# **Oregon Wetland Program Plan**

2011 - 2016

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Prepared by the
Oregon Department of State Lands
Wetlands & Waterways Conservation Division

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



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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 in a variety of ways: 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. 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). With these landmark statutes passed in 1967, the Oregon Legislative Assembly recognized that the protection, conservation and best use of the water resources of the state are vital to the economy and well-being of the state and its people.

The legislative assembly also recognized that wetlands provide many functions and values that are essential to the state. 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 require compensation for "functions and values for the waters of the state."

The Wetlands Program was established by statute in a 1989 comprehensive wetlands conservation bill. The Program is responsible for developing and maintaining the Statewide Wetland Inventory, providing wetland planning assistance, developing standards and tools, and providing public information and training. The Removal-Fill Law and the Wetlands Program are administered by the Wetlands & Waterways Conservation Division at Oregon Department of State Lands (DSL).

However, Oregon's aquatic resources are affected by many natural resource programs' requirements, decisions and actions. 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's (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 protect the quality of Oregon's environment.
- Oregon Department of Fish and Wildlife's Habitat Resources Program and Conservation Program include In-Water Timing Guidelines, Habitat Mitigation Recommendations, fish passage and fish screening requirements, Scientific Take Permit, and the Oregon Conservation Strategy, which is an overarching state strategy for protecting and enhancing fish and wildlife and their habitats.
- Oregon Department of Land Conservation and Development 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 mission is to assure sufficient and sustainable water supplies and
  responsible water management through restoring and protecting stream flows and watersheds, requiring WaterUse and Stored-Water permits, and developing 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 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 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 Agricultural Water Quality Management Program addresses water pollution associated with agricultural lands and activities, the Soil Water and Conservation District Program provides technical assistance and grants, and the Native Plant Conservation Program works to conserve native plant diversity.
- Oregon Department of Geology and Mineral Industries regulates reclamation and mining practices (out-of-stream mining).
- Oregon Watershed Enhancement Board's (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, promotion of local watershed councils, and development of watershed 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.

Over the past 20 years, DSL with it's 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, which was released as the Oregon Rapid Wetland Assessment Protocol in May 2009. 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. Another WPDG project was titled: *Making Wetland Restoration Count* grant. Awarded in 2005, the project facilitated the collaboration between DSL, the Oregon Watershed Enhancement Board, and restoration community to evaluate and improve the environmental outcome and tracking of voluntary wetland restoration projects. Another recent grant-funded project was The *Regulatory Environmental Outcome Demonstration Grant* that allowed the state with federal partners to pilot a permit-streamlining effort, which then laid the groundwork for the state's current 404 Assumption effort. In 2010, DSL received a grant to support Oregon's Department of Environmental Quality in assessing wetlands for the 2011 EPA National Wetland Condition Assessment. Grant monies also funded an effort to update the 1993 catalogue of wetland plant communities in Oregon and make available online through the Oregon Wetland Explorer, which will inform

permit decisions, as well as planning and education programs. DSL's most recent WPDG funds an upgrade to Oregon's Rapid Wetland Assessment Protocol, which will improve the efficiency of the tool, allow for it's use in identifying locally significant wetlands by local governments, and facilitate it's use in ecosystem credit accounting.

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.

#### **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	2011-12	2013	2014	2015	2016
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	Х				
Develop a five-year monitoring and assessment strategy that will guide and coordinate statewide efforts	Х				
Establish an Oregon Wetlands Monitoring Workgroup to continue refinement and implementation of the strategy; to build and strengthen interagency participation; and to provide an ongoing mechanism for identifying common assessment needs, priorities, and funding resources	Х	Х			
Evaluate and develop monitoring standards, methods, protocols that best serves the monitoring objectives of the state	Х	Х	Х	Х	Х
Work toward integrating wetland monitoring efforts with other aquatic monitoring efforts	Х	Х	Х	Х	Х
<ul> <li>Collaborate with the Pacific Northwest Aquatic Monitoring Partnership, which provides a forum for coordinating state, federal, and tribal aquatic habitats and monitoring of aquatic resources</li> </ul>	Х	Х	Х	Х	Х

