

# Oregon Wetland Program Plan

2017 – 2021

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Prepared by the  
Oregon Department of State Lands  
Aquatic Resource Management Program

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Enhancing State and Tribal Programs (ESTP) Initiative for Wetland Programs



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## **Acknowledgments**

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Regulation and management of aquatic resources falls under numerous agencies in Oregon. With the goal of developing a comprehensive Plan, the Department of State Lands (DSL) worked with partners to identify various program’s wetland objectives and strategies. People from the following agencies and organizations contributed to this strategy: Aaron Borisenko and Steve Mrazik, Oregon Department of Environmental Quality; Joseph Sheahan, Oregon Department of Fish and Wildlife; Kyle Abraham, Oregon Watershed Enhancement Board; Christine Shirley, Department of Land Conservation and Development; Ruben Ochoa, Water Resources Department; Vanessa Blackstone, Oregon Parks and Recreation Department; Dana Field and Anna Buckley, Oregon Department of State Lands; Craig Cornu, South Slough National Estuarine Research Reserve; Dede Olson, US Forest Service Pacific Northwest Research Station; Scott Peets, US Forest Service; Heather Medina and Cory Owens, Natural Resources Conservation Service; Tina Teed and Jaimee Davis, US Army Corps of Engineers; and Yvonne Vallette, US Environmental Protection Agency.

## **Introduction**

Oregon currently has approximately 1.4 million acres of wetlands, 111,619 stream miles, 1,400 named lakes and an additional 3,800 ponds and reservoirs. Although historical loss of natural resources has taken its toll, Oregon has a more recent history of protecting its water and land resources. Through landmark statutes passed in 1967, the Oregon Legislative Assembly recognized that the protection, conservation and best use of the water resources of the state is vital to the economy and well-being of the state and its people. The primary state law that authorizes the regulation of activities within the waters of the state is the Oregon Removal-Fill Law (ORS 196.600 – 196.665, 196.668 - 196.692, 196.795 – 196.990, and 390.805 – 390.925), which is administered by the Department of State Lands (DSL).

Oregon has a no net loss of wetland goal and is required to “maintain a stable resource base of wetlands,” to “encourage wetland restoration and creation,” and to “offset losses of the functions and values of the water resources” of the state. In 1989, the Department of State Lands’ wetlands program was established by statute through a comprehensive wetlands conservation bill. DSL’s Aquatic Resources Management Program is responsible for issuing removal-fill permits, developing and maintaining the Statewide Wetland Inventory, providing wetland planning assistance, developing standards and tools, and providing public information and training.

In Oregon, many natural resource programs’ requirements, decisions and actions affect aquatic resources. Thus, effectively managing Oregon’s aquatic resources requires extensive collaboration and

partnering between programs that have varying natural resource directives and goals. In addition to DSL's programs, the primary regulatory and nonregulatory state programs and their requirements and strategies to protect, restore and manage Oregon's wetlands include:

- Oregon Department of Environmental Quality (DEQ) administers the 401 Water Quality Certification program. DEQ's Oregon's Water Quality Monitoring Strategy and monitoring programs provide environmental information necessary to support resource management and water quality policies, standards and permits to protect the quality of Oregon's environment.
- Oregon Department of Fish and Wildlife's (ODFW) Habitat Resources Program and Conservation Program include in-water timing guidelines, habitat mitigation recommendations, fish passage and fish screening requirements, and scientific take permits. ODFW's Oregon Conservation Strategy is an overarching state strategy for protecting and enhancing fish and wildlife and their habitats.
- Oregon Watershed Enhancement Board (OWEB) is a leader in the conservation of Oregon's natural resources by helping Oregonians take care of streams, rivers, wetlands and natural areas. OWEB administers the state's Watershed Enhancement Program that includes acquisition and restoration grants funded through the Oregon Lottery, supporting local watershed councils, and development of strategic action plans. OWEB coordinates The Oregon Plan for Salmon and Watersheds, which emphasizes the importance of monitoring the status of environmental factors that affect watersheds and habitat quality.
- Oregon Department of Land Conservation and Development (DLCD) administers Oregon's 19 Statewide Planning Goals that include: Goal 5 requires local protection programs for significant freshwater wetlands, Goal 16 prohibits development in 98% of the remaining estuarine wetlands, and Goal 17 requires protection for major marshes along Oregon's coastal shore lands. Less directly, Goals 6 and 7 may address wetland management for water quality and flood management purposes.
- Oregon Water Resource Department's (OWRD) mission is to assure sufficient and sustainable water supplies and responsible water management through restoring and protecting stream flows and watersheds, requiring Water-Use and Stored-Water permits, and through Oregon's Integrated Water Resource Strategy.
- Oregon's Indian Tribal communities consist of nine federally recognized Tribes whose Tribal governments manage natural resources in reservation or trust lands that comprise over 875,000 acres, or 1.4 percent of land within Oregon's boundaries. In addition, the Ft. McDermitt Paiute Shoshone Tribe in Nevada has some reservation lands in Oregon.
- Oregon Parks and Recreation Department's (OPRD) natural resource management objectives include protecting and restoring native ecosystems and cultural resources. The Department administers the state Scenic Waterways Program that provides protection for special rivers and

