Appendix I
Mid Coast Basin Report

1. Basin Description

The Mid-Coast Basin encompasses four subbasins on Oregon's central coast: the Alsea, Siletz-Yaquina, Siltcoos and Siuslaw. This area contains a wide variety of ecosystems and habitats, including high elevation Coast Range temperate forests, low elevation valleys, coastal wetlands, shallow lakes, estuaries and beaches. Major land uses in the basin include private and federal forests, livestock grazing in valley pastures, rural residential development, with urban development concentrated along the Highway 101 corridor. The rivers, lakes and estuaries of the Mid-Coast Basin are historically rich in native fish and wildlife. Salmonids, including the Oregon Coast Coho, are key fish species which are culturally and economically important in Oregon's coastal basins. Certain salmonid populations are threatened or at risk due to factors documented elsewhere. Water quality in the Mid-Coast Basin affects native fish, other aquatic life and the beneficial uses of drinking water and water recreation. A large amount of the basin is forests exhibiting a wide range of seral stages, from recent clear cut harvest to mature forests. Off-shore commercial fishing is an important economic activity and tourism is also a vibrant industry along the coastal strip.

Table I-1: 2011 Land use and land cover for each subbasin in the Mid Coast.

Subbasin	Watershed Area (km2)	% Urban/Roads	% Forest	% Cultivated	% Range/Forest Disturbance	%Other
Alsea	1775.477	6.0	79.3	0.9	12.1	1.7
Siletz-Yaquina	1948.422	7.6	57.5	0.7	31.1	3.1
Siltcoos	336.084	4.9	53.4	0.2	25.4	16.2
Siuslaw	1993.411	5.4	72.1	1.4	19.6	1.5

