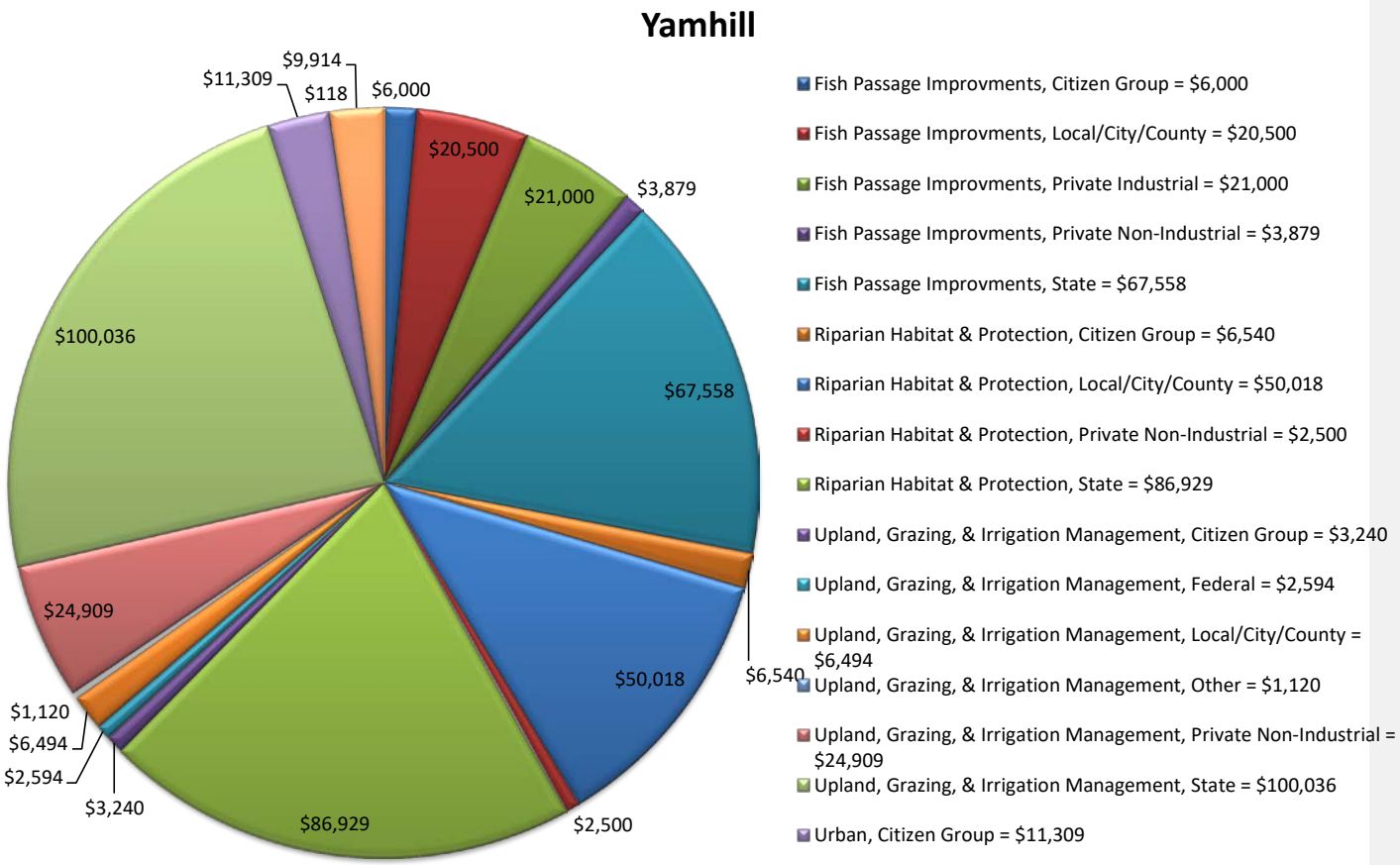
SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Wilson-Trask-Nestucca	Fish Passage Improvements	Citizen Group	$51,052	$0	**$51,052**
Wilson-Trask-Nestucca	Fish Passage Improvements	Federal	$651,638	$7,800	**$659,438**
Wilson-Trask-Nestucca	Fish Passage Improvements	Local/City/County	$805	$36,700	**$37,505**
Wilson-Trask-Nestucca	Fish Passage Improvements	State	$1,580,096	$11,587	**$1,591,683**
Wilson-Trask-Nestucca	Instream Habitat and on-Bank Stabilization	Federal	$369,714	$0	**$369,714**
Wilson-Trask-Nestucca	Instream Habitat and on-Bank Stabilization	Local/City/County	$0	$0	**$0**
Wilson-Trask-Nestucca	Instream Habitat and on-Bank Stabilization	State	$611,814	$0	**$611,814**
Wilson-Trask-Nestucca	Riparian Habitat and Protection	Citizen Group	$61,167	$0	**$61,167**
Wilson-Trask-Nestucca	Riparian Habitat and Protection	Local/City/County	$0	$0	**$0**
Wilson-Trask-Nestucca	Riparian Habitat and Protection	Private Non-industrial	$0	$0	**$0**
Wilson-Trask-Nestucca	Riparian Habitat and Protection	State	$126,851	$0	**$126,851**
Wilson-Trask-Nestucca	Road Improvements	Local/City/County	$403	$0	**$403**
Wilson-Trask-Nestucca	Road Improvements	State	$2,914	$359	**$3,273**
Wilson-Trask-Nestucca	Wetland and Estuary	Citizen Group	$61,167	$0	**$61,167**
Wilson-Trask-Nestucca	Wetland and Estuary	Local/City/County	$0	$0	**$0**
Wilson-Trask-Nestucca	Wetland and Estuary	Private Non-industrial	$0	$0	**$0**
Wilson-Trask-Nestucca	Wetland and Estuary	State	$0	$0	**$48,145**
TOTAL					**$3,622,212**



Total Project Cost: $3,622,212

YAMHILL SUBBASIN

SUBBASIN	PROJECT	CONTRIBUTOR	CASH	IN KIND	SUBTOTAL
Yamhill	Fish Passage Improvements	Citizen Group	$6,000	$0	**$6,000**
Yamhill	Fish Passage Improvements	Local/City/County	$9,500	$11,000	**$20,500**
Yamhill	Fish Passage Improvements	Private Industrial	$21,000	$2,600	**$23,600**
Yamhill	Fish Passage Improvements	Private Non-industrial	$3,879	$0	**$3,879**
Yamhill	Fish Passage Improvements	State	$67,558	$0	**$67,558**
Yamhill	Riparian Habitat and Protection	Citizen Group	$6,000	$540	**$6,540**
Yamhill	Riparian Habitat and Protection	Local/City/County	$13,000	$37,018	**$50,018**
Yamhill	Riparian Habitat and Protection	Private Non-industrial	$2,500	$0	**$2,500**
Yamhill	Riparian Habitat and Protection	State	$86,929	$0	**$86,929**
Yamhill	Upland, Grazing, and Irrigation Management	Citizen Group	$0	$3,240	**$3,240**
Yamhill	Upland, Grazing, and Irrigation Management	Federal	$2,594	$0	**$2,594**
Yamhill	Upland, Grazing, and Irrigation Management	Local/City/County	$0	$6,494	**$6,494**
Yamhill	Upland, Grazing, and Irrigation Management	Other	$0	$1,120	**$1,120**
Yamhill	Upland, Grazing, and Irrigation Management	Private Non-industrial	$15,698	$9,211	**$24,909**
Yamhill	Upland, Grazing, and Irrigation Management	State	$85,936	$14,100	**$100,036**
Yamhill	Urban	Citizen Group	$0	$11,309	**$11,309**
Yamhill	Urban	Local/City/County	$0	$118	**$118**
Yamhill	Urban	State	$9,914	$0	**$9,914**
TOTAL					**$424,658**



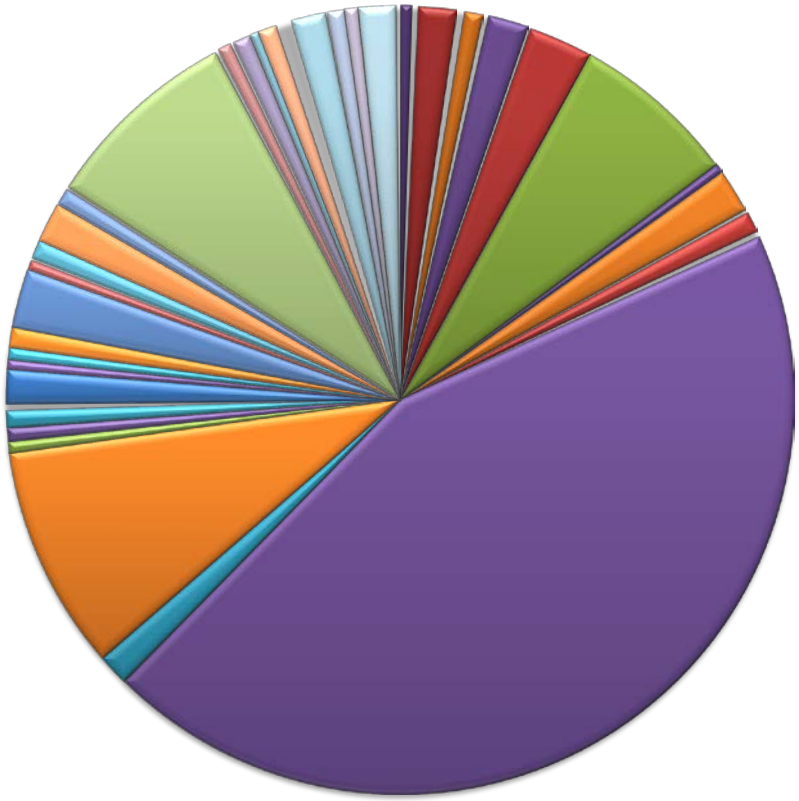
Total Project Cost: $424,658

SUBBASIN BY SUBBASIN FUNDING BY CONTRIBUTOR(S), CASH, IN KIND, AND THE SUBTOTAL COST TO IMPLEMENT WATER QUALITY RELATED PROJECT(S)