Coordinate with the USFWS's North Pacific Landscape Conservation Cooperative, who provides scientific and technical support for landscape conservation in an adaptive management framework geared toward climate change and other biological stressors	Х	Х	Х	Х	X
Establish a data management approach for coordinated data standards, storage, management, and dissemination of monitoring and assessment data				Х	X
Collaborate with and support the Institute for Natural Resources, the Wetlands Conservancy, and Oregon State University in the continued development of the Oregon Wetlands Portal to integrate and share wetland information and provide online wetland tools, such as the support tool for applying the Oregon Rapid Wetland Assessment Protocol (ORWAP)	Х	X	X	X	X

Action (b): Continue wetland mapping efforts and development of Level 1 Landscape Assessments and tools						
Activity	2011-12	2013	2014	2015	2016	
Participate in the National Wetland Mapping Consortium, which strives to support the management of wetland resources through enhanced wetland mapping and monitoring	Х	Х	X	X	X	
Quality control the Wetlands of Oregon database, developed by the Institute for Natural Resources, to use as the framework for an updated Statewide Wetlands Inventory			Х			
Develop an approach and schedule, in coordination with USFW and other partners, for updating the NWI statewide		X	X			
<ul> <li>Investigate the feasibility of incorporating Local Wetland Inventories into the NWI master geodatabase using FGDC mapping standards</li> </ul>	Х					

Conduct Status and Trends studies:					
Status and Trends Report – Willamette Valley Wetland Change Study 2005-2014			Х		
<ul> <li>Status and Trends Report – Complete the stalled Oregon Coastal Wetland Change Study 1985 – 2001</li> </ul>		?			
Investigate conducting other regional studies				Х	Х
Develop an ORWAP "lite" assessment method for use by local governments in the significant wetlands analysis during their Goal 5 wetland planning	X	Х			
Develop statewide baseline Level 1 data on wetland condition, which includes investigation of existing data, identifying data gaps, determining indicators, and developing a scoring protocol			Х	Х	
Investigate the utility of enhancing NWI maps with LLWW descriptors and/or the feasibility of incorporating ORWAP results that could identify wetlands types and provide functional assessments profiles over broad geographic areas or across wetland types	Х	Х			
Conduct pilot studies to develop and test watershed-based wetland characterizations including functional assessment tools for wetlands and streams	Х	Х	Х	Х	Х
Develop spatial assessment tools that can be used to: rank wetlands based on their suitability for conservation, restoration, and mitigation needs; ascertain strategic siting of restoration projects to provide the greatest ecological benefits; determine conservation/restoration priorities areas; identify, avoid or protect high quality wetlands; identify ecological connections; evaluate surrounding land use effects; identify cases and sources of degradation; identify potential threats; and determine cumulative effects of impacts	X	Х	Х	Х	Х

Action (c): Development and refinement of Level 2 Rapid Assessment methods and tools					
Activity	2011-12	2013	2014	2015	2016
Apply the Oregon Rapid Wetland Assessment Protocol (ORWAP) to the National Wetland Condition Assessment (NWCA) sites to compare condition results with the USRAM results	Х				
Refine the Oregon Rapid Assessment Protocol (ORWAP) in order to facilitate the protocols use in ecosystem credit accounting: (a) analyze and adjust indicators, (b) apply the new version to a statistical sample of wetland sites statewide, and (c) scale all function from 0 to 10	Х	X	X		
Coordinate and participate in 6 ORWAP pilot projects, including the Lane Council of Government's efforts with 4 Willamette Valley cities (determine feasibility of using ORWAP to replace the outdated Oregon Freshwater Wetland Assessment Methodology when identifying Locally Significant Wetlands)	Х				
Analyze ORWAP condition and functional results from the statistical sampling of wetland sites			X		
Update and refine the Oregon Wetland Plant Community Classification that is utilized in the state compensatory mitigation rules for wetland preservation, the Oregon Wetland Rapid Assessment Method's Wetland Types for Conservation Concern, and the Oregon Explorer's Special Areas of Concern	Х				
Establish a wetland reference network that reflects a human-induced disturbance gradient for Oregon's wetland types	Х	Х	Х	Х	Х
Interpret HGM scores from reference datasets for tidal wetlands in the coastal ecoregion and for riverine impounding and slope/flats in the Willamette Valley Ecoregion		Х			
Continue to develop and improve effectiveness monitoring methods	Х	Х	Х	Х	Х
Evaluate the utility of a Floristic Quality Assessment Index as a biotic condition indicator for wetland condition			Х		