adjacent lands, manages state park lands, and enforces the 1967 Beach Bill, which provides protection and preservation of natural resource values found on the ocean shore.

- Oregon Department of Forestry's (ODF) administers the Oregon Forest Practices Act that sets standards on all nonfederal lands for any commercial activity involving harvesting trees on forestlands. The Department develops and implements a ten-year State Forests Monitoring Program Strategic Plan and regional state forests management plans to achieve management goals.
- Oregon Department of Agriculture's (ODA) Natural Resources Program Area addresses water quality and natural resource conservation on agricultural lands through the Agricultural Water Quality Management Program and the Soil Water and Conservation District Program, which provides technical assistance and grants. The Native Plant Conservation Program works to conserve native plant diversity.

Over the past 25 years, DSL with its partners have built the capacity of wetland regulation, planning, and restoration programs within the state, largely through the assistance of US Environmental Protection Agency's Wetlands Program Development Grant (WPDG) Program. For example, DSL was awarded a WPDG to develop a statewide wetland assessment tool - the 2009 Oregon Rapid Wetland Assessment Protocol. The development of this tool fulfilled a need recognized by the Oregon legislature and the regulated public for a standard method that would allow for the rapid assessment of wetland functions, values and condition that could be used statewide on all wetland types. The *Making Wetland Restoration Count* WPDG project facilitated collaboration between DSL, the Oregon Watershed Enhancement Board, and the restoration community to evaluate and improve the environmental outcome and tracking of voluntary wetland restoration projects. The *Regulatory Environmental Outcome Demonstration Grant* project allowed the state, with federal partners, to pilot a permit-streamlining effort that laid the groundwork for the state's 404 Assumption effort.

In 2010, DSL received a grant to support the Department of Environmental Quality in assessing Oregon's wetlands for the 2011 EPA National Wetland Condition Assessment. In 2011, DSL received WPDG funds to upgrade the Oregon Rapid Wetland Assessment Protocol, which improved the efficiency of the tool, allows for its use in identifying locally significant wetlands by local governments, and facilitates its use in ecosystem credit accounting. DSL's most recent WPDG funds are helping to develop a Stream Function Assessment Protocol and web-based user platform; and to improve our mitigation program by developing policies that promote a watershed approach to mitigation and replaces acreage-based compensatory mitigation with a more function-based accounting method.

In addition to the multiple state agency and program directives, there are numerous federal agencies and programs that affect Oregon's aquatic resources. Thus, the Oregon Wetland Program Plan ("Plan") has a range of management activities and should be considered a work in progress that will be revisited and revised as needed. The Plan provides a framework and direction over the next five years for the Oregon Department of State Lands (DSL) and its state, federal, and Tribal partners to guide future Wetland Program Development Grant applications to build, strengthen, and improve the state's ability to better protect and manage wetlands and other aquatic resources.