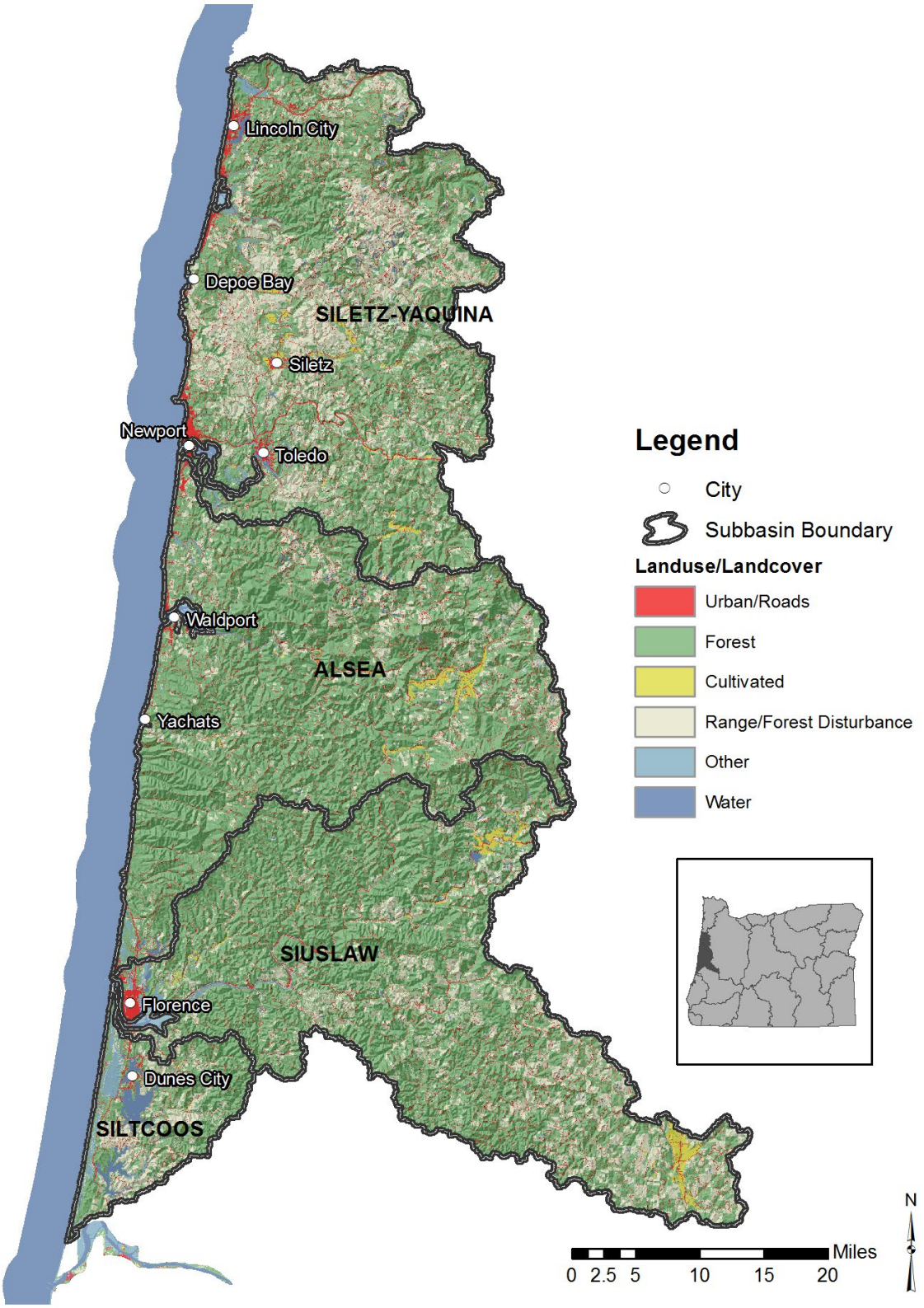

Figure I-1: Land use in the Mid Coast administrative basin.

1.1 Basin Contacts

Table I-2: Oregon DEQ basin contact.

Administrative Area	DEQ Basin Coordinator
Mid-Coast Basin	David Waltz: 541-687-7345: waltz.david@deq.state.or.us

2. Water Quality Impairments and TMDLs

2.1 Water Quality Impaired Stream Segments

Under Section 303(d) of the Clean Water Act, states, territories and authorized tribes must submit lists of impaired waters. Impaired waters are those that do not attain water quality standards or support all designated uses. The law requires that states establish priority rankings for waters on the lists and develop Total Maximum Daily Loads (TMDLs) for these waters. Table I-3 identifies the number of Mid Coast Basin waterbody segments impaired by parameter from the 2012 Integrated Report and the number of segments with approved TMDLs. Sources: ODEQ, USEPA

Table I-3: Number of impaired stream segments with and without a TMDL as identified in Oregon's 2012 Integrated Report and Assessment database.

Parameter	Segments without a TMDL	Segments with a TMDL
Aquatic Weeds Or Algae	7	0
Arsenic	1	0
Biocriteria	10	0
Biological Criteria	27	0
Chloride	1	0
Chlorophyll a	2	0
Dissolved Oxygen	36	0
E. Coli	21	0
Enterococcus	6	0
Fecal Coliform	14	0
Iron	1	0
pH	13	0
Phosphorus	0	2
Sedimentation	7	0
Temperature	89	0
Tissue - soft shell clam - arsenic	4	0
Turbidity	1	0

2.2 Total Maximum Daily Load Watershed Plans

The federal Clean Water Act requires that water pollutant reduction plans, called Total Maximum Daily Loads (TMDLs), be developed for water bodies that are listed in Category 5 of the Integrated Report (303(d) List). TMDLs describe the maximum amount of pollutants that can enter the river or stream and still meet water quality standards.

TMDLs take into account the pollution from major 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, and 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 (Oregon Administrative Rules 340-042-0040(l)). The TMDL and WQMP serve as a multi-sector plan and provides the blueprint for TMDL related implementation activities. Table I-4 lists the TMDLs that have been approved in the Mid Coast Basin.

Table I-4: Approved TMDLs in the Mid Coast Basin and the impairments addressed by those TMDLs.

TMDL Document Name	Impairments Addressed
Clear Lake TMDL	Protection of high quality water, public water supply source

3. Implementation Highlights

3.1 Section 319 Grants

Federal Section 319(h) funds are provided annually through the EPA to states for the development and implementation of each state's Nonpoint Source Management Program. In Oregon a portion of 319 Grant funding is "passed through" to support community or partner projects that address Oregon's nonpoint source program priorities. Generally, DEQ requires grantees to report annually on the progress made implementing their grant project. This section highlights those outputs and accomplishments reported to DEQ in 2019. Note this section does not identify or include projects proposed and awarded a grant in 2019. Outputs and accomplishments for those projects will be reported to DEQ in future years once they have been implemented. For a listing of projects proposed and awarded a grant in 2019 see Section 3.6.2 of the main report.