Action (d): Develop Level 3 Intensive Site Assessment methods and tools					
Activity	2011-12	2013	2014	2015	2016
Identify a set of core indicators that are relevant for established monitoring objectives for intensive site assessments			Х	Х	Х
Develop monitoring design(s) and site selection approach(s) for the statewide monitoring effort			Х	Х	Х
Incorporate climate change adaptation data needs identified by the Oregon Climate Assessment Report, The Oregon Climate Change Adaptation Framework, and other relevant sources into monitoring efforts	Х	Х	Х	Х	Х
Develop a systematic process to assess ecological health of the South Slough Reserve and associated watersheds to inform coastal management decisions	Х	Х	Х	Х	Х
Build a monitoring infrastructure to characterize the short-term variability and long-term changes associated with a variety of estuarine wetland and watershed attributes and process	Х	Х	Х	Х	Х
<ul> <li>Set up SSNERR (South Slough National Estuarine Reserve Research Reserve) as a 'sentinel' site to provide information about climate change to Oregon's coast</li> </ul>	Х				
Investigate the feasibility of completing a stalled statewide coastal Habitat Classification Scheme		Х			
Continue and expand the collaborative DSL and NRCS's wetland growing season study related to wetland determination efforts	Х	Х	Х	Х	Х
Participate in the National Wetland Condition Assessment and in the National Wetlands Monitoring and Assessment Work Group	Х	Х	Х	Х	Х
Explore the feasibility of conducting a NWCA intensification study in a targeted Oregon region (i.e. Willamette Valley)			Х		

### **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 ad effectiveness	vances to	improv	e prog	ram	
Activity	2011-12	2013	2014	2015	2016
Move from an acreage based compensatory wetland mitigation based approach to functions-based replacement within an eco-system rubric:	Х	Х	Х	Х	
<ul> <li>Coordinate with the Willamette Partnership, federal partners and stakeholders to develop an implementation strategy to move Oregon's Removal-Fill Program into a Functions-based Accounting System</li> </ul>	Х	X			
<ul> <li>Coordinate with state, federal, and stakeholder groups on the investigation and implementation of an eco-system marketplace for wetland and other resource mitigation credits such as ESA, water quality, and floodplains</li> </ul>	X	Х	X	X	
Explore applicable options to enable electronic web-based regulatory activities	Х	Х	Х	Х	Х
<ul> <li>Develop a web-based form and process that enables local governments to submit electronic Wetland Land Use Notifications and supporting documents to DSL</li> </ul>	Х				
Develop a web-based application that enables applicants to submit electronic General Authorization (GAs) and supporting documents to DSL	X				
<ul> <li>Evaluate feasibility of electronic submittal of wetland delineation reports coupled with digital delineation maps</li> </ul>	X				

Develop a web-based form for submittal and completion of Wetland     Determination Requests for the general public	Х				
Evaluate LinkDocs software capability to provide electronic permitting for the DSL-COE Removal-Fill Joint Permit Application				Х	Х
Evaluate LinkDocs capability to provide electronic submittal of wetland mitigation monitoring reports by permitees		Х			
Develop a Removal-Fill Guide that is designed to help applicants. Institute a plan for on-going maintenance and update of the Guide	Х				
Continue to develop Department of Environmental Quality Internal Management Directives for the Permit Writers' Manual in order to provide guidance and tools for staff to insure staff has the necessary information and skills to issue water quality permits	Х	Х	Х	Х	Х
Explore new training mediums for staff as necessary to support regulatory programs' effectiveness	Х	Х	Х	Х	Х

Action (b): Coordinate and collaborate among agencies and programs to support program goals and streamline	
efforts	