## List of Acronyms

ARMP	Aquatic Resource Mitigation Program
COE	US Army Corps of Engineers
DEQ	Department of Environmental Quality
DLCD	Department of Land Conservation and Development
DSL	Department of State Lands
EPA	Environmental Protection Agency
LLWW	Landscape position, landform, water flow path, and waterbody type
LWI	Local Wetland Inventory
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NWCA	National Wetlands Condition Assessment
NWI	National Wetlands Inventory
OCMP	Oregon Coastal Management Program
ODA	Oregon Department of Agriculture
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
OPRD	Oregon Parks and Recreation Department
ORWAP	Oregon Rapid Wetland Assessment Protocol
OWEB	Oregon Watershed Enhancement Board
OWRD	Oregon Water Resources Department
SFAM	Stream Function Assessment Method
SSNERR	South Slough National Estuarine Reserve Research
SWI	Statewide Wetland Inventory
SWMP	System Wide Monitoring Program
USFS	US Forest Service
USFWS	US Fish and Wildlife Service

## Core Element: Monitoring and Assessment

**Goal:** To guide and coordinate statewide monitoring and assessment efforts in order to improve the States’s ability to sustainably manage and conserve Oregon’s wetlands.

**Objective:** Develop and maintain a wetland monitoring and assessment coordinated framework for Oregon, to monitor the status of wetlands in the state of Oregon consistent with *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA 2006) by using EPA’s three-tier approach, and to provide decision makers with the best possible information on the extent, type, and health of our state’s wetlands and the ecosystem services they provide.

Action (a): Develop and maintain a wetland monitoring and assessment coordinated framework for Oregon					
Activity	2017	2018	2019	2020	2021
Collaborate with state and federal aquatic resource partners to identify mutual data needs and uses, shared goals and objectives, and program decisions and environmental outcomes that would benefit from a statewide wetlands monitoring and assessment program	X	X	X	X	X
<ul style="list-style-type: none"> <li>Evaluate and develop monitoring standards, methods, protocols that best serve the monitoring objectives of the state</li> </ul>	X	X	X	X	X
<ul style="list-style-type: none"> <li>Work toward integrating wetland monitoring efforts with other aquatic monitoring efforts</li> </ul>	X	X	X	X	X
<ul style="list-style-type: none"> <li>Continue to develop and improve effectiveness of monitoring methods</li> </ul>	X	X	X	X	X
South Slough National Estuarine Research Reserve (SSNERR) staff will participate in various wetland monitoring and assessment advisory groups (e.g., DSL workgroups, NOAA workgroups, Wasson Creek Restoration Advisory Group) to provide input on and recommendations about wetland characteristics, processes, monitoring protocols, and funding opportunities	X	X	X	X	X
SSNERR will begin to characterize sedimentation and vertical accretion rates in Coos estuary tidal wetlands: <ul style="list-style-type: none"> <li>Use the Reserve’s local geodetic control network to determine precise elevations of the water level sensors at all water quality stations of the System-wide Monitoring Program (SWMP) operated by the Reserve</li> <li>Quantify changes in tidal inundation regimes at key tidal wetlands in the Coos estuary using long-term water level data from NOAA’s tide stations, SWMP stations, and tribally</li> </ul>					X

<p>managed water quality monitoring stations</p> <ul style="list-style-type: none"> <li>Collect sediment dynamics data at existing and newly established sites to quantify tidal wetland sedimentation and vertical accretion rates in the Coos estuary, including at Sentinel Site stations in the South Slough</li> </ul>					
<p>SSNERR will begin to characterize the density and spatial distribution of tidal wetlands at the Reserve's Sentinel Site stations:</p> <ul style="list-style-type: none"> <li>Map the spatial distribution of emergent marshes, eelgrass beds, and forested wetlands at Sentinel Site stations within the Reserve</li> <li>Collect percent cover, shoot density, and elevation data associated with emergent marsh plant communities, eelgrass beds, and forested wetlands at Sentinel Site stations</li> <li>Establish groundwater wells and groundwater level data loggers at Sentinel Site stations to characterize tidal wetland groundwater level regimes and quantify changes</li> <li>Evaluate relationships between plant community characteristics of tidal wetlands and water quality, elevation, groundwater level, sedimentation, vertical accretion, and tide level data</li> </ul>					X
<p>SSNERR will map the presence and extent of invasive species impacting Reserve managed wetlands:</p> <ul style="list-style-type: none"> <li>Use data to map the presence of invasive species affecting or threatening the Reserve, while identifying data gaps</li> <li>Utilize invasive species partnerships to support creating maps</li> <li>Engage interns to assist staff with mapping and ground-truthing as part of their job-training experience</li> </ul>			X	X	X
<p>Collaborate with and support the Institute for Natural Resources, the Wetlands Conservancy, and Oregon State University in the continued development of the Oregon Explorer to integrate and share wetland information and provide online wetland tools</p>	X	X	X	X	X
<p>Continue utilizing DEQ's <i>A Strategy for Monitoring Oregon's Waters (2005)</i> as a statewide water monitoring approach and tool for setting priorities until superseded by an updated strategy</p>	X	X	X	X	X