Basin	Total
Alsea	$77,959
Alsea, Siletz-Yaquina	$44,985
Alvord Lake	$71,574
Applegate	$1,142,935
Bully	$135,829
Burnt	$109,970
Chetco	$296,628
Clackamas	$3,765,126
Coast Fork Willamette	$86,196
Coos	$425,835
Coquille	$287,504
Goose Lake	$1,881,596
Harney-Malheur Lakes	$86,165
Illinois	$385,135
Imnaha	$14,246
Lake Abert	$4,046,562
Lost	$71,958
Lower Columbia	$81,264
Lower Columbia-Clatskanie	$105,253
Lower Columbia-Sandy	$6,366,351
Lower Crooked	$16,488,978
Lower Deschutes	$890,767
Lower Owyhee	$2,087,479
Lower Rogue	$539,910
Lower Willamette	$106,651,256
McKenzie	$3,117,149
Middle Columbia-Hood	$22,278,612
Middle Fork John Day	$797,932
Middle Fork Willamette	$1,897,451
Molalla-Pudding	$666,255
Necanicum	$3,363,271

Basin	Total
Nehalem	$4,409,393
North Fork John Day	$1,933,963
North Santiam	$951,981
North Umpqua	$1,172,014
Powder	$2,044,235
Siletz-Yaquina	$5,858,341
Siltcoos	$940,478
Silver	$170,679
Silvies	$184,501
Siuslaw	$1,867,697
Sixes	$3,962,838
South Santiam	$1,665,859
South Umpqua	$369,920
Sprague	$19,599,733
Summer Lake	$4,556
Trout	$42,105
Tualatin	$229,273
Umatilla	$399,489
Umpqua	$1,335,077
Upper Crooked	$243,087
Upper Deschutes	$1,794,544
Upper Grande Ronde	$897,245
Upper John Day	$1,860,361
Upper Klamath	$48,679
Upper Klamath Lake	$528,877
Upper Malheur	$658,026
Upper Rogue	$264,528
Upper Willamette	$3,435,156
Walla Walla	$135,107
Wallowa	$1,742,087
Warner Lakes	$5,439

Basin	Total
Williamson	$534,400
Willow	$1,369,303
Wilson-Trask-Nestucca	$3,622,212
Yamhill	$424,658
Total	**$241,677,881**


Alsea
Alsea, Siletz-Yaquina
Alvord Lake
Applegate
Bully
Burnt
Chetco
Clackamas
Coast Fork Willamette
Coos
Coquille
Goose Lake
Harney-Malheur Lakes
Illinois
Imnaha
Lake Abert
Lost
Lower Columbia
Lower Columbia-Clatskanie
Lower Columbia-Sandy
Lower Crooked
Lower Deschutes
Lower Grande Ronde
Lower John Day
Lower Malheur
Lower Owyhee
Lower Rogue
Lower Willamette
McKenzie
Middle Columbia-Hood
Middle Fork John Day
Middle Fork Willamette
Middle Rogue
Middle Snake-Succor
Middle Willamette
Molalla-Pudding
Necanicum
Nehalem
North Fork John Day
North Santiam
North Umpqua
Powder
Siletz-Yaquina
Siltcoos
Silver
Silvies
Siuslaw
Sixes
South Santiam
South Umpqua
Sprague
Summer Lake
Trout
Tualatin
Umatilla
Umpqua
Upper Crooked
Upper Deschutes
Upper Grande Ronde
Upper John Day
Upper Klamath
Upper Klamath Lake
Upper Malheur
Upper Rogue
Upper Willamette
Walla Walla
Wallowa
Warner Lakes
Williamson
Willow
Wilson-Trask-Nestucca
Yamhill

APPENDIX 2. Progress of NPS 319 Funded Projects (Grant Performance Report)

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W11629	MidCoast TMDL	2011	TBD	$4,000.00	$4,000.00	Waltz, David	31-Dec-15
W11634	Milton-Freewater Levee & Habitat	2011	Walla Walla Basin Watershed Council	$9,820.04	$8,070.04	Dombrowski, Tonya	31-Dec-15
W12640	Salmon Safe Certification of Green Pea	2012	Oregon State University	$55,000.00	$29,795.22	Dombrowski, Tonya	31-Oct-15
W12641	Milton-Freewater Levee Setback	2012	Walla Walla Basin Watershed Council	$96,000.00	$64,591.75	Dombrowski, Tonya	31-Dec-15
W12643	Filter Strip Water Quality Improvement	2012	Owyhee Watershed Council	$25,300.00	$21,297.02	Dombrowski, Tonya	31-Dec-15
W12644	Owyhee River Improvement Project - Phase 3	2012	Malheur SWCD	$38,000.00	$24,507.09	Dombrowski, Tonya	30-Sep-15
W12648	Backyard Planting Program Year 10	2012	Tillamook Estuaries Partnership	$53,115.00	$15,680.01	Purcell, Jennifer	30-Sep-15

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W12650	Tillamook SWCD 2012 Stream Enhancement & Rest.	2012	Tillamook County SWCD	$35,925.00	$31,870.22	Purcell, Jennifer	30-Jun-15
W12653	Morgan creek Assessment &Rest. Project	2012	Douglas SWCD	$45,000.00	$32,670.68	Fern, Jacqueline	31-Dec-15
W12654	Southern Willamette Valley Groundwater Management	2012	Lane Council of Governments	$43,471.00	$38,268.78	Eldridge, Audrey	31-May-15
W12655	Mid-Coast BMP Implementation Project	2012	Lincoln SWCD	$45,420.00	$25,084.61	Waltz, David	30-Jun-15
W12656	Stream Smart : Bear Creek Clean Water Project	2012	Bear Creek Watershed Council	$18,900.00	$8,608.90	Tugaw, Heather	31-Dec-15
W12659	Nitrogen Sources in Tidally-Restricted Estuary	2012	Curry County SWCD - NPS Grant	$13,419.00	$3,507.01	Blake, Pamela	30-Jun-15
W12666	2015 Wasco County Pesticide Stewardship Partnership	2012	Oregon State University	$3,000.00	$3,000.00	Crown, Julia	31-Dec-15
W13700	Walla Walla River Levee Setback	2013	Walla Walla Basin Watershed Council	$45,000.00	$28,633.20	Dombrowski, Tonya	31-Dec-16
W13701	Klamath Tracking & Accounting Program (KTAP)	2013	Klamath Basin	$56,000.00	$45,407.08	Dombrowski, Tonya	31-Dec-15

			Rangeland Trust				

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W13702	Examining the Adoption of BMPs in N. Malheur Co.	2013	TBD	$12,742.00	$12,742.00	Dombrowski, Tonya	TBD
W13703	NMC WQ Improvement Outreach and BMP Demo Project	2013	Malheur SWCD	$49,950.00	$49,950.00	Dombrowski, Tonya	31-Dec-15
W13704	BLM Nutrient Monitoring in the Powder Basin	2013	Powder Basin Watershed Council	$22,000.00	$16,712.43	Dombrowski, Tonya	31-Dec-16
W13705	Nestucca Riparian Restoration	2013	Nestucca Neskowin Watershed Council	$45,000.00	$22,413.73	Purcell, Jennifer	30-Sep-15
W13706	Depaving and re-greening in the lower Willamette	2013	Depave	$20,000.00	$20,000.00	Drake, Doug	30-Jun-15
W13707	Molalla River Corridor campsite restoration	2013	Molalla River Watch	$15,000.00	$4,673.75	Williams, Karen	31-Mar-16
W13708	BYPP 2013-14	2013	TBD	$40,000.00	$40,000.00	Purcell, Jennifer	TBD
W13709	Upper Nehalem Riparian Restoration	2013	Upper Nehalem Watershed Council	$45,000.00	$32,080.61	Purcell, Jennifer	30-Sep-15

W13710	Trask R Ws Study-Sediment turbidly and toxic responses	2013	Oregon State University	$79,411.00	$79,411.00	Seeds, Joshua	31-Dec-15

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W13712	Deer Creek Stream flow, channel	2013	Illinois Valley SWCD	$15,048.00	$7,329.70	Meyers, Bill	31-Dec-15
W13713	South Umpqua WQ Improvement Project	2013	Partnership for Umpqua Rivers	$41,616.00	$40,988.73	Tugaw, Heather	31-Dec-15
W13714	Thompson Creek Habitat Restoration	2013	Applegate Partnership & Watershed Council	$16,000.00	$13,679.25	Meyers, Bill	30-Jun-15
W13715	Model Stormwater landscapes in the S. Willamette V	2013	Long Tom Watershed Council	$26,048.00	$24,375.84	Wright, Pamela	31-Dec-15
W13716	Siuslaw Riparian Restoration and WQ Monitoring	2013	Siuslaw Watershed Council	$15,524.00	$14,287.96	Walts, David	30-Jun-15
W13717	Big Elk Road Assessment	2013	TBD	$15,524.00	$15,524.00	Walts, David	TBD
W13718	GW Protection Ed. To Promote Public	2013	Oregon State University	$47,766.00	$24,286.90	Eldridge, Audrey	30-Jun-16
W13719	Clackamas CC - Septic System Study	2013	Clackamas River Water Providers	$30,000.00	$2,730.90	Williams, Karen	31-Dec-15

W13720	West Hills Innovative Stormwater Demo.	2013	West Multnomah Soil & Water Conservation District	$18,000.00	$1,800.00	Newell, Avis	30-Mar-15

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W13722	McKenzie WS Pesticide Reduction Project	2013	Eugene Water & Electric Board	$20,480.00	$14,414.18	Fern, Jacqueline	30-Jun-15
W13723	Coos WA Biocriteria	2013	TBD	$31,048.00	$25,180.97	Blake, Pam	31-Dec-15
W13724	Agriculture Pesticide Round Up	2013	City of Island City	$25,000.00	$11,996.05	Dombrowski, Tonya	31-Mar-15
W13725	Walla Walla Basin PSP	2013	Walla Walla Basin Watershed Council	$6,647.00	$1,039.17	Dombrowski, Tonya	31-Dec-15
W14750	Mid. Deschutes River & Tumalo Crk. Temp. Monitoring.	2014	Upper Deschutes Watershed	$18,340.00	$18,340.00	Dombrowski, Tonya	30-Jun-17
W14751	The Lower Mill Creek Riparian Restoration Project	2014	TBD	$36,250.00	$36,250.00	Dombrowski, Tonya	TBD
W14752	Tri-County Yellow Flag Iris containment & Control Project	2014	TBD	$8,000.00	$8,000.00	Dombrowski, Tonya	TBD

W14753	PBWC WQ Monitoring Ext. and Expansion	2014	TBD	$76,213.00	$76,213.00	Dombrowski, Tonya	TBD
W14754	FLIR Camera	2014	TBD	$4,907.00	$4,907.00	Dombrowski, Tonya	TBD