Activity	2011-12	2013	2014	2015	2016
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	Х	X	X	Х	X
Continue to identify opportunities to streamline permit processes	Х	Х	Х	Х	Х
Develop and implement notice-based General Authorization (GAs) for activities that are similar in nature, will not result in long-term harm and will cause only minimal individual and cumulative environmental effects (i.e. gravel removal, culvert replacement)	Х				

Develop and implement General Permits (GPs) for activities that are similar in nature or recurring and have predictable outcomes and effects	Χ	X	Х	Х	
Coordination with COE for development of federal Regional General Permits (RGPs) and state General Permits (GPs)	X	X	Х	Х	X
Develop and adopt new rules on a Vernal Pool General Permit and work with COE on resolving issues related to a draft RGP	Χ				
Coordinate with COE on the development of a RGP and GP for Industrial Land Development for Linn and Benton Counties	Х	Х			
Participate in the Governor's Regulatory Streamlining and Simplification Project to create a roadmap on how to deliver services with greater efficiency and coherence	Х				
Department of State Lands submittal to EPA for assumption of the CWA 404 permitting authority and if feasible, implementation of 404 assumption	Х	Х	Х		
Prepare legislative concept for approval to assume the program	Х				
Submit agency sponsored bill to 2013 Legislative Assembly		Х			
Submit the state's application to EPA for a pre-application consultation	Х				
Develop supplemental program elements for the 404 assumption application, including MOA's with DOGAMI, ODF and the federal Services (optional)	Х	Х			
Develop internal operation procedures and revise application forms and other materials to use for state-issued 404 permits	Х	Х			
Convene 404 Assumption Advisory Committee meetings and conduct public outreach on the assumption process	Х	Х			
Complete Corps/DSL transition period; commence full assumption			Х		
Development of Oregon's Integrated Water Resource Strategy, which will provide an action agenda for the State to follow that takes into consideration	Х				

water quantity, water quality, and ecological needs					
Utilize the LEAN/Kaizen approach to identify process improvements in order to streamline 404/401/Fill-Removal operations with a focus on pre-application and coordination meetings	Х	X			
Participation on the CORE Team 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	Х	Х	Х	Х	Х
Collaboration with Freshwater Trust on the Stream Restoration Partnership	Х	Х	Х	Х	Х
Provide support and technical input on federal CWA related issues	Х	Х	Х	Х	Х
Partner on a NOAA grant to acquiring improved tidal datum information for determining jurisdiction and sea level rise planning	Χ				
Update the interagency (EPA, COE, DSL) Wetland Delineation Report Guidance	Х				
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	Х	Х	Х	Х	Х
Maintain support for ODOT/DOT Oregon Transportation Investment Act program and collaboration with ODOT on transportation related infrastructure improvements	Х	Х	Х	Х	Х
Interagency natural resource programs cross training of staff on regulatory authorities, policies, and procedures	Х	Х	Х	Х	Х
Continue coordination among state and federal natural resource agencies and programs	Х	Х	Х	Х	Х

Action (c): Improve mitigation success and ensure assessments and mitigative results	ion lead to	desire	d envir	onmen	ital
Activity	2011-12	2013	2014	2015	2016

Continue developing and refining aquatic resource functional and condition assessment methodologies as needed	Х	Х	Х	Х	Х
Review post-construction mitigation functional assessments for permittee- responsible mitigation, which were implemented in 2010, to assess whether functional replacement is being achieved			Х		
Track and review all monitoring reports for permittee-responsible mitigation	Х	Х	Х	Х	Х
Evaluate and revise, as needed, the Routine Monitoring Guidance that provides a standard way to collect and report data for wetland mitigation monitoring	Х	Х	Х	Х	Х
Refine post-construction monitoring protocols to create consistency for monitoring of compensatory mitigation sites	Х	Х			
Evaluate the routine compensatory mitigation performance standards developed in 2009 to determine their effectiveness in obtaining functional replacement			Х	Х	Х
Develop and implement a statewide banking/mitigation program for stream impacts	Х	Х			
Participate in the development of a stream mitigation framework and stream classification method through the Willamette Partnership's EPA Grant	Х	Х			
Evaluate and improve strategies for long-term protection and management of mitigation sites including legacy mitigation banks	Х	Х	Х	Х	Х
Coordinate with the COE to ensure the approved In-Lieu-Fee program is working successfully	Х	Х	Х	Х	Х
Expand the In-Lie-Fee program to allow for advance release of mitigation credits for certain watersheds that are currently underserved by banks	Х				
Encourage establishment of new mitigation banks (currently at 25) throughout the state	Х	Х	Х	Х	Х