<b>Action (b): Continue wetland mapping efforts and development of Level 1 Landscape Assessments and tools</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Participate in the National Wetland Mapping Consortium, which strives to support the management of wetland resources through enhanced wetland mapping and monitoring	X	X	X	X	X
Develop an approach and schedule, in coordination with USFWS and other partners, for updating the National Wetlands Inventory (NWI) statewide		X			
Conduct Status and Trends studies:					
<ul style="list-style-type: none"> <li>Investigate conducting regional studies, including conducting an update to the Willamette Valley Wetland Change Study</li> </ul>			X	X	X
Implement use of the new Oregon Rapid Wetland Assessment Protocol-Local Planning (ORWAP-LP) that is an off-site wetland assessment method to be conducted during development of local wetland inventories	X				
SSNERR will complete the baseline habitat mapping (coastal ecological features including land cover and land use) and accuracy assessment on those maps for Reserve lands using standard protocols that are standard across the National Estuarine Research Reserve system	X	X			
SSNERR will complete the update of maps showing the distribution of eelgrass throughout the Coos estuary - these updated maps are being produced with aerial imagery and bathymetry data collected in 2016	X				

<b>Action (c): Development and refinement of Level 2 Rapid Assessment methods and tools</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Complete development of a Stream Function Assessment Method (SFAM) and a SFAM Map Viewer, which will be located on the Oregon Explorer web site	X				
Upgrade the Oregon Rapid Wetland Assessment Protocol (ORWAP) Map Viewer located on the Oregon Explorer web site		X			



Action (d): Develop Level 3 Intensive Site Assessment methods and tools					
Activity	2017	2018	2019	2020	2021
SSNERR will complete the update and refinement to the Coastal and Marine Ecological Classification Standard (CMECS) estuary habitat maps for the Coos estuary, through a partnership with the Department of Land Conservation and Development	X	X	X		
SSNERR will work with partners, including the Pacific Northwest Coastal Blue Carbon Working Group, to quantify carbon stocks and characterize ecosystem drivers in estuarine wetland habitats across the Pacific Northwest	X	X	X		

### Core Element: Regulatory

**Goal:** To avoid and minimize wetland losses, preserve wetland functions, and replace unavoidable or unauthorized losses with sustainable wetlands of at least equal size and functionality.

**Objective:** Continue development of strong and effective state regulatory programs by: efficiently utilizing regulations, policies and technological advances; collaborating and streamlining; improving mitigation successes; developing tools; improving data management to maximize efficiency and assist in decision-making; strengthening enforcement efforts; providing outreach; and tracking and evaluating program activities and environmental results.

Action (a): More effectively utilize regulations, policies and technological advances to improve program effectiveness					
Activity	2017	2018	2019	2020	2021
Complete the interagency (state/federal) development and implementation of the Oregon Aquatic Resource Mitigation Program (ARMP), which has a functions-based, watershed-scale approach to compensatory mitigation for wetlands and streams to improve mitigation decisions and optimize mitigation investments	X	X			