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W14755	Owyhee River Improvement Project Phase 4	2014	TBD	$48,877.00	$48,877.00	Dombrowski, Tonya	TBD
W14756	Getting Word Out Malheur Basin	2014	TBD	$27,120.00	$27,120.00	Dombrowski, Tonya	TBD
W14757	Nestucca Riparian Restoration	2014	TBD	$60,000.00	$60,000.00	Purcell, Jennifer	TBD
W14758	Milton Creek Riparian Enhancement	2014	Scappoose Bay Watershed Council	$24,836.00	$24,836.00	Drake, Doug	31-Dec-17
W14759	Upper Nehalem Rip Rest & WQ Monitoring. Project	2014	Upper Nehalem Watershed Council	$50,000.00	$50,000.00	Purcell, Jennifer	30-Sep-16
W14760	Clackamas R WSC WQ Monitoring & Improvement. Project	2014	Clackamas River Basin Council	$18,480.00	$18,480.00	Williams, Karen	31-Mar-16
W14761	TWC Catchment Scorecard & WQ	2014	The Wetlands Conservancy	$24,919.00	$24,039.41	Newell, Avis	31-Dec-16
W14762	Columbia Co. WSScale WQ Monitoring	2014	TBD	$14,060.00	$14,060.00	Purcell, Jennifer	TBD
W14763	2015 Children's Clean Water Festival	2014	Tillamook Estuaries Partnership	$6,250.00	$6,250.00	Purcell, Jennifer	31-Dec-15

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W14764	NORP Plant Purchase	2014	TBD	$10,162.00	$10,162.00	Purcell, Jennifer	TBD
W14765	TMDL Implementation Status & Trend Study	2014	TBD	$14,403.00	$14,403.00	Michie, Ryan	TBD
W14766	Will. Model WS Revegetation & Stds of Practice guide 2015	2014	TBD	$40,000.00	$40,000.00	Michie, Ryan	TBD
W14767	PSP Pass through 2015	2014	Walla Walla Basin Watershed Council	$15,000.00	$15,000.00	Crown, Julia	31-Dec-18
W14768	PSP DEQ Lab	2014	TBD	$10,939.00	$10,939.00	Crown, Julia	TBD
W14769	National Water Quality Initiative (NWQI)	2014	TBD	$25,000.00	$25,000.00	Kishida, Koto	TBD

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W14770	Curry Cumulative Rest. For Aquatic Health	2014	TBD	$24,849.00	$24,849.00	Blake, Pam	TBD
W14771	Targeted Ed to add nitrate to GW Rogue Basin	2014	Jackson County Soil & Water Conservation Dist.	$24,000.00	$24,000.00	Fern, Jacqueline	31-Dec-15
W14772	Expanding the Benefit, Rip Reveg Luckiamute Basin	2014	Lane Council of Governments	$31,387.00	$31,387.00	Wright, Pamela	31-May-16
W14773	Coos Biocriteria Ass & Evaluation, Phase 2	2014	TBD	$10,462.00	$10,462.00	Blake, Pam	TBD
W14774	10-mile WS WQ & Biological Monitoring.	2014	TBD	$11,736.00	$11,736.00	Blake, Pam	TBD
W14775	Gold Hill WQ Improvement - RARE	2014	City of Gold Hill	$12,000.00	$12,000.00	Woolverton, Priscilla	30-Jun-16
W14776	Prioritization Areas of Action Plan Imp.	2014	TBD	$31,387.00	$31,387.00	Eldridge, Audrey	TBD
W14777	Riparian Rest. & Continuous WQ Monitoring	2014	TBD	$12,770.00	$12,770.00	Waltz, David	TBD
W14778	Siletz, Yaquina, Beaver Cr Subbasin BMP Projects	2014	TBD	$18,616.00	$18,616.00	Waltz, David	TBD

Table 13: 319 Oregon Open Projects Status, 2011-2014

PROJECT NUMBER	TITLE	FUNDING YEAR	CONTRACT WITH	BUDGET	BALANCE	PROJECT MANAGER	END DATE
W14779	South Umpqua Basin - Morgan Creek - Phase 2	2014	TBD	$37,500.00	$37,500.00	Meyers, Bill	TBD
W14780	Western Oregon LID Implementation Guidance	2014	TBD	$16,000.00	$16,000.00	Meyers, Bill	TBD

Watershed Management – 319 Program

APPENDIX 3. Oregon 319 Nonpoint Source Implementation Grants

Final Application

Request for Proposals

Fiscal Year 2014

Last Updated: 02/12/2014
By: Ivan Camacho
DEQ 319-02-14

This report prepared by:

Oregon Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204
1-800-452-4011
www.oregon.gov/deq

Contact:
Ivan Camacho
(503) 229-5088

2014 – Oregon §319 Nonpoint Source Grant Final Application

Table of Contents

State of Oregon
Department of
Environmental
Quality

Section A: Request for Final Application 218

1. PROJECT REQUIREMENTS 218
2. EVALUATION CRITERIA 219
3. HOW DO I APPLY? 219
4. PROJECTED TIME TABLE FOR CONTRACT PROCESSING 220
5. FOR MORE INFORMATION 221

Section B: §319 Grant Final Application Form.....222

Section A: Request for Final Application

Oregon 319 Nonpoint Source Implementation Grants Application
Fiscal Year 2014

The Oregon Department of Environmental Quality (DEQ) is pleased to notify you that you have been selected to submit a Final Application for the §319 Nonpoint Source (NPS) Implementation Grants.
In Oregon, approximately $700,000 of federal grant dollars are expected for 2014, pending EPA budget approval. Funding and oversight of selected proposals will be administered by the DEQ NPS Water Quality Program staff.

DEQ will evaluate final application submittals received on or before March 31, 2014 and select projects to be recommended for EPA funding. DEQ expects to submit project recommendations to EPA by May of 2014. Successful projects may commence in the fall of 2014.

1. PROJECT REQUIREMENTS

We strongly encourage applicants to make contact with correspondent regional coordinators as referenced in Table 3. Regional staff are eager to work with you and assist you to address the regional project priorities.

Grant recipients and the proposed project must meet the following minimum requirements:

a) A complete Grant Application Form, page 8 of this document
.

b) Proposals that are selected for funding must provide **at least forty-percent** of the total project cost with non-federal funds and/or in-kind services, such as volunteer labor. Successful grant recipients are expected to submit **documentation of project match to DEQ** along with quarterly invoices.

To calculate the minimum required match, *multiply the amount of 319 funds you are requesting for your project by two-thirds and round up to the nearest dollar.*

FOR EXAMPLE, IF THE 319 CONTRIBUTION COST TO THE PROPOSED PROJECT IS:	THE MATCH WOULD BE CALCULATED BY MULTIPLYING BY 2/3	TOTAL COST OF PROJECT WOULD BE:
$100,000	**$66,667**	**$166,667**
$45,000	**$30,000**	**$75,000**

Applicants are encouraged to investigate partnering opportunities with the Oregon Watershed Enhancement Board grant program: http://www.oregon.gov/OWEB/GRANTS/index.shtml

c) Applicants with projects that include a water quality monitoring component will be required to **develop sampling and analysis procedures, methods and strategy**. For information on this subject, please refer to the documents listed on the DEQ web page:
http://www.deq.state.or.us/lab/techrpts/technicaldocs.htm. Successful applicants proposing a monitoring strategy will be required to:

- Develop a sampling plan for DEQ approval prior to data collection.
- Submit electronic data to DEQ at the conclusion of the project.

d) The State of Oregon requires the following documentation at the time of Final Application.:

1. Signed Data Universal Numbering System/Federal Funding Accountability and Transparency Act (DUNS/FFATA) Certification form– provided by DEQ and signed by project implementers. *(Note: The DUNS/FFATA Certification indicates that the organization has a DUNS Number and is eligible to receive federal funds: www.fsrs.gov)*
2. If the Grant Recipient would like to bill for indirect costs, DEQ approval is required. One option is to request a 10% de minimis indirect cost rate as a percentage of modified total direct cost (MTDC). The second option is for DEQ to review and approve an existing and current Cost Allocation Plan (CAP) and Indirect Cost (IDC) Rate Agreement, with their assigned cognizant agency. Neither of these two options is required; the sub-recipient may choose to be reimbursed only for direct costs.

e) Grant Recipients must enter into a Grant Agreement with the State of Oregon to receive funds, and agree to enter project implementation information in the Oregon Watershed Restoration Inventory (this database tracks detailed information about restoration efforts undertaken as part of the Oregon Plan for Salmon and Watersheds).

f) Organizations are required to make a good faith effort to **hire disadvantaged businesses**. A list of disadvantaged business enterprises is available on Oregon Business Development Department's website or on the U.S. Small Business Administration site. For assistance, contact Ivan Camacho at (503)229-5088, or camacho.ivan@deq.state.or.us.

g) **Annual progress reports** and a **final report** are required. Progress reports are intended to allow grantees to consider, and share information regarding progress toward meeting performance targets, and allow DEQ staff to offer assistance in meeting those targets.

2. EVALUATION CRITERIA

DEQ staff will evaluate submissions based on the following criteria:

- Clear description of the water quality or habitat problem
- Potential to achieve measurable results
- Project work plan that clearly describes tasks and timeline
- Evidence that organization is capable of completing proposed project
- Complete and reasonable budget
- Commitment from applicant's partners and other project collaborators

3. HOW DO I APPLY?

Submit a signed copy of the Final Application (Section B of this document) via mail or hand delivered to the appropriate DEQ office, by **5:00pm on March 31, 2014**. Please include an electronic copy, in Microsoft Word (not PDF), to Ivan Camacho at camacho.ivan@deq.state.or.us. Facsimiles are not accepted.