# Action (d): Develop or refine standards and tools to more effectively and consistently administer regulatory activities and provide decision support

Activity	2011-12	2013	2014	2015	2016
Restructure, enhance, and update Oregon's Statewide Wetland Inventory (SWI)	X	Х	Х	Χ	Х
Quality control the Wetlands of Oregon database developed by the Institute for Natural Resources to use as framework for an updated SWI			X		
<ul> <li>Pilot the incorporation of delineations and compensatory wetland mitigation polygons into the SWI, starting with the cities of Beaverton and Gresham (two efforts in which the cities are digitizing DSL records)</li> </ul>		X			
Update the Local Wetlands Inventory Standards and Guidelines to incorporate current GIS-based technologies and data			X		
<ul> <li>Develop a DSL on-line wetland mapper with a GIS-based SWI that includes polygons from the NWI, Local Wetland Inventories, and DSL- approved delineations</li> </ul>				X	
Update the Oregon Wetland Plant Community Classification	Х				
Incorporate any new rare wetland plant communities identified by the Oregon Wetland Plant Community Classification update into the compensatory mitigation rules for wetland preservation, the Oregon Rapid Wetland Assessment Method's Wetland Type for Conservation Concern, and the Oregon Explorer's Special Areas of Concern		X			
Improve the Oregon Explorer ORWAP web-based tool to increase efficiency in obtaining information to complete the Oregon Rapid Wetland Assessment Protocol (ORWAP)		Х			
Integrate climate change considerations into program policies and decisions to increase wetland ecosystem resiliency	Х	Х	Х	Х	Х

Action (e): Promote and assist in development of local government wetland planning solutions and tools								
Activity	2011-12	2013	2014	2015	2016			
Continue to work with local governments on development of Local Wetland Inventories (LWIs) for their Goal 5 natural resources planning	X	Х	Х	Х	Х			
Participation on the Economic Recovery Review Council to foster industrial development and coordinate permit processes	Х	Х	Х	Х	Х			
Participate on the Governor's Regional Solutions Teams to support community development needs and solutions by focusing and integrating agency's resources on regional environmental priorities	Х	Х	Х	Х	Х			
Develop approaches to define and inform local governments of indirect and cumulative impacts of landscape changes on wetland and other aquatic resources					Х			
Oregon Solution initiatives collaboration on projects that support sustainable community solutions to environmental issues	Х	Х	Х	Х	Х			

Action (f): Improve data management to maximize efficiency and assist in decision-making						
Activity	2011-12	2013	2014	2015	2016	
Continue to evaluate and refine data collection and database infrastructures to meet program goals and objectives	Х	Х	Х	Х	Х	

 Refine DSL's Land Administration System (LAS) resource gains and losses database to ensure appropriate tracking of wetland gains and losses, receipt of monitoring reports and recording of monitoring results (compliance and performance standards) for both permitted and

Х		

unauthorized activities				
Create a new feature in DSL's LAS database to track gains/losses of wetland functions to accommodate function based accounting		X	Х	
Develop and implement tracking of gains/losses for stream impacts and mitigation		Х		

Action (g): Improve and strengthen enforcement efforts to ensure replacement of unavoidable or illegal losses								
Activity	2011-12	2013	2014	2015	2016			
Continue to evaluate and improve enforcement and compliance mechanisms to deter violations and monitor compliance	Х	Х	Х	Х	Х			
Improve coordination with Oregon State Police to assist in enforcement in the field	Х	Х	Х	Х	Х			
Continue coordination with the COE and EPA on selected strategic enforcement cases	Х	Х	Х	Х	Х			
Develop GIS related tools to assist in enforcement investigations and contested case proceedings	Х	Х	Х	Х	Х			
Utilize DSL's Land Administrative System (LAS) database's enforcement module to track enforcement cases, particularly related to timely resolution and effective tracking of outcomes	Х	Х	Х	Х	Х			
Direct additional compliance efforts to targeted sectors (such as agriculture) that has low compliance rates	Х	Х	Х	Х	Х			
Action (h): Provide outreach, education and technical assistance to promote sustainable protection, conservation and best use of the state's water resources								
Activity	2011-12	2013	2014	2015	2016			
Continue to make program information available through readily accessible	Х	Х	Х	Х	Х			