Develop metrics and success criteria for evaluating the new ARMP's effectiveness	X	X	X		
Explore and implement electronic and web-based regulatory tools:	X	X	X	X	X
<ul style="list-style-type: none"> <li>Develop and implement a LinkDocs process that enables applicants to submit electronic General Authorization (GAs), the DSL-COE joint Individual Permit Application, and mitigation monitoring reports to DSL</li> </ul>	X	X			
<ul style="list-style-type: none"> <li>Develop an electronic submittal and review process for wetland delineation reports submitted to DSL</li> </ul>	X	X			
<ul style="list-style-type: none"> <li>Develop a DSL web-based form for submittal and completion of Wetland Determination Requests for the general public</li> </ul>		X			
Pursue an updated fee structure for DSL's removal-fill permits and wetland delineation reviews		X	X		
Continue to develop Internal Management Directives to document DEQ's policies and procedures for improved water quality outcomes	X	X	X	X	X
Implement recommendations from the 2016 independent NPDES Permitting Program Review, which will address DEQ's permit renewal backlogs	X	X	X		
Develop a DSL program-level plan for removal of derelict and abandoned vessels on state-owned waterways and utilize the Submerged Lands Enhancement Fund to expend a minimum of \$100,000 per biennium for clean-ups	X	X	X	X	X
DEQ's Cleanup Program will continue to provide oversight for the investigation and cleanup of hazardous substances by identifying and responding to high priority sites and encouraging responsible parties to complete work through voluntary programs	X	X	X	X	X
SSNERR staff will lead training sessions with partners as requested on wetland processes, restoration techniques, and associated effectiveness monitoring protocols for DSL, USACE and other wetland regulatory staff members and restoration practitioners	X	X	X	X	X
Explore new training mediums for staff as necessary to support DSL's regulatory programs' effectiveness	X	X	X	X	X
Complete development and implementation of DSL's Aquatic Resources Management Program training plan	X				

<b>Action (b): Coordinate and collaborate among agencies and programs to support program goals and streamline efforts</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue to develop and maintain clear guidelines for roles, responsibilities, and procedures for review of permits for activities that require approval from more than one state/tribal agency	X	X	X	X	X
Continue to identify opportunities to streamline permit procedures and forms	X	X	X	X	X
<ul style="list-style-type: none"> <li>DSL will develop and implement General Permits (GPs) for activities that are similar in nature or recurring and have predictable outcomes and effects</li> </ul>	X	X	X	X	X
Support the Governor’s Regulatory Streamlining and Simplification Roadmap (developed in 2012) to improve regulatory effectiveness	X	X	X	X	X
Update Oregon’s Integrated Water Resources Strategy (2012) that takes into consideration water quantity, water quality, and ecosystem needs	X				
Conduct monthly interagency Kaizen meetings as a coordination tool and to provide comment and feedback to prospective applicants for large, complex, or controversial projects	X	X	X	X	X
Provide coordination and support to the Oregon Watershed Enhancement Board’s (OWEB) voluntary restoration grant programs	X	X	X	X	X
Participate in inter-agency discussions to collaboratively develop and recommend strategies and policies for salmon recovery and watershed restoration per the goals of the Oregon Plan for Salmon and Watersheds	X	X	X	X	X
Work in partnership with the Oregon Coastal Management Program (OCMP) to ensure Oregon’s coastal and ocean resources are managed, conserved, and developed consistently with statewide planning goals	X	X	X	X	X
Provide support and technical input to the Corps on federal CWA related issues	X	X	X	X	X
Update the interagency (EPA, COE, DSL) Wetland Delineation Report Guidance	X				

Continue to develop statewide TMDL responses, including siting criteria for mitigation to replace water quality functions and avoidance of wetlands with high water quality functions in areas that have water quality limited streams	X	X	X	X	X
Maintain support and collaborate with the Oregon Department of Transportation on transportation related infrastructure improvements	X	X	X	X	X
Develop and maintain partner relationships with state and federal natural resource agencies and programs	X	X	X	X	X
<ul style="list-style-type: none"> <li>Conduct interagency cross training of staff on regulatory authorities, policies, and procedures</li> </ul>	X	X	X	X	X
Develop and maintain partner relationships with local government planning and natural resource programs	X	X	X	X	X

<b>Action (c): Improve mitigation success and ensure assessments and mitigation lead to desired environmental results</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue development and refinement of aquatic resource function and condition assessment methods as needed	X	X	X	X	X
Examine the effectiveness of DSL's current removal-fill compensatory mitigation program by analyzing past performance in a watershed context	X	X			
DSL will track and review all monitoring reports for permittee-responsible mitigation	X	X	X	X	X
Evaluate and revise, as needed, DSL's Routine Monitoring Guidance that provides a standard way to collect and report data for wetland mitigation monitoring, including:	X	X	X	X	X
<ul style="list-style-type: none"> <li>Refine post-construction monitoring protocols to create consistency for monitoring of compensatory mitigation sites</li> </ul>	X	X			
<ul style="list-style-type: none"> <li>Evaluate the routine wetland compensatory mitigation performance standards developed in 2009 to determine their effectiveness in obtaining functional replacement and identify recommended performance standards for stream compensatory mitigation projects</li> </ul>	X	X			