If you are submitting large files (over 6 MB), please save them on a compact disk (CD) and send to:

Oregon Department of Environmental Quality
Attention: Ivan Camacho
811 SW 6th Avenue
Portland, OR 97204

Table 1. Oregon DEQ Regional Offices		
Office	**Address**	**Phone number**
Bend	475 NE Bellevue Dr., Suite 110 Bend, OR 97701	(541) 388-6146
Coos Bay	381 N. Second St. Coos Bay, OR 97420	(541) 269-2721
Eugene	165 East 7th Avenue, Suite 100 Eugene, OR 97401	(541) 686-7838
Medford	221 Stewart Ave., Suite 201 Medford, OR 97501	(541) 776-6010
North Coast Branch Office	65 N Highway 101, Suite G Warrenton, OR 97146	(503) 861-3280
Northwest Region	2020 SW 4th Avenue, Suite 400 Portland, OR 97201-4987	(503) 229-5263
Pendleton	700 SE Emigrant, #330 Pendleton, OR 97801	(541) 276-4063
Salem	750 Front St NE, #120 Salem, OR 97301-1039	(503) 378-8240
The Dalles / Columbia Gorge	400 E Scenic Dr., #307 The Dalles, OR 9705	(541) 298-7255
Tillamook Office	2310 First Street, Suite 4 Tillamook, OR 97141	(503) 842-3038

4. PROJECTED TIME TABLE FOR CONTRACT PROCESSING

Final funding decisions will be made by May 2014. Total time to process a grant agreement once the Pre-Proposal is received from an organization is approximately 6-8 months, as shown in the following table:

TABLE 2. TIMEOUTLINE	
PROCESS	**ESTIMATED TIME FRAME**
Following pre-proposal reviews, DEQ invites specific organizations to submit full project proposals.	February 5, 2014
Deadline for submittal of full proposals	**March 31st , 2014**
DEQ makes final selection of proposals to receive funding, and submits recommendations to EPA for review.	By April 30th 2014
DEQ notifies applicants of funding recommendations.	May 2014
DEQ and Grant Recipient draft scope of work, as part of a **NONPOINT SOURCE IMPLEMENTATION GRANT AGREEMENT** (Appendix A) and send to partner organizations for review.	Following EPA approval (generally in June - July)
DEQ Contract Office reviews grant agreement*.	August* 2014
Signature process and approval.	September* 2014
Project may begin.	Fall 2014

*If an organization has not submitted necessary documentation, this process may be delayed. This process may also be delayed by EPA review and budget approval.

5. FOR MORE INFORMATION

For information and assistance regarding grant applications, please contact Ivan Camacho at (503) 229-5088 or refer to the DEQ staff contact information, for regional staff contacts (Table 3). You can also visit: http://www.deq.state.or.us/about/locations.htm for a list of regional offices and addresses.

TABLE 3. DEQ staff contact information

REGION	BASIN	STAFF	PHONE #
Eastern	Burnt – Powder River Basin	John Dadoly	(541) 278-4616
	Deschutes Basin	Bonnie Lamb	(541) 633-2027
	Goose and Summer Lakes	Tonya Dombrowski	(541) 278-4615
	Grande Ronde, Imnaha, Wallowa Basins	Don Butcher	(541) 278-4603
	Hood Basin	Bonnie Lamb	(541) 633-2027
	John Day Basin	Don Butcher	(541) 278-4603
	Klamath Basin	Tonya Dombrowski	(541) 278-4615
	Malheur Lakes Basin (Steens and Alvord area)	Tonya Dombrowski	(541) 278-4615
	Malheur River Basin (including Willow and Bully Creeks)	John Dadoly	(541) 278-4616
	North Malheur County and Lower Umatilla Basin GWMAs	Phil Richerson	(541) 278-4604
	Owyhee River Basin	Tonya Dombrowski	(541) 278-4615
	Snake River-Hell's Canyon	Tonya Dombrowski	(541) 278-4615
	Umatilla Basin	Don Butcher	(541) 278-4603
	Walla Walla Basin	Don Butcher	(541) 278-4603
	Willow Creek Subbasin	Don Butcher	(541) 278-4603
Northwest	Clackamas & Sandy Basins	Steve Mrazik	(503) 229-5379
	Molalla & Pudding Basins	Karen Williams	(503) 229-6254
	Tillamook & North Coast Basins	Jennifer Purcell	(971) 212-5745
	Tualatin Basin	Avis Newell	(503) 229-6018
	Willamette- Lower	Doug Drake	(503) 229-5350
Statewide	Drinking Water Source Protection	Sheree Stewart Jacqueline Fern	(503) 229-5413 (541) 686-7898
	Monitoring, Quality Assurance	Steve Hanson	(503) 693-5737
	NPS Education	Ivan Camacho	(503) 229-5088
	Riparian Forest Restoration	Josh Seeds	(503) 229-5081
	State Revolving Fund	Larry McAllister	(503) 229-6412
	Pesticide Stewardship Program	Kevin Masterson Koto Kishida	(503) 229-5615 (503) 229-6381
Western	Drinking Water Source Protection	Jacquie Fern	(541) 686-7898
	Mid-Coast Basin	David Waltz	(541) 687-7345
	Rogue Basin	Bill Meyers Heather Tugaw	(541) 776-6272 (541) 776-6091
	South Coast Basins	Pam Blake	(541) 269-2721 x227
	Southern Willamette Valley GWMA	Audrey Eldridge	(541) 776-6029
	Umpqua Basin	David Waltz Heather Tugaw	(541) 687-7345 (541) 776-6091
	Willamette – Middle, including North Santiam, Pudding, Yamhill	Nancy Gramlich	(503) 378-5073
	Willamette – Upper, including S. Santiam, Coast Fork, McKenzie, Middle Fork	Pamela Wright	(541) 686-7719

Section B: §319 Grant Final Application Form

I. Applicant Information

Name:

Address:

Phone number:

Email address:

Application Title:

Organization Name:

Type of Organization (e.g. watershed council, county, non-profit, etc.)

DUNS Number Federal Tax ID Number

Proposed Start Date Proposed End Date

Signature of Applicant: _____Date of signature: _____

II. Project Description

1. Basin/Subbasin:
2. 12- Digit Hydrological Unit Code (HUC).

   (for reference, use the following link to identify the 12-digit HUC: http://map24.epa.gov/mwm
3. Project goals
4. Project objective (s)
5. What are you trying to accomplish?
6. How are you planning to accomplish it?

III. Project Work Plan

Please provide a description of tasks associated with your project, including sub-tasks, if necessary. For each task and sub-task, identify the resulting product(s), and identify which staff person or other agency will be responsible for carrying out the task.

IV. NPS Pollution Load Reduction

If the project's objective includes load reduction estimates, please provide a list of pollutants that will be targeted and 303(d) listed waterbodies. Estimate the nonpoint source pollutant load reduction, where applicable, and describe how the project will track the resulting load reductions and projected improvements in water quality conditions.

V. Project Evaluation

Successful 319 applications receiving funding are required to evaluate or estimate the water quality improvements resulting from the project. The evaluation component of your project should be designed to detect changes that result from the project using metrics appropriate to the project and the stated goals.

When developing your project evaluation strategy, consider that environmental improvement typically requires assessment over several years, if not decades. It is also important to consider the scale of change that will result from your project (site specific, stream reach, sub-basin or larger). In addition, consider linkages to ongoing monitoring efforts such as those conducted by the state, local government and volunteer groups that will be carried out during the project time frame.

Please describe your strategy for project evaluation. Describe how the project implementation will be evaluated and how evaluation results will be used, including how success will be defined, estimated or calculated, and an evaluation time frame (even if it extends beyond the time frame of the grant).

VI. Monitoring

For those applicants proposing to perform environmental measurements as part of the project or evaluation (water quality, macro-invertebrate populations, stream morphology, etc.), please describe the purpose of the monitoring and the data management and statistical analysis to be applied to the data.

Complete the following table as part of this section. If appropriate, include a map of the project area identifying sampling locations and proposed parameters.

Parameter	Analytical Technique	Number of Sample Locations	Sampling Frequency

All projects that include water quality monitoring activities for evaluating or project guidance will be required to submit a Quality Assurance Project Plan (QAPP) as part of the final NPS Agreement for review and approval by DEQ (not with this application). Until a QAPP has been approved by DEQ, grant funds for monitoring activities will not be released and/or match funds addressed by monitoring activities will not be credited. Please contact the appropriate NPS Program Staff listed in section A.5 above for additional information and guidance. Applicants are encouraged to contact DEQ Volunteer Monitoring Coordinator, Steve Hansen (503) 693-5737 to receive advice and assistance in developing the project proposal or in project implementation.

VII. Organization Information

Briefly describe your organization's capability to implement the proposed project. Include a description of the relevant qualifications of the organization and project staff that will ensure the success of the project.

VIII. Partners and Related Funding

EPA 319 Grant funds require a 40% match in non-federal funds. Match can be in the form of cash, or in-kind contributions from your organization or project partners. Letters of support or commitment are required from all funding partners committing a specific amount of time, money, activities, or other resources reflected in the budget.

In the table below show all anticipated funding sources and indicate, by checking in the appropriate box, the nature of each contribution. Be sure to provide a dollar amount or value for each funding source. If participation is in-kind, briefly describe the nature of the contribution in the first column.

Funding Source (if in-kind, briefly describe the nature of the contribution)	Cash (X)	In-kind (X)	Secured (X)	Pending (X)	Amount/Value
					$
					$
					$
					$
					$
					$
Total Estimated Match Funds					$

IX. Project Budget

Please submit the project budget in the supplemental form, included with this application. If you do not have a copy please contact Ivan Camacho, (503) 229-5088, camacho.ivan@deq.state.or.us.