outlets (website, fact sheets, brochures, presentations, video, etc.)					
Continue to develop clear guidance and/or training to the regulated public on how to identify waters of the state and to determine permitting needs	Х	Х	Х	Х	Х
Develop and implement on-line training for wetland outreach and assessment tools	Х	Х	Х	Х	Х
Develop an on-line training platform for local government planning staff for the Wetlands Land Use Notification protocol		Х			
Develop an on-line training platform for local government planning staff for development of Local Wetland Inventories			Х		
Continue outreach efforts to stakeholders, including relationship building activities	Х	Х	Х	Х	Х

Action (I): Track, measure and evaluate permit/certification program activities and environmental results to better inform wetland resource decisions							
Activity	2011-12	2013	2014	2015	2016		
Continue to track permit and certification programs' activities and revisit periodically the type of information that needs tracked	Х	Х	Х	Х	Х		
Prepare annual Removal-Fill Program & Wetland Program trackable wetland gains & losses report		Х	Х	Х	Х		
Continue DSL's mitigation site mapping project to enter sites back to 1999 into a geo referenced database	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.

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

Activity	2011-12	2013	2014	2015	2016
Coordinate with natural resource agencies and partners to establish common goals for wetland protection and restoration efforts throughout the state		Х	X	X	Х
Identify new and expand existing strategic partnerships that leverage funds and knowledge to achieve healthy watershed and community outcomes	Х	Х	Х	Х	Х
Continue to apply wetland and habitat restoration permit streamlining processes where feasible	Х	Х	Х	Х	Х
Working on State and Federal agency partnerships on development of General Permits for use on restoration projects on federal lands	Х	Х	Х	Х	Х
<ul> <li>Coordinating with federal and state partners for development of regional general permits for habitat enhancement projects that include placement of wood, boulders, and gravel</li> </ul>	Х	Х	Х	Х	Х

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

Activity	2011-12	2013	2014	2015	2016
Integrate restoration/protection efforts on a watershed or landscape scale			Χ	Х	Х

Develop and pilot tools within targeted watersheds (selected watersheds in the Willamette, Umpqua, and Rogue River Basins)			Х	Х	Х
<ul> <li>Update and expand watershed assessments to include wetland assessments</li> </ul>	Х	Х	Х	Х	Х
Continue to develop protocols and tools necessary to apply strategic conservation in grant decisions	X	Х	Х	Х	Х
<ul> <li>Evaluate revising Oregon Watershed Enhancement Board's (OWEB) Restoration Priorities and incorporate the priorities into the grant application review process. Ensure wetland function and condition is integrated into the priorities</li> </ul>	Х	X			
Maintain OWEB's Ecosystem Service Model program that supports research to assess the potential for ecosystem services markets to enhance restoration and conservation opportunities	Х	X	Х	X	Х
Provide resources for local groups to update existing watershed planning documents with new information, including wetland restoration and protection priorities	Х	Х	Х	Х	Х
Collaborate with partners to identify watershed priorities and develop protocols to coordinate and concentrate wetland restoration efforts where there is high ecological value		Х	Х	Х	Х
Implement monitoring and research programs to build knowledge and strengthen feedback about OWEB investments and to support adaptive management for outcome improvements	Х	Х	Х	Х	Х
Continue ODFW's Western Oregon Stream Restoration Program that works with 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	Х	Х	Х	Х	Х