Develop and implement a statewide banking/mitigation program for stream impacts	X	X			
Evaluate and improve strategies for long-term protection and management of mitigation sites including legacy mitigation banks	X	X	X	X	X
Continue coordination between DSL and the COE to ensure the approved In-Lieu-Fee program is working successfully	X	X	X	X	X
Encourage establishment of new mitigation banks throughout the state	X	X	X	X	X

<b>Action (d): Develop or refine standards and tools to more effectively and consistently administer regulatory activities and provide decision support</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Develop a DSL internal policy database	X				
Develop an interagency mitigation portal on the Oregon Explorer website to provide data and tools to support wetland and stream mitigation decisions	X				
DSL will restructure, enhance, and update Oregon's Statewide Wetland Inventory (SWI):					
<ul style="list-style-type: none"> <li>Develop (1) an on-line wetland mapper with a GIS-based SWI that includes data from the NWI, Local Wetland Inventories, and DSL-approved delineations, and (2) a maintenance and support plan</li> </ul>	X	X			
<ul style="list-style-type: none"> <li>Update the Local Wetlands Inventory Standards and Guidelines to incorporate current GIS-based technologies and data</li> </ul>		X			
<ul style="list-style-type: none"> <li>Conduct outreach to local governments on the benefits of the updated SWI</li> </ul>			X	X	X
Integrate climate change considerations into program policies and decisions to increase wetland ecosystem resiliency	X	X	X	X	X
DSL will develop an ORWAP web-based training platform for consultants and restoration specialists			X		

DSL will develop an SFAM web-based training platform for consultants and restoration specialists			X		
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<b>Action (e): Promote and assist in development of local government wetland planning solutions and tools</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Coordinate with the Department of Land Conservation and Development and local governments on their natural resource planning and local protection programs	X	X	X	X	X
<ul style="list-style-type: none"> <li>Continue working with local governments on development of Local Wetland Inventories (LWIs)</li> <li>DSL will revise the Locally Significant Wetland criteria rules used by local governments during their wetland planning and applicable state rules</li> </ul>	X	X			
Provide assistance to the Governor’s Regional Solutions Teams to support community development needs and solutions by focusing and integrating agency’s resources on regional environmental priorities	X	X	X	X	X
Support Oregon Solutions whose mission is to develop solutions to community based problems through collaborative efforts	X	X	X	X	X

<b>Action (f): Improve data management to maximize efficiency and assist in decision-making</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue to evaluate and refine data collection and database infrastructures to meet program goals and objectives	X	X	X	X	X
<ul style="list-style-type: none"> <li>Create new features in DSL’s LAS database to track gains/losses of wetland and stream functions to accommodate the new function-based mitigation program</li> <li>Replace DSL’s LAS database with a platform that has a web and GIS interface to enable new capabilities that would result in greater efficiency and productivity</li> </ul>	X	X	X	X	X

<b>Action (g): Improve and strengthen enforcement efforts to ensure replacement of unavoidable or illegal losses</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue to evaluate and improve enforcement and compliance mechanisms to deter violations and monitor compliance	X	X	X	X	X
Continue coordination with Oregon State Police to assist in enforcement in the field	X	X	X	X	X
Continue coordination between DSL, the COE and EPA on selected strategic enforcement cases	X	X	X	X	X
Develop GIS related tools to assist in enforcement investigations and contested case proceedings	X	X	X	X	X
Utilize DSL's LAS database's enforcement module to track enforcement cases, particularly related to timely resolution and effective tracking of outcomes	X	X	X	X	X
Direct additional compliance efforts to targeted sectors that have low compliance rates	X	X	X	X	X

<b>Action (h): Provide outreach, education and technical assistance to promote sustainable protection, conservation and best use of the state's water resources</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue to make program information available through readily accessible outlets (website, fact sheets, brochures, presentations, video, etc.)	X	X	X	X	X
Continue to develop clear guidance and/or training for the regulated public on how to identify waters of the state and to determine permitting needs	X	X	X	X	X
Update DSL's Removal-Fill Guide's (that is designed to help applicants with the regulatory process) mitigation chapters to capture the mitigation program improvements and institute a plan for on-going maintenance and update of the guide		X			