Budget Form is attached: Yes ☐ No ☐

Section C. Pre Proposal Project Priorities

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation				
Basin / Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d) and Watershed Approach**	**Water Quality Problem**	**Project Need**
Eastern Region Effectiveness Monitoring and TMDL Implementation Tracking	Region Wide			Targeted effectiveness monitoring projects include development and implementation of monitoring and assessment systems to characterize the effectiveness of implementation projects and project types/elements specific to improving water quality and habitat in the Basin and to track basin-scale progress, water quality impacts of water management and storage projects and TMDL implementation.
Eastern Region Pesticide Reduction Activities	Region Wide		Pesticides	Targeted pesticide reduction projects include the design and implementation of programs to reduce/remove old or unused pesticides, and encourage replacement of current use pesticides with softer alternatives. Targeted project elements include public education programs to increase public awareness of environmental quality and health concerns associated with pesticide use and storage. Projects targeting underserved areas will be given priority.
Eastern Region Riparian Restoration (including morphology and flow)	Region Wide		Temperature	Basin-wide targeted riparian restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegatation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Riparian restoration projects should target activities in the area of on-going project work whenever possible. Projects correlated with and/or adjacent to other restoration work will be given priority.
Eastern Region Stormwater	Region Wide		Bacteria Nutrients Metals Turbidity Sediment	Targeted projects include: water quality improvement specific to stormwater impacts including local planning, alternatives assessment, stakeholder and homeowner education and information program development, feasibility studies and similar efforts.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Basin / Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d) and Watershed Approach**	**Water Quality Problem**	**Project Need**
Grande Ronde Basin Channel and Riparian Restoration	Basin-wide (Upper Grande Ronde, Lower Grande Ronde, Imnaha, Wallowa)	TMDLs completed	Temperature Nutrients pH Dissolved oxygen	Stream channel and riparian restoration projects should target activities in the area of on-going multi-year, multi-organization project work whenever possible. Basin-wide targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegatation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.
John Day Basin Channel and Riparian Restoration	Lower John Day, Middle Fork John Day, North Fork John Day, Upper John Day	TMDLs completed	Temperature Bacteria Biological criteria Dissolved oxygen Sediment	On the Middle Fork John Day River, stream channel and riparian restoration projects should target activities in the area of on-going multi-year, multi-agency project work. On the North Fork and Upper John Day River, targeted restoration projects include those activities addressing: • Temperature, bacteria, sediment and low dissolved oxygen Basin-wide targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegatation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.
Implementation Capacity				Targeted implementation capacity projects are those that research, evaluate or produce innovative methods of promoting restoration and addressing socioeconomic limitations or perceptions of constraint.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Basin / Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d) and Watershed Approach**	**Water Quality Problem**	**Project Need**
Klamath Basin Coordinated Implementation Planning	Klamath River Basin (Sprague River, Upper Klamath Lake, Upper Klamath and Lost River, Williamson)	TMDLs completed	Temperature Dissolved oxygen pH Ammonia toxicity Chlorophyll a	Targeted implementation planning projects include design/development of a unified implementation plan for irrigation and drainage districts and others that will identify and prioritize implementation activities specific to meeting water quality objectives identified by the TMDLs; and will improve overall coordination of future implementation activities between separate entities in the Basin. Strong consideration will be given to those proposals that include identification of tracking and accounting mechanisms for implementation progress within the Basin and effectiveness monitoring protocols for identifying both water quality benefits realized through implementation of the plan and assessment of project-type effectiveness.
Deschutes Basin Channel and Riparian Restoration	Basin-wide	Watershed Approach completed	Temperature Flow Sediment / turbidity Habitat Groundwater quality Nutrients/bacteria Harmful algal blooms Toxics	Stream channel and riparian restoration projects should target activities in the area of on-going multi-year, multi-agency project work. Targeted restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegetation of riparian area, increased instream flow, riparian fencing. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Projects correlated with and/or adjacent to other restoration work will be given priority.
Increased Instream Flow				Targeted water conservation projects directed at increasing instream flows, especially summer-time flows. Projects directed at permanent increases in instream flows will be given priority over short-term or temporary increases in instream flow.
Erosion Control				Targeted erosion control projects to improve streambank stabilization, improve land management and conservation cropping techniques and reduce associated pollutant transport to surface waters. Project elements should include the design and implementation of programs to reduce: • Sediment, nutrient, bacteria and pesticide loading to surface waters • Project element s should also include tools for public education and outreach and analysis of outreach success. • Projects correlated with and/or adjacent to other implementation work will be given priority.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Basin / Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d) and Watershed Approach**	**Water Quality Problem**	**Project Need**
Deschutes Basin (Cont.) Water Quality Monitoring and Pollutant Source Characterization				Targeted water quality monitoring and pollutant source characterization projects are those that include development and implementation of monitoring programs specific to the assessment of water quality and characterization of sources of: • Bacteria, nutrients, dissolved oxygen and/or pH in surface water • Harmful algae blooms in lakes or reservoirs • Nitrate and bacteria data in groundwater • Mercury in surface waters and/or fish tissue • Arsenic in groundwater and surface waters. Proposed project(s) are expected to include an extensive portion of the stream channel over time or an appropriate area for ground water characterization rather than isolated small segments or areas. Projects correlated with other monitoring efforts will be given priority.
Nutrient Reduction				Targeted nutrient reduction projects are those that include research, design and implementation activities that will reduce nutrient loading to the Malheur River, its tributaries and groundwater in the Northern Malheur County GWMA. Projects correlated with and/or adjacent to other restoration work will be given priority.
Agricultural Implementation				Targeted agricultural implementation projects include riparian area restoration activities in the Malheur River Basin. Targeted project elements include revegetation, fencing, grazing management, irrigation management and effectiveness monitoring to characterize watershed response to implementation projects.
Channel and Riparian Restoration				Basin-wide targeted riparian restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegetation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Riparian restoration projects should target activities in the area of on-going project work whenever possible. Projects correlated with and/or adjacent to other restoration work will be given priority.
Powder Basin Channel and Riparian Restoration	Burnt, Powder, and Brownlee subbasins	Watershed Assessments completed TMDL development in progress	Nutrients Sediment Bacteria Temperature	Basin-wide targeted riparian restoration project elements include restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegetation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Riparian restoration projects should target activities in the area of on-going project work whenever possible. Projects correlated with and/or adjacent to other restoration work will be given priority.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Basin / Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d) and Watershed Approach**	**Water Quality Problem**	**Project Need**
Powder Basin (Cont.) Nutrient Reduction				Targeted nutrient reduction projects are those that include research, design and implementation activities that will reduce nutrient loading waterbodies in the Powder Basin. Projects correlated with and/or adjacent to other restoration work will be given priority.
Agricultural Implementation				Targeted agricultural implementation projects include riparian area restoration activities in the Powder Basin. Targeted project elements include revegetation, fencing, grazing management, irrigation management and effectiveness monitoring to characterize watershed response to implementation projects.
Malheur River Basin (Cont.) Pollutant Source Characterization				Targeted pollutant source characterization projects are those that include development and implementation of monitoring programs specific to the characterization of sources of: • Elevated water temperatures, nutrients, bacteria, and depressed dissolved oxygen in local surface water, and agricultural drains in support of targeting and refining TMDL implementation efforts and changes in management practices • Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. • Projects correlated with and/or adjacent to other restoration work will be given priority.
Improved stream flows				Targeted projects are those that will increase summer time instream flows (quantity and timing) to more closely mimic the natural hydrograph; result in implementation of water conservation strategies on-farm; specifically and permanently reduce stream water withdrawals and promote upland conservation measures.
Umatilla Basin Riparian Protection and Restoration	Umatilla, Walla Walla and Willow Subbasins	Watershed Assessments in progress TMDLs completed	Nutrients Sediment Bacteria Temperature pH Algae	Targeted projects are those that will establish and protect riparian buffers (also addresses other WQ indicators and pollutants), including restoring morphologic function (increased sinuosity, decreased width/depth ratios, floodplain reconnection), revegetation of riparian area, increased instream flow. Proposed project(s) are expected to include an extensive portion of the stream channel over time rather than isolated small-length segments. Riparian restoration projects should target activities in the area of on-going project work whenever possible. Projects correlated with and/or adjacent to other restoration work will be given priority.
Sediment and Erosion Reduction				Targeted projects are those that will characterize and/or reduce fine sediment, including the actions identified above for temperature and assessment of excess erosion trends, sources, causes and prioritization of responsible changes in management actions.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Basin / Priority Activity	**Specific Location**	**Status: GWMA**	**Water Quality Problem**	**Project Need**
Umatilla Basin (Cont.) Bacteria Reduction				Targeted projects are those that will characterize and/or reduce bacteria, including spatially targeted priorities for bacteria BMPs and projects, and E. coli monitoring in selected areas where projects are adapted to spatial scales at which improvements will be detectable and historic monitoring data is available.
Eastern Region Project Priorities: Groundwater Management Areas (GWMAs)				
Lower Umatilla Basin Ground Water Management Area (LUBGWMA) Action Plan	Umatilla Subbasin Middle Columbia Basin	Lower Umatilla Basin GWMA established in 1990	Nitrate-Nitrogen	Targeted projects include those specific to reduction of nitrogen concentrations in groundwater including: • Research and development of activities or products which will reduce nitrate loading to groundwater – Targeted projects should address one of the five potential nitrate sources identified in the GWMA. • Revise fertilizer guides and recommended BMPs – Revised guidelines should describe the deficiencies of the current documentation and the number of acres that will be affected by the revisions; as well as evaluate the environmental aspects of the revisions. • Document BMP implementation on the GWMA scale in a system that allows spatial analysis (e.g., GIS) – Develop and implement a program to track BMP implementation (temporally and spatially) to facilitate quantification and documentation of projects and allow analysis of and linkage to monitoring well water quality relative to BMP implementation. • Perform field scale BMP performance evaluations – Identify appropriate locations and mechanisms to perform evaluations of BMPs (both existing and experimental) at the field scale. Proposed project plans should have very well developed monitoring plans capable of documenting BMP performance. • Evaluation of the Mineralization N Test – Comparison of the mineralization N test to other commonly used analyses to allow more accurate budgeting of nitrogen in the GWMA. • Develop and implement groundwater workshop for growers and certified crop advisors – Develop and sponsor workshops specific to groundwater protection. Ensure that the content is consistent with the intent of the action plans and with groundwater protection goals of DEQ and ODA. • Develop outreach material/strategy for small acreage growers and/or lawn and garden care – Develop targeted outreach and education programs to educate and reduce loading from small acreage growers and homeowners within the GWMA.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Eastern Region Project Priorities: Groundwater Management Areas (GWMAs)				
Basin/Priority Activity	**Specific Location**	**Status: DWSP**	**Water Quality Problem**	**Project Need**
Northern Malheur County Ground Water Management Area (NMCGWMA) Nitrate Reduction	Lower Malheur River Subbasin	Northern Malheur County GWMA established in 1989	Nitrate-Nitrogen	Targeted projects include: • Research and development of activities or products which will reduce nitrate loading to groundwater – Targeted projects should address a potential nitrate source identified in the GWMA. • Document BMP implementation on the GWMA scale in a system that allows spatial analysis (e.g., GIS) – Develop and implement a program to track BMP implementation (temporally and spatially) to facilitate quantification and documentation of projects and allow analysis of and linkage to monitoring well water quality relative to BMP implementation.
Eastern Region Project Priorities: Drinking Water Source Protection (DWSP)				
All ER Basins	Public water supply wells that have significant nitrate risks.	Source Water Assessment is complete. GIS assistance can also be provided.	Nitrate	Targeted projects for reducing nitrogen loading to groundwater within the 10-year time-of-travel recharge zone for public water supply wells that have significant nitrate risks. (> 50% safe drinking water MCL levels). Activities can supplement GWMA implementation activities.
All ER Basins	Municipally owned DWSAs, especially recently acquired land.	Source Water Assessments complete. GIS assistance can also be provided.	Bacteria, Sediment, Turbidity	Projects addressing management and restoration of land in drinking water source areas (DWSAs) owned by Public Water Systems or owned by a community that relies on the Public Water System and its DWSA. Restoration of riparian and ecosystem functions, remediation of current or potential pollution sources, and bolstering system resiliency to natural disturbance and climate change to protect beneficial uses including drinking water.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Western Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation				
Western Region Basin/Priority Activity	**Specific Location**	**Status: TMDLs/303(d)**	**Water Quality Problem**	**Project Need**
Mid-Coast Basin Assessment and BMP Implementation	Siletz-Yaquina, Alsea and Siuslaw subbasins	303(d) listings; TMDLs being developed	Beneficial use impairments due to bacteria, temperature, dissolved oxygen & sedimentation or Biocriteria	Water quality monitoring to better quantify sources of nonpoint source pollutant loading, identify trends and assist with prioritization of sites for BMP implementation; BMP implementation to improve riparian conditions and/or reduce nonpoint source pollution Development and implementation of riparian restoration projects to address temperature impairments and/or reduce sediment delivery on 303(d) listed streams and tributaries not meeting regional Biocriteria targets. Projects within Upper Siletz drinking water source area (Siletz, Newport, Toledo) will receive higher priority, and Projects within Siuslaw Watershed Aquatic Priorities areas associated with private land ownership will receive higher priority.
Mid-Coast Basin Assessment and BMP Implementation	City of Newport Urban Growth Boundary	303(d) listings; TMDLs being developed	Beneficial use impairments due to bacteria	Water quality assessment or monitoring to better quantify sources of nonpoint source pollutant loading, identify trends and assist with project development or prioritization of sites for BMP implementation; BMP implementation to reduce nonpoint source pollution