In 2019, there were two 319 projects active that reported project outputs and accomplishments to DEQ. Combined the projects have a total grant budget of $30,069. Table I-5 describes the projects and the reported outputs.

Table I-5: Project outputs reported in 2019 for Section 319 pass through grants.

Project Name	Grantee	Project Description	Reported Outputs
Yachats Watershed Monitoring and Assessment	Lincoln Soil and Water Conservation District	The Project objectives include conducting site scale assessment of near-stream landscape conditions and agricultural practices to identify opportunities for development of on-the-ground nonpoint source reduction projects.	Monitoring sites were established and water temperature monitoring was conducted in coordination with ODA; these are environed as long-term Ag sites
Siuslaw Riparian Restoration and Continuous WQ Monitoring Phase IV	Siuslaw Watershed Council	This Project will utilize grant funds to perform monitoring and assessment to identify priority areas for BMPs implementation and develop specific projects to improve riparian conditions and function and reduce fine sediment and thermal loading in 303(d) listed streams and priority watersheds.	Recipient has entered into a landowner agreement to install livestock exclusion fencing as part of a joint riparian improvement project with Siuslaw SWCD

Figure I-2: Bear Creek - Riparian restoration livestock exclusion fencing

3.2 Clean Water State Revolving Fund (CWSRF)

The Clean Water State Revolving Fund loan program provides below market rate loans to public agencies for the planning, design and construction of various projects that prevent or mitigate water pollution. Eligible agencies include federally recognized Indian tribal governments, cities, counties, sanitary districts, soil and water conservation districts, irrigation districts, various special districts and intergovernmental entities. DEQ partners with Oregon communities to implement projects that attain and maintain water quality standards, and are necessary to protect beneficial uses. This section highlights the ongoing projects and the outputs and accomplishments reported to DEQ in 2019.

In 2019 there was one nonpoint source related Clean Water State Revolving Fund project active that reported project outputs and accomplishments to DEQ. Combined the projects have a total budget of $4,128,454. Table I-6 describes the project and the reported outputs.

Table I-6: Nonpoint source related Clean Water State Revolving Fund project outputs reported in 2019.

Project Name	Grantee	Project Description	Reported Outputs
Bay Moore Stormwater Project	City of Newport	Newport has a sponsorship option project which addressed stormwater issues such as upgrades to the storm sewer in the Bay-Moore basin, installation of a bio-retention facility at Sam Moore Creek and the design of a fish passage at the Big Creek reservoirs.	Completed - initiation of operations with affirmative certification of stormwater system improvements

3.3 Source Water Protection Grants

The Oregon Health Authority regulates drinking water under state law and the Safe Drinking Water Act and works cooperatively with DEQ on source water protection efforts. Using the Drinking Water Revolving Loan Fund, OHA funds Source Water Protection Grants (up to $30,000 per public water system) for source water protection activities, monitoring, and planning in Drinking Water Source Areas. In addition, loans are available for improving drinking water treatment, source water protection activities, or land acquisition in source areas. Oregon's Infrastructure Finance Authority is responsible for administering these projects. The loan fund set-asides also fund five Drinking Water Protection positions at DEQ that provide technical assistance to public water systems and communities while they develop and implement strategies that reduce the risk within the delineated source water areas. This section highlights the ongoing projects and the outputs and accomplishments reported to DEQ in 2019.

In 2019 there were three nonpoint source related Drinking Water Source Protection program projects active that reported project outputs and accomplishments to DEQ. Combined the projects have a total budget of $103,457. Table I-7 describes the projects and the reported outputs.

Table I-7: Nonpoint source Drinking Water Source Protection program projects and outputs for 2019.