Maintain an effective, organized and comprehensive communications plan <ul style="list-style-type: none"> <li>Update DSL's communications plan that addresses both internal and external communications</li> </ul>	X	X	X	X	X
	X				
Develop and implement on-line training on wetland tools for local governments <ul style="list-style-type: none"> <li>DSL will develop a web-based training platform for local government planning staff for the Wetlands Land Use Notification protocol</li> <li>DSL will develop a web-based training platform for local government planning staff for development of Local Wetland Inventories</li> </ul>	X	X	X	X	X
		X			
		X	X		
Engage citizens and stakeholders in continued improvement of Oregon's resource programs <ul style="list-style-type: none"> <li>Develop and implement a DSL stakeholder outreach and education plan</li> </ul>	X	X	X	X	X
	X	X			

<b>Action (I): Track, measure and evaluate permit/certification program activities and environmental results to better inform wetland resource decisions</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue to track permit and certification programs' activities and periodically revisit the type of information that needs to be tracked	X	X	X	X	X
Prepare DSL's annual Removal-Fill wetland gains & losses report	X	X	X	X	X
Develop DSL protocols for mapping approved mitigation site areas in GIS	X				

**Core Element: Voluntary Wetland Restoration and Protection**

**Goal:** Maintain, improve, and increase healthy wetland ecosystems through protection and restoration.



**Objective:** Protect wetlands from degradation or destruction; restore wetland acres, condition, and functions; monitor and track progress over time; and modify practices as appropriate.

<b>Action (a): Build and maintain strong partnerships with local, state, tribal, and federal agencies, nonprofit organizations and private landowners for watershed and habitat restoration and conservation</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Promote coordination between natural resource agencies and partners to establish common goals for wetland protection and restoration efforts throughout the state	X	X	X	X	X
Identify new, and expand existing strategic partnerships that leverage funds and knowledge to achieve healthy watershed and community outcomes	X	X	X	X	X
Continue to apply wetland, stream, and habitat restoration permit streamlining processes where feasible	X	X	X	X	X
<ul style="list-style-type: none"> <li>• Work on State and Federal agency partnerships on development of General Permits for use on restoration projects on federal lands</li> </ul>	X	X	X	X	X
<ul style="list-style-type: none"> <li>• Participate in the Stream Restoration Partnership whose goal is to facilitate restoration actions in and along streams to improve freshwater health</li> </ul>	X	X	X	X	X

<b>Action (b): Consider watershed planning and other strategic approaches for identifying protection or restoration needs and identifying solutions that would sustain and restore resilient ecosystems</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Integrate restoration/protection efforts on a watershed or landscape scale	X	X	X	X	X
<ul style="list-style-type: none"> <li>• Continue to participate in inter-agency initiatives to evaluate wetland and watershed condition</li> </ul>			X	X	X
<ul style="list-style-type: none"> <li>• Provide up-to-date wetland assessment guidance to partners</li> </ul>	X	X	X	X	X
Continue to develop protocols and tools necessary to apply strategic conservation in grant decisions and maintain updated information about watershed and wetland priority areas for conservation and restoration	X	X	X	X	X

Provide resources for local groups to update existing watershed planning documents and strategic plans with new information, including wetland restoration and protection priorities (for example: Conservation Opportunity Areas; ODFW Crucial Fish and Wildlife Habitat; priority wetland habitats identified through the Institute for Natural Resources' Wetlands Explorer	X	X	X	X	X
Collaborate with partners to identify watershed priorities and develop protocols to coordinate and concentrate wetland restoration efforts where there is high ecological value		X	X	X	X
SSNERR will continue to facilitate the Partnership for Coastal Watersheds and their community driven projects including; the dispersal of the Community, Lands, and Waterways status and trends report, a land use inventory and analysis, and a hydrodynamic model, all of which address estuarine planning and wetland management	X	X	X	X	X
ODFW's Western Oregon Stream Restoration Program (WOSRP) will continue to provide support to watershed councils and landowners to reduce or minimize the impacts of invasive species, restore floodplain functions, create in-stream habitat, and restore wetland and riparian areas to increase water quality and flood storage capacity	X	X	X	X	X