Umpqua Basin- South Umpqua BMP implementation & monitoring	Priority watersheds with specific load reduction and BMP needs identified in the TMDLs & WQMP	TMDLs Issued	Beneficial use impairments due to elevated bacteria, nutrients, & harmful algae blooms (HABs)	Development and implementation of riparian condition protection and improvement activities identified in DEQ's TMDLs/Water Quality Management Plan (WQMP): http://www.deq.state.or.us/WQ/TMDLs/docs/umpquabasin/umpqua/chpt7wqmp.pdf including: • Riparian enhancement; restoration of riparian shade & function • Control of livestock access to streams and off-channel watering • Stream bank and channel stability improvements • Source reduction BMPs for rural residential areas and "hobby" farms • Monitoring of conditions and BMPs to assess effectiveness and/or trends. Projects involving multiple partners and located within public drinking water source areas will receive higher priority.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Western Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Western Region Basin/Priority Activity	**Specific Location**	**Status: TMDLs/303(d)**	**Water Quality Problem**	**Project Need**
Rogue Basin	Upper Rogue Middle Rogue Lower Rogue Applegate Illinois	TMDLs Adopted	Temperature Bacteria Nutrients and/or Sedimentation	Implementation of efforts identified in Water Quality Implementation Plans (WQIP) or Water Quality Management Plans (WQMP). Potentially including: • Development or revision of riparian ordinance. • Stormwater management projects and planning for non-phase II communities. • Improvement of riparian shade and function, proposals must include long-term maintenance plan. • Control sediment sources. • Irrigation improvement projects. • Science-based projects to restore riparian function and floodplain connectivity. • Development and/or implementation of outreach campaign utilizing social marketing or other strategies.
Rogue Basin	Bear Creek	303(d) listing	Mercury	Investigation of Emigrant Lake 303(d) listing for mercury.
Rogue Basin	Upper Rogue	303(d) listing	Cyanobacteria (Blue-Green Algae)	Investigation of Lost Creek Lake, Lake Selmac or other 303(d) listed waterbodies for Cyanobacteria (blue-green algae).
Rogue Basin	Lower Rogue	Category 3B	Bacteria – shellfish standard	Investigation of the Rogue estuary 303(d) listing for bacteria.
South Coast Basin	Coos Sub-basin	303d listed	Bacteria, temperature, dissolved oxygen, biological criteria.	Assessment and Monitoring Characterize water quality conditions; (1) urban stormwater, (2) macroinvertebrate communities, (3) natural background, (4) land use interfaces (or boundary), and (5) estuary.
South Coast Basin	Tenmile Watershed	TMDL and WQMP Adopted 303d listed	Nutrients, sediment, weed and algae (HABS), biological criteria.	Implementation, Demonstration and Monitoring (1) Implement DMA Water Quality Implementation Plan priorities, (2) demonstrate Aquatic Weed Management Plan measures, (3) expand the characterization of macroinvertebrate communities, (4) continue effectiveness monitoring to determine trajectory to meet TMDL load allocations, (5) develop a water quality fact sheet to include highlights from WQ effectiveness monitoring report, (6) continue to work with Lakeside Water District to protect drinking water source waters.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Western Region Project Priorities: TMDLs/303(d) Development and Implementation and Watershed Approach Implementation (Cont.)				
Western Region Basin/Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d)**	**Water Quality Problem**	**Project Need**
South Coast Basin	Sixes and Chetco Sub-basins Coastal Frontal Systems	TMDLs and WQMP Sixes in draft, Chetco under development 303d listed	Bacteria, temperature, dissolved oxygen, pH, weeds and algae (HABS), biological criteria.	**Monitoring and Assessment** Characterize (1) estuarine water quality conditions (periphyton, nutrients, and cold water refugia), (2) expand the characterization of macroinvertebrate communities, (3) update GIS layers for riparian conditions and riparian and sediment abatement projects.
South Coast Basin	Coquille Sub-basin	TMDL and WQMP are near completion 303d listed	Bacteria, temperature, dissolved oxygen, pH, chlorophyll a, algal (HABS), biological criteria.	**Education, Outreach, and Monitoring** (1) Promote an understanding of water quality problems and actions that can be taken to improve water quality, (2) facilitate joint Water Quality Implementation Planning, (3) develop watershed restoration and enhancement strategies with strong linkages to draft TMDL load reduction goals, (4) expand the characterization of macroinvertebrate communities and (5) identify cold water refugia.
South Coast Basin	All	303d listed	Temperature, sediment, nutrients	**Education and Outreach** Development of educational materials in support of water quality protection. These materials may describe water quality related ordinances or seek to inform local communities about local water quality problems and potential solutions.
Willamette River Basin: • Coast Fork • McKenzie • Middle Fork • Middle Willamette (River Mile 50-107) • North Santiam • Pudding • South Santiam • Upper Willamette (River Mile 108-187) • Yamhill	Cities, Counties, and agricultural areas in the Willamette Subbasins	TMDLs adopted, TMDLs in-progress and 303 (d) listings	• *E. coli* • Dissolved Oxygen • Iron • Legacy and Current Use Pesticides • Mercury • Nutrients • Temperature	**Demonstration Project** • Identify specific sensitive areas and implement demonstration stormwater best management practices and/or Low Impact Development (LID) projects. Utilize sites to conduct outreach. **BMP Implementation** • Active riparian restoration projects to address temperature, sediment, bacteria, and pesticides. Priority will be given to projects adjacent to other implementation work and within sixth field hydrologic unit areas. • Implementation of agricultural BMPs focused on reducing bank erosion (e.g., riparian restoration to reduce erosion of sediment from tile drainage). **Implementation Planning** • Target cities and counties that are facing rapid growth and surface/ground water quality problems related to stormwater management or riparian area degradation. Address needs specific to their problems, especially around stormwater and stream temperature, including targeted outreach to landowners. • Partnerships involving small cities (population less than 10,000), counties and other entities within the same subbasin that collaborate to conserve/leverage limited resources to focus on water quality improvement specific to stormwater and temperature. Priority will be given to projects that address impaired surface waters and drinking water. **Pesticide Stewardship** • Design and implementation of programs to reduce pesticide transport to surface and ground waters, as well as increase public awareness of improved pesticide use and application practices.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Western Region Project Priorities: Groundwater Management Areas (GWMAs)				
Western Region Basin/ Priority Activity	**Specific Location**	**Status: GWMA**	**Water Quality Problem**	**Project Need**
Western Region	Southern Willamette Valley Groundwater Management Area	GWMA	Nitrate In Drinking Water (Groundwater)	Outreach: Based on the outcomes of the Residential and Agricultural Focus Groups (2011-2013), determine and implement a priority action or messaging strategy. Use the results of the Social Marketing process to determine how to talk to the public and in particular about groundwater. Analyze and map target geographic areas for marketing purposes. GWMA Committee: Provide ongoing coordination support for the GWMA Committee. Coordinate and facilitate quarterly GWMA Committee meetings. Prepare GWMA Committee meeting materials, record and distribute meeting minutes. Update maps as needed for GWMA Committee and partner agency understanding of project. Implementation: Conduct a detailed assessment of the revised SWV Groundwater Management Area Action Plan; assess if the current processes used in the GWMA are working; and identify and prioritize actions that, when implemented, will provide the most significant reduction of nitrate losses to groundwater. Initiate implementation of one of the higher priority actions identified in the existing Action Plan or recommended revisions to the Action Plan, in consultation with the SWV Groundwater Management Committee and staff.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Western Region Project Priorities: Drinking Water Source Protection (DWSP) ***Areas identified can be found at:*** **http://www.deq.state.or.us/wq/dwp/results.htm**				
Basin/PriorityActivity	**Specific Location**	**Status: Drinking Water**	**Water Quality Problem**	**Project Need**
Siletz/Yaquina, Alsea, Siuslaw, Coos, and Coquille Subbasins	Drinking Water Source Areas for Public Water Systems with Surface Water Intakes	Source Water Assessments complete. GIS and other technical assistance available.	Sediment, Turbidity, Nutrients, Pesticides	Projects to develop Drinking Water Protection Plans in watersheds where majority of potential contaminant threats to drinking water are from nonpoint sources that may contribute to excess sediment or high turbidity, such as rural residential, agriculture, and forestry uses. Priority will be given to projects that include multiple stakeholders in watersheds where proposed actions will benefit drinking water, as well as other beneficial uses.
Siletz-Yaquina Sub-basin	Drinking water source areas upstream of Newport intake on Siletz River	Source water assessments complete. GIS and other technical assistance available.	Sediment, Turbidity, Nutrients	Projects addressing higher risk non-point source potential contamination documented in DEQ/OHA Source Water Assessments including: stormwater, forest management, agricultural activities, land application sites, and/or river recreation. Priority will be given to projects that include multiple stakeholders, involve restoration of riparian and ecosystem functions; and address drinking water threats, as well as impairment of other beneficial uses
Umpqua Basin – South Umpqua	Tributaries and sections of the South Umpqua River within Drinking Water Source Areas	Approved TMDLs; Source Water Assessments Complete. GIS and other technical assistance available.	Elevated Bacteria And Nutrients, Harmful Algae Blooms, Sediment, Temperature.	Implementation of best management practices to address factors associated with harmful algae blooms and/or elevated *E. coli* counts within drinking water source areas in the South Umpqua Sub-basin. Priority will be given to projects that include multiple stakeholders and address drinking water threats, as well as impairment of other beneficial uses. Project examples include establishing or expanding riparian buffers; fencing; cattle crossings; off-channel watering; improved manure management; and stream bank restoration.
Umpqua Basin – South Umpqua Groundwater Drinking Water Source Areas in Jackson and Polk Counties	Drinking water source areas with significant nitrate risks.	Source Water Assessments complete. GIS and other technical assistance available.	Nitrate	Projects addressing nitrogen loading to groundwater within drinking water source areas that have significant nitrate risks (> 5 ppm nitrate). Project examples include outreach and education, and implementation of best management practices associated with fertilizer applications, septic system maintenance, and/or manure management.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Northwest Region Project Priorities: TMDLs/303(d) Development and Implementation Watershed Approach Implementation				
Basin/Priority Activity	**Specific Location**	**Status: TMDLs/303(d)**	**Water Quality Problem**	**Project Need**
All NWR Basins/ TMDL Implementation	Clackamas, Lower Willamette, Molalla, North Coast, Tillamook, Tualatin.	TMDLs completed	Temperature, Bacteria, Dissolved Oxygen, Nutrients (phosphorus), Sediment, Toxics (mercury)	**Riparian & In-channel restoration** (Native planting, erosion control, Large wood placement). **Pesticide partnership projects** and/or specific toxic reduction projects. **Innovative storm water planning/tools, education and demonstration projects** (includes hydromodification modeling, tools, and low impact development approaches practices (LIDA)). **Agriculture BMPs** (includes fencing & digester projects)
All NWR Basins/ TMDL Implement action	Clackamas, Lower Willamette, Molalla, North Coast, Tillamook, Tualatin.	TMDLs completed, Implementation plans in place	Temperature, Bacteria, Nutrients (phosphorus), Sediment, Toxics (mercury)	**Project or TMDL (watershed) Effectiveness Monitoring.** Evaluating effectiveness of projects, strategies, and desired outcomes (e.g., increased shade, lower pollutant levels, water quality TMDLs targets met).
Molalla R./TMDL Implementation	Mainstem	Completed December 2008	Temperature	Restoration/protection activities in upper mainstem coordinated among BLM and other watershed groups; TMDL implementation monitoring for cities of Canby and Molalla, Clackamas County, and DOGAMI. Field studies and/or models to quantify hyporheic flow; Studies to better understand geomorphology and hydrology (specifically channel widening) that help identify stable restoration areas and reaches that should be protected. Water conservation projects.
	North Fork		Temperature	Riparian restoration; Monitoring pre/post logging; Road abandonment.
	Milk Creek, Gribble Creek		Temperature	Riparian restoration; Stream flow monitoring.
	Table Rock Fork		Temperature	Riparian restoration/protection activities coordinated among BLM and other watershed groups; Road abandonment.
Lakes	Blue Lake	Data Collection	Nutrients Algae Invasive Weeds pH	Invasive weed harvesting/prevention/education efforts; Pilot projects demonstrating invasive weed control techniques; Boat cleaning station; Equipment and apparatus associated with aquatic weed and blue-green algae control; Water quality, phytoplankton, and plankton project effectiveness monitoring.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Northwest Region Project Priorities Drinking Water Source Protection (DWSP) *Areas identified can be found at:* http://www.deq.state.or.us/wq/dwp/results.htm				
Basin/Priority Activity	**Specific Location**	**Status: DWSP**	**Water Quality Problem**	**Project Need**
All NWR Basins	Drinking water source areas with focus on riparian areas/sensitive areas affecting intakes and sensitive areas contributing to groundwater wells.	Source Water Assessment is complete. GIS assistance can also be provided.	Bacteria, Blue Green Algae, Toxics (Emerging Pollutants), Sediment, Nutrients	Projects addressing higher risk non-point source potential contamination within sensitive areas based on data and recommendations from the DEQ/OHA Source Water Assessment reports and surface water sampling (by USGS and DEQ) including: household hazardous waste, stormwater, pesticides, agricultural crops, nurseries, forestry, and onsite septic systems. Activities can supplement TMDL implementation activities.
All NWR Basins	Municipally owned DWSAs, especially recently acquired land.	Source Water Assessments complete. GIS assistance can also be provided.	Bacteria, Sediment, Turbidity	Projects addressing management and restoration of land in drinking water source areas (DWSAs) owned by Public Water Systems or owned by a community that relies on the Public Water System and its DWSA. Restoration of riparian and ecosystem functions, remediation of current or potential pollution sources, and bolstering system resiliency to natural disturbance and climate change to protect beneficial uses including drinking water.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Headquarter Priorities				
Basin/Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d)**	**Water Quality Problem**	**Project Need**
Statewide/ Toxics Reduction	Statewide	Data collection (ongoing)	Current Use and Legacy Pesticides	Pesticide Stewardship Partnership Support: Sample collection of current use and legacy pesticides and outreach for local pesticide users. These activities by partners have been associated with reduction of pesticides in streams. The project may include sample collection and outreach activities such as Pesticide Waste Collection Events for 2014 and 2015 by local PSP partners.
Statewide TMDL/NPS Implementation	Statewide	TMDL/NPS implementation effectiveness	Temperature, Bacteria, Sedimentation, Dissolved Oxygen, or any pollutant for which there is an approved TMDL or there is a nonpoint source concern identified and implementation is occurring	Internship Project: Create Study design, collection and evaluation of data, and relate implementation activities to water quality (standards or TMDL load allocations) status and trends
National Water Quality Initiative Monitoring	Willow Creek and/or Fifteen Mile Creek	TMDL/NPS implementation effectiveness	Temperature, Bacteria, Sedimentation, Dissolved Oxygen, or any pollutant for which there is an approved TMDL or there is a nonpoint source concern identified and implementation is occurring	Sample collection as well as sample analysis in National Water Quality Initiative watersheds. EPA requires monitoring in National Water Quality Initiative (NWQI) watersheds in order to assess effectiveness of NWQI related implementation activities. Create study design, collect, analyze and interpret data. This project may include supporting sample collection by local monitoring partners.
TMDL implementation. Refer to **Regional** Priorities	Statewide	TMDLs adopted	Temperature, Bacteria, Sedimentation, Dissolved Oxygen, or any pollutant for which there is an approved TMDL.	DEQ is looking for projects that can demonstrate or pilot methods to reduce project costs for both the grantee and DEQ while maintaining or increasing the scale and scope of water quality improvement outcomes. The project must have a focus on water quality BMP implementation or planning but utilize unique methods, partnerships, or administrative structures to demonstrate savings or increased efficiencies.