Action (c): Develop guidance and tools to assist in strategic decisions					
Activity	2011-12	2013	2014	2015	2016
Develop a spatial statewide wetland prioritization tool that will rank wetlands for suitability for conservation, restoration, and mitigation needs. The tool will be developed by the Institute for Natural Resources and Portland State University	Х				
Share priorities via the Oregon Explorer, a web-based natural resources digital library, with other organizations involved in wetland protection and restoration		Х	Х	Х	Х
Continue five-year updates to the Oregon Department of Fish and Wildlife's Oregon Conservation Strategy, which is a long-term conceptual framework and guide to conserving the species and habitat that defines the nature of Oregon	X				
Develop monitoring protocol to monitor the effectiveness of restoration sites in meeting project objectives			Х		

Action (d): Support an enduring, high-capacity local infrastructure for conducting watershed and habitat restoration and conservation						
Activity	2011-12	2013	2014	2015	2016	
Establish and articulate policies related to the support and development of a diverse local infrastructure for watershed restoration	Х	Х	Х	X	Х	

Evaluate and adjust the Oregon Watershed Enhancement Board's watershed council support grant review and funding processes to build local capacity, provide base funding, and promote strategic partnerships	Х	X	X	X	X
Provide technical skills and assistance to build capacity, secure additional funding and increase local organizational resilience	Х	Х	X	X	Х

Continue to target long-term, large-scale restoration commitments to address specific ecological outcomes in specific locations through Special Investment Partnerships (i.e. the Upper Deschutes and the Willamette Basin)	Х	Х	Х	Х	Х
Work with counties to enroll properties in ODFW's Wildlife Habitat Conservation and Management Program	Х	Х	Х	Х	Х
Foster collaboration of citizens, agencies, and local interests	Х	Х	Х	Х	Х
Support and fund landowner projects that improve watershed health	Х	Х	Х	Х	Х
Coordinate and sponsor meetings and conferences to share ideas and expertise	Х	Х	Х	Х	Х

Action (e): Monitor and track progress over time, document results, and modify practices as appropriate							
Activity	2011-12	2013	2014	2015	2016		
Coordination by state and federal partners with The Conservation Registry, an online centralized database that records, tracks and maps conservation projects	X	Х	X	X	Х		
Continue to administer the Oregon Watershed Enhancement Board's (OWEB) Oregon Watershed Restoration Inventory (OWRI) database	Х	Х	Х	Х	Х		
enter and track acquisition sites and restoration projects	Х	Х	Х	Χ	Х		
<ul> <li>provide OWRI data to users and the public through partnerships that supply a geodatabase and on-line resources</li> </ul>	Х	Х	Х	Χ	Х		
Develop methods to track percentage of OWEB's watershed restoration grants that address established basin and watershed restoration priorities				Х			
Evaluate potential for including annual assessment of wetland function and condition for OWEB's performance measure reporting				Х	Х		

Action (f): Provide information to help Oregonians understand the need for and engage in activities that support healthy watersheds

Activity	2011-12	2013	2014	2015	2016
Continue developing outreach programs and promotional strategies	X	Χ	Х	X	Х
Encourage projects and "capacity-building" grants that foster cooperation, promote education about watershed concepts, and supports citizen groups	Х	Х	Х	Х	Χ
Support programs that teach students and adults about the importance of watershed health and restoration efforts	Х	Х	Х	Х	Χ
Report on the progress of the state's programs and plans and how they are working to restore watershed conditions	Х	Х	Х	Х	Х

## **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.

Action (a): Work toward developing standards for wetlands that best serve the state's goals					
Activity	2011-12	2013	2014	2015	2016
Participate in the National Wetlands Condition Assessment and the National Wetlands Monitoring and Assessment Work Group (NWMAWG)	X	X	Х	X	X
Evaluate NWCA 2011 monitoring data when made available				X	
Participate in the Association of Wetland Managers Water Quality Standards for Wetlands Work Group	X				

Collaborate with monitoring partners to identify wetland monitoring designs and indicators	Х	Х	Х	Х
Collect water quality, sediment and tissue data in perennial wetlands to assess risks from toxic contaminants to aquatic life uses.			Х	Х
Collect data on mercury, methyl mercury and methylation potential in riparian wetlands.			Х	Х
Develop potential biocriteria for wetland condition assessments.	Χ	Х	Х	Х