<b>Action (c): Develop guidance and tools to assist in strategic decisions</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Coordinate with ODFW to improve wetland restoration prioritizing tools embedded in the Oregon Conservation Strategy	X	X			
Share priorities via the Oregon Explorer, a web-based natural resources digital library, with other organizations involved in wetland protection and restoration	X	X	X	X	X
Develop protocols to monitor the effectiveness of restoration sites in meeting project objectives			X		

<b>Action (d): Support an enduring, high-capacity local infrastructure for conducting watershed and habitat restoration and conservation</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Establish and articulate policies related to the support and development of a diverse local infrastructure for watershed restoration	X	X	X	X	X
Support the Oregon Watershed Enhancement Board's watershed council capacity program to empower local communities, provide base funding, and promote strategic partnerships	X	X	X	X	X
Where appropriate, support long-term, large-scale restoration investments identified and led by local partners (OWEB's Focused Investment Partnerships).	X	X	X	X	X
Track, report and communicate meaningful ecological outcomes in specific locations through Special Investment Partnerships (i.e. the Upper Deschutes and the Willamette Basin)	X	X	X	X	X
Support and encourage private landowners to enroll properties in ODFW's Wildlife Habitat Conservation and Management Program (WHCMP) to voluntarily conserve and restore native wildlife habitat	X	X	X	X	X
Foster collaboration of citizens, agencies, and local interests	X	X	X	X	X
Support and fund landowner projects that improve watershed health	X	X	X	X	X
Coordinate and sponsor meetings and conferences to share ideas and expertise	X	X	X	X	X

<b>Action (e): Monitor and track progress over time, document results, and modify practices as appropriate</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Coordination by state and federal partners with The Conservation Registry, an online centralized database that records, tracks and maps conservation projects	X	X	X	X	X
Continue to administer the Oregon Watershed Enhancement Board's (OWEB) Oregon Watershed Restoration Inventory (OWRI) database	X	X	X	X	X

<ul style="list-style-type: none"> <li>enter and track acquisition sites and restoration projects</li> <li>provide OWRI data to users and the public through partnerships that supply a geodatabase and on-line resources</li> </ul>	X	X	X	X	X
	X	X	X	X	X
Evaluate potential for including annual assessment of wetland function and condition for OWEB's performance measure reporting	X	X			
Continue to implement monitoring programs to build knowledge and strengthen feedback about Oregon Watershed Enhancement Board investments and to support adaptive management for outcome improvements	X	X	X	X	X

<b>Action (f): Provide information to help Oregonians understand the need for and engage in activities that support healthy watersheds</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Continue developing outreach programs and promotional strategies	X	X	X	X	X
Encourage projects and "capacity-building" grants that foster cooperation, promote education about watershed concepts, and supports citizen groups	X	X	X	X	X
Support programs that teach students and adults about the importance of watershed health and restoration efforts	X	X	X	X	X
Report on the progress of the state's programs and plans and how they are working to restore watershed conditions	X	X	X	X	X

### **Core Element: Water Quality Standards for Wetlands**

**Goal:** To restore, maintain and enhance the quality of Oregon's wetlands in accordance with the Clean Water Act as well as to work with Oregonians for a healthy, sustainable environment.

**Objective:** Integrate water quality monitoring and assessment into the State and Tribal wetland monitoring strategies.

<b>Action (a): Work toward developing standards for wetlands that best serve the state's goals</b>					
<b>Activity</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
SSNERR staff will continue to collect data at the System-Wide Monitoring Program (SWMP) water quality monitoring sites, established along the South Slough's estuarine gradient in 1995, to enable researchers to track short term variability and long terms change in a variety of water quality attributes (pH, temperature, dissolved oxygen, nutrients, etc.)	X	X	X	X	X
Participate in the National Wetlands Condition Assessment (NWCA) and the National Wetlands Monitoring and Assessment Work Group (NWMAWG)	X	X	X	X	X
Evaluate NWCA 2016 monitoring data when made available	X				
Collaborate with monitoring partners to identify wetland monitoring designs and indicators		X	X	X	X