Table 1 DEQ 2014 Regional Pre-Proposal Project Priorities

Headquarter Priorities (Cont.)				
Basin/Priority Activity	**Specific Location**	**Status: TMDLs/ 303(d)**	**Water Quality Problem**	**Project Need**
TMDL Implementation/CZARA Management Measure Implementation	Statewide with specific focus on basins in western Oregon	TMDLs adopted/applicable 303(d) listings/CZARA urban management measure requirement	Sediment/TSS, Bacteria, Dissolved Oxygen, Nutrients, Metals, Hydrocarbons, pesticides	DEQ is looking for projects that develop tools &/or guidance documents that support local governments in the implementation of a post-construction stormwater quality management program that incorporates runoff reduction concepts, such as Low Impact Development and Green Infrastructure. DEQ is also looking for these projects to assist local governments in verifying or determining that a land development project meets its post-construction performance standard. Education and outreach/training for the local governments is desired.

Statewide Drinking Water Priorities				
Basin/Priority Activity	**Specific Location**	**Status: DWSP**	**Water Quality Problem**	**Project Need**
Statewide shallow groundwater aquifers that provide drinking water to private well owners	Private water supply sources statewide	Individual property owners are responsible for operation, maintenance and testing of private wells.	Bacteria / pathogens, nutrients, metals, arsenic, pesticides, household hazardous waste and fuels	Provide technical assistance to private well owners with contamination issues and questions. Provide outreach and pollution prevention resources to private well owners through website and/or other pathways. May include maintaining and updating information on existing “OSU Well Water” website.

APPENDIX 5: Proposed Projects Received from the 2014 RFP

Table 2: 2014 Proposed Projects Received and Recommended for Funding

#	Name	Region	Submitted By	Contact	Phone	Basin	Requested	Budget	Summary	Fund?
1	Replacement No-Till Drill For Owyhee/Malheur	ER	OSU	William H. Buhrig	(541) 889-8840	Malheur		$26,799	1st Drill Used For 5,800 Ac, A Replacement Is Needed	Yes
2	Mid Deschutes River And Tumalo Crk Temp. Monit	ER	Upper Deschutes WSC	Lauren Mork	(541) 382-4078	Mid. Deschutes	$18,340	$18,340	Assess Water Temperature In The Mid Deschutes River And Evaluate Restoration	Yes
9	The Lower Mill Creek Riparian Restoration Project	ER	Wasco Co SWCD	Buckley, Anna	(541)296-6178	Mill Creek	$36,250	$82,500	Riparian Restoration, 1.7-1.9 Mi	Yes
10	Tri-County Yellow Flag Iris Containment And Ctrl Prgm	ER	Tri-County CWMA	Angie Gibbons	(541) 962-5083	Grande Ronde	$8,000	$37,500	Non-Native Weed Control	Yes
11	Catherine Creek Restoration	ER	Union SWCD	Mary Rosen	(541) 963-1313	Upper Grande Ronde		$70,000	Riparian Restoration	Yes
13	GWMA Evaluation Of Irrigated Ag's BMPS	ER	Umatilla Co SWCD	Tom Demianew	(541) 276-8131	Umatilla GWMA		$55,000	BMP Effectiveness	Yes
15	PBWC WQ Monitoring Extension And Expansion	ER	PbWC	Johanna Sedell	(541) 523-7288	Powder Basin	$76,213	$76,013	WQ Monitoring	Yes
18	Flir Camera	ER	GRMW	Mason Bailie	(541) 663-057	Wallowa	$4,907	$1,900	Camera - Restoration	Yes
19	Wood River Valley Treatment Wetlands	ER	Klamath Basin Rangeland Trust	Nell Kolden	(541) 273-0921	Upper Klamath		$47,500	Wetland (2) Construction And Administration	Yes
20	Owyhee River Improvementment Project Phase 4	ER	Malheur Co SWCD	Gary Faw	(541) 889-2588 X115	Owyhee	$48,877	$40,300	Data Collection, Ag Drains	Yes
21	Getting Word Out Malheur Basin	ER	Malalheur WSC	Kelly Weidman	(541) 889-8840	Malheur	$27,130	$52,500	Public Awareness	Yes