Project Name	Grantee	Project Description	Reported Outputs
Turbidity-Sediment Monitoring and Erosion Control Projects for Source Protection and	City of Newport and Toledo	Water quality monitoring, landowner outreach to design and implement voluntary projects for bank stability, coordinate with	Lincoln SWCD staff continued to assist with turbidity monitoring equipment setup and sampling, as well as

Project Name	Grantee	Project Description	Reported Outputs
Planning in the Siletz Sub-basin - Phase II	Water Utilities	Mid-Coast place based planning effort.	providing technical assistance to landowners on best management practices in the Siletz Watershed. However, due to continuing staffing issues at the SWCD, the City requested a project extension to June 2020.
City of Yachats Source Water Protection Plan	City of Yachats (00966)	Address water quality and quantity issues by developing a drinking water protection plan including formation of a DWP team, enhancing the delineation and inventory of potential contaminant sources, providing pubic education and best management practice information, and report preparation.	City advertised project and prepared for hiring a consultant. All work will be performed by GSI in 2020.
Phase II - Implementing Schooner Creek Sediment Reduction	Lincoln City Water District (00483)	This is the state-funded portion of the larger DWPP Phase II project. Building on a Roads Risk Assessment conducted in 2018, Lincoln City and their partners including the Salmon Drift Creek Watershed Council, Lincoln County Public Works, and the Siuslaw National Forest are addressing the most significant sediment sources above the Lincoln City municipal water intake. Actions for 2019 will to reduce sediment include road drainage and surface improvements, and road segment stabilization.	Contract between watershed council and City of Lincoln City was finalized. Proposed work will occur in 2020.

3.4 Drinking Water Provider Partnership Grants

Oregon DEQ participates in the Drinking Water Providers Partnership (DWPP) with USDA Forest Service Region 6, EPA Region 10, the U.S. Bureau of Land Management OR/WA Office, the Washington Department of Health, Geos Institute and WildEarth Guardians. Together, these partners coordinate a competitive grant solicitation and award program for environmental conservation and restoration projects in municipal watersheds across the Northwest. The Drinking Water Providers Partnership made the first of the annual awards in 2016 and most projects have a focus on nonpoint sources of pollution. The goal of the Partnership and the funding is to develop and support local partnerships to restore and protect the health of watersheds which communities depend upon for drinking water while also benefiting aquatic and riparian ecosystems, including the native fish that inhabit them.

This section highlights the ongoing projects and the outputs and accomplishments reported to the DWPP in 2019.

In 2019 there were no active Drinking Water Providers Partnership projects with reported outputs in the Mid Coast.

3.5 OWEB Grant Funded Projects

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. These grant projects often address nonpoint sources of pollution and are thus included in this report.

Based on the most recent data available in OWEB's Oregon Watershed Restoration Inventory (OWRI) database, there were 33 OWEB funded projects completed in 2018 with a total cash and in-kind budget of $950,104. The tables below summarize reported outputs for different project activities in each Mid Coast subbasin.

Learn more about OWEB grant programs at https://www.oregon.gov/OWEB/grants/Pages/grant-programs.aspx.

Table I-8: Summary of OWEB grant funded fish passage projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Fish Passage Crossing improvement (Number of treatments)
Siletz-Yaquina	1
Siltcoos	1

Table I-9: Summary of OWEB grant funded instream projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Instream habitat: Large wood placement (Number of treatments)
Siltcoos	245

Table I-10: Summary of OWEB grant funded riparian projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

SubbasinActual	Voluntary riparian tree retention (Acres)	Voluntary riparian tree retention (Miles)
Siuslaw	17.1	6.5

Table I-11: Summary of OWEB grant funded riparian projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Riparian fencing (Area treated)	Riparian fencing (Stream sides treated)
Siltcoos	6.6	2

Table I-12: Summary of OWEB grant funded riparian projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Riparian invasive plant control (Area treated)	Riparian invasive plant control (Stream sides treated)
Siuslaw	3	2

Table I-13: Summary of OWEB grant funded upland projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Upland erosion control (Acre)
Siletz-Yaquina	0.1

Table I-14: Summary of OWEB grant funded upland projects completed in 2018, the most recent year data is available in the OWEB OWRI database.

Subbasin	Nutrient/manure management (Acre)	Nutrient/manure management (Number of treatments)
Alsea	8	1