Table 2: 2014 Proposed Projects Received and Recommended for Funding

#	Name	Region	Submitted By	Contact	Phone	Basin	Req'd	Budget	Summary	Fund?
7	Middle Fork John Day River & Bear Creek Habitat Restoration Projeect	ER	The Freshwater Trust	Marley Gaddis	503.222.9091	John Day River Basin		$56,333	Restore Instream, Riparian Habitat & Floodplain Connectivity 2.1 Miles	Yes
24	Nestucca Riparian Restoration	NWR	Nestucca-Neskowin WC	Alex Sifford	(503) 965-2200	Nestucca	$60,000	$45,000	Riparian Maintenance And Restoration	Yes
25	Milton Creek Riparian Enhancement	NWR	Scappoose Bay Watershed Council	Charles Mccoy	(503) 397-7904	Scappose Bay	$24,836	$22,000	Riparian Restoration, 3.5 Mile	Yes
27	Upper Nehalem Rip Rest And WQ Monit Project	NWR	Upper Nehalem WC	Maggie Peyton	503-429-0869	Upp Nehalem	$50,000	$66,000	On-Going TMDL Implementation	Yes
28	Clackamas R. WSC WQ Monit And Improvement Proj	NWR	Clackamas River Basin Council	Cheryl Mcginnis	503.303.4372	Clackamas	$18,480	$18,334	Public Education/Outreach, Clean Up, WQ Monitoring	Yes
30	TWC Catchment Scorecard And WQ	NWR	TWC	Esther Lev,	(503) 227-0778	Nwr Basins	$24,919	$24,860	Tmdl Implementation, Scorecards For WQ Impairments	Yes
32	Columbia Co WSSCALE WQ Monit	NWR	Columbia SWCD	Tyler Joki	503-397-4555 X104	Lower Willamette/ Nc	$14,060	$14,360	Site Selectrion / WQ Monitoring	Yes
34	TEP CCWF 2015	NWR	TEP	Claudine Rehn	(503) 322-2222	Tillamook Bay	$6,250	$6,250	Public Education/Outreach	Yes
36	Western Oregon LID Implementation Guidance	NWR	Oregon Environmental Council	Teresa Huntsinger	503.222.1963 X112	NWR-WR	$11,000	$20,442	BMP Information And Education	Yes
	Norp Plant Purchase	NWR	Norp				$10,000			
23	TMDL Implementation Status And Trend Study	SW	PSU	Joseph Maser	(503) 725-9040	TBD	$14,403	$14,338	TMDL Assessment	Yes
44	Will. Model WS Reveget & Stds Of Practice Guide 2015	SW	Bonneville Environmental Foundation	Kendra Smith	503-248-1905	Willamette	$40,000	$40,000	Revegetation Program In The Willamette B Thru' The Model WS Program	Yes
	PSP	SW	HQ			Various	$20,939			

Table 2: 2014 Proposed Projects Received and Recommended for Funding

#	Name	Region	Submitted By	Contact	Phone	Basin	Req'd	Budget	Summary	Fund?
38	Curry Cumulative Restoration For Aquatic Health	WR	Curry SWCD	Cindy Myers	(541) 247-2755	Sixes/Chetco/ Lower Rogue	$24,849	$25,781	Evaluation Of WQ Efforts From Riparian Restoration	Yes
41	Targeted Ed To Address Nitrate To GW Rogue Basin	WR	Jackson Co SWCD	Randy White	(541) 690-9983	Rogue	$24,000	$24,000	BMP Evaluation, Pub Educ, Nitrate Testing	
42	Expanding The Benefit: Rip Reveg tation Luckiamute Basin	WR	Luckiamute Watershed Council	Kristen Larson	(541)-602-8631	Luckiamute	$31,387	$48,330	Riparian Restoration	Yes
43	Coos Biocriteria Assessment And Evaluation, Phase 2	WR	Coos Watershed Association	Jon A. Souder	(541) 888-5922	Coos WS	$10,462	$26,575.48	Biocriteria Monitoring	Yes
47	10-Mile WS WQ And Biological Monit	WR	TLBP	Mike Mader	(541) 759-2414	Tenmiles Lakes WS	$11,736	$15,000	WQ Monitoring/BMP Development	Yes
49	Gold Hill WQ Improvement - Rare	WR	City Of Gold Hill	Nicolas Lennartz	(541) 855-1525	Rogue	$12,000	$13,380	BMP Documentation (Photo Monitoring), Implementation	Yes
50	Prioritizating Areas Of Action Plan Implementation	WR	Lane Council Of Governments	Kalakay Denise	541-682-7415	SWV-GWMA	$31,387	$41,000	BMP Planning/Mapping WQ Impairments	Yes
45	Riparian Rest And Continuous WQ Monitoring	WR	Siuslaw Watershed Council	Matt Gibson	541.268.3044	Siuslaw	$12,770	$12,770	Riparian Restoration	Yes
51	Siletz, Yaquina, Beaver Cr Sub-Basin BMP Project	WR	Lincoln Co SWCD	Josh	541-265-2631	Siuslaw & Siltcoos	$18,617	$25,553	Riparian Restoration	Yes
52	South Umpqua Basin - Morgan Creek - Phase I	WR	Douglas SWCD	Walt Barton	(541) 967-5061	South Umpqua	$37,500	$40,000.00	WQ Monitoring And BMP Implementation In South Umpqua	
36	Western Oregon LID Implementation Guidance	WR	Oregon Environmental Council	Teresa Huntsinger	503.222.1963 X112	NWR-WR	$5,000	$20,442	BMP Information And Education	Yes

APPENDIX 6: **Acronyms**

Acronym	Translation/Capitalization
319	Section 319 of the federal Clean Water Act; Nonpoint Source Pollution Program
401	Certification of Fill and Removal and Hydroelectric Projects
ACP	Aquatic Conservation Strategy
ACWA	Association of Clean Water Agencies
AFO, CAFO	Animal Feeding Operation, Concentrated Animal Feeding Operation
AG	Attorney General
AWQMAP	Agricultural Water Quality Management Area Plan
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
CAFO	Confined Animal Feeding Operation
CBOD	Carbonaceous Biochemical Oxygen Demand
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
CFR	Code of Federal Regulations
CNPCP	Coastal NonpointPollution Control Program
CPM	EPA core performance measure
CREP	Conservation Reserve Enhancement Program (State)

Acronym	Translation/Capitalization
CRP	Conservation Reserve Program (Federal)
CSO	Combined Sewer Overflow
CWA	Clean Water Act
CWAP	Clean Water Action Plan
CZARA	Coastal Zone Act Reauthorization Amendments
DEQ	Oregon Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DMA	Designated Management Agencies (Federal, USA EPA)
DOGAMI	Department of Geology & Mineral Industries
DOJ	Department of Justice
DSL	Division of State Lands
EMAP	Environmental Monitoring and Assessment Program
EPA	Environmental Protection Agency
EPOC	Environmental Partnership for Oregon Communities
EQC	Oregon's Environmental Quality Commission
ER	Eastern Region
ESA	Endangered Species Act (federal)
ESU	Evolutionarily Significant Unit
FLIR	Forward-looking infrared radiometer
FPA	Forest Practices Act
FPAC	Forest Practices Advisory Committee
GIS	Geographic Information System

Acronym	Translation/Capitalization
GWMA	Groundwater Management Area
H20	Headwaters to Ocean project (Oregon)
HSP	Healthy Streams Partnership
HSPIG	Healthy Streams Partnership Implementation Group
HSRAF	Hazardous Substance Remedial Action Fund
HW	Hazardous Waste program
ICBEMP	Interior Columbia Basin Ecosystem Management Project
IMST	Independent Multidisciplinary Science Team
IPM	Integrated Pest Management
IUP	Intended Use Plan
IWR	Instream Water Rights
LASAR	DEQ’s Laboratory Analytical Storage & Retrieval System
LCREP	Lower Columbia River Estuary Program
LEAD	DEQ's Laboratory and Environmental Assessment Division
LLID	Latitude Longitude Identification
LUCS	Land Use Compatibility Statement
LQ	DEQ Land Quality Division
MAO	Mutual Agreement And Order
MOA	Memorandum Of Agreement
MOU	Memorandum Of Understanding
NEP	National Estuary Program
NFP	Northwest Forest Plan
NHD	USGS National Hydrography Dataset

Acronym	Translation/Capitalization
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NON	Notice of Noncompliance
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source Pollution
NPV	Notice Of Permit Violation
NRCS	Natural Resources Conservation Service
NRI	Natural Resources Inventory
NWR	DEQ Northwest Region
OAR	Oregon Administrative Rules
OCSRI	Oregon Coastal Salmon Restoration Initiative
OD	DEQ Office of Director
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Dept of Transportation
OECA	US EPA Office of Enforcement and Compliance Assurance
OPSW	Oregon Plan for Salmon and Watersheds
ORS	Oregon revised statutes
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board
OWQI	Oregon Water Quality Index
P2	Pollution Prevention
PBT	Persistent Bioaccumulative Toxics

Acronym	Translation/Capitalization
PCS	Permit Compliance System
PNCERS	Pacific Northwest Coastal Ecosystems Regional Study
PPIS	Pollution Prevention Incentives For States
PSU	Portland State University
RBP	Rapid Bioassessment Protocol
RCRA	Resource Conservation & Recovery Act
REMAP	Regional Environmental Monitoring and Assessment Program
RMA	Riparian Management Area
SB 1010	Oregon Senate Bill 1010, Agricultural Water Quality Management Act (1996)
SB 737	Oregon Senate Bill 737, pollution prevention and toxics reduction (2007)
SDWA	Safe Drinking Water Act
SOLV	Stop Oregon Litter & Vandalism
SRF	State Revolving Fund
STAC	USDA State Technical Advisory Committee
STORET	US EPA Storage and Retrieval System
SWCD	Soil And Water Conservation District
TBNEP	Tillamook Bay National Estuary Project
TCPP	Tillamook County Performance Partnership
TDG	Total Dissolved Gas
TMDL	Total Maximum Daily Load

Acronym	Translation/Capitalization
UAA	Use Attainability Analysis
UIC	Underground Injection Control
USACE (US COE)	US Army Corps of Engineers
USFS	US Forest Service
USFS	US Fish and Wildlife Service
USGS	US Geological Survey
UST	Underground Storage Tanks
UWA	Unified Watershed Assessment
WMC	DEQ Waste Management & Cleanup Division
WPCF	Water Pollution Control Facility
WQ	Water Quality Division
WQMP	Water Quality Management Plan
WR	DEQ Western Region
WRD	OregonWater Resources Department