



Mid Coast Agricultural Water Quality Management Area Plan Review Report

Spring 2011

Local Advisory Committee Meets to Review Area Plan

Executive summary

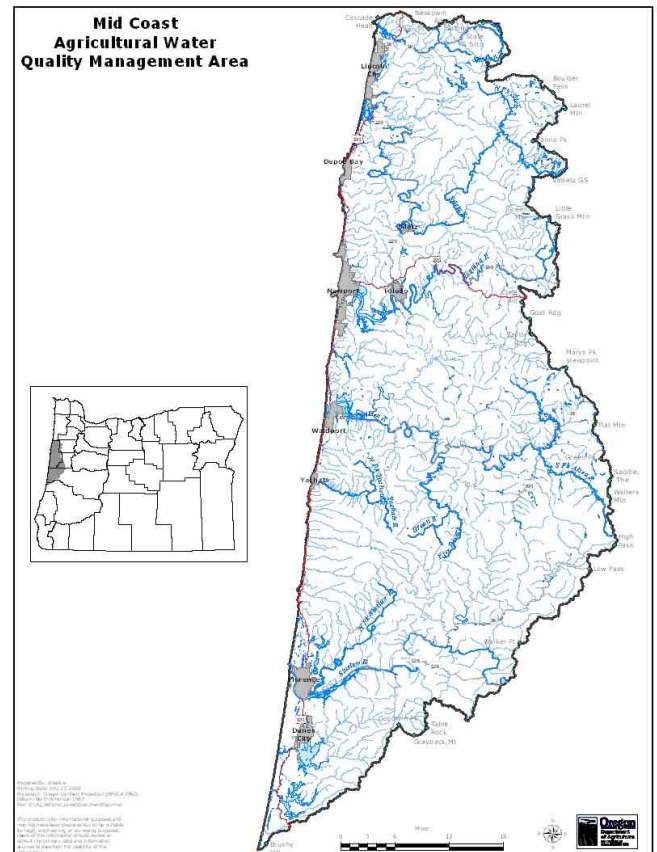
On March 9, 2011, the Mid Coast Local Advisory Committee (Committee) met with the Oregon Department of Agriculture (Department) and the Lincoln and Siuslaw Soil and Water Conservation Districts (SWCD) to review implementation of the Mid Coast Agricultural Water Quality Management Area Plan (Area Plan) and Rules.

Updates to the Area Plan during the last review (March 2009) identified twenty-six targets for education and outreach, land stewardship and water quality projects, funding and administration, and monitoring. Also, the Committee recommended targeted riparian restoration and development of rural living handbooks. From January 2009 to December 2010, the SWCDs accomplished 22 of the 26 targets that were developed, implemented 18 riparian projects, and the Lincoln SWCD is near completion of a rural living handbook. The Committee complimented the SWCDs on the work that they were able to accomplish related to implementation of the Area Plan.

The Committee reiterated impediments to establishment of riparian vegetation, including:

- Invasive vegetation such as reed canarygrass.
- The Department enforces the riparian vegetation rule only when agricultural activity is present.

At the review, a subcommittee was formed to begin working on prioritization. The subcommittee will work with state agencies including the Department, the Department of Environmental Quality, and Oregon Department of Fish and Wildlife to stay apprised of prioritization activities and inform the Committee to make recommendations.



The Mid Coast Agricultural Water Quality Management Area boundaries are the Coast Range Mountains to the east, the Pacific Ocean to the west, the Salmon River-Neskowin Creek watershed boundary to the north, and the Tahkenitch Lake-Smith River watershed boundary to the south. The management area includes the Alsea, Salmon, Siletz, Siltcoos, Siuslaw, Tahkenitch, Yachats, and Yaquina watersheds, as well as several small watersheds that drain directly to the Pacific Ocean.

Committee Members for 2011

Wayne Hoffman, Vice Chair	Betty Huff
Kevin Carroll	Elmer Ostling
Richard Huff	Howard Pazdral
Sally Owens	Joe Steere
Jeff Feldner	

Mid Coast Agricultural Water Quality Plan and Rules

The Mid Coast Area Plan and Rules were developed with advice from the Committee. The Area Plan and Rules are developed in accordance with the Agricultural Water Quality Management Act of 1993. After review by the State Board of Agriculture, the director of ODA approved the Area Plan and Rules in 2002.

Since then, the Committee met to review the Area Plan and Rules in 2004, 2008, and an in-depth review from July of 2008 to March of 2009 (updates specific to the 2008/2009 review are on page 6).

Through the Mid Coast Area Plan, the Committee identified a mission “to implement and evaluate an outcome-based Plan that will protect and improve water quality and promote the continued economic viability of all agricultural operations, large and small.”

In addition to the mission, the Committee identified a goal “to maintain and improve water quality in agricultural areas, meet state water quality standards and protect applicable beneficial uses.”

The Committee identified the following objectives to implement the mission and goal:

- Education and outreach.
- Identify, support, and implement incentives or good land stewardship, and water quality enhancements.
- Identify and secure funding for administration and implementation of the program to achieve the mission, goal, objectives, and strategies of the Area Plan.
- Encourage monitoring and evaluation of local water quality, watershed conditions, and effectiveness of the Area Plan and Rules.

Lastly, the Committee developed several strategies and targets for implementation of the Area Plan.

See Attachment A for a summary of implementation related to the strategies and targets.

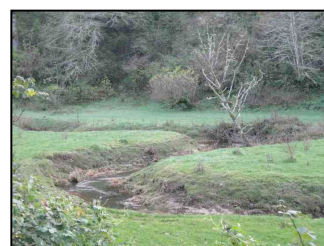
The following is a summary of regulations that apply in the Mid Coast Management Area:

1. Riparian vegetation must provide the water quality functions of shade, streambank stability, and filtration of pollutants.
2. Landowner actions may not cause pollution to any waters of the state or place wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means. In addition, there are rules specific to nutrients, irrigation return flow, and sediment in the Mid Coast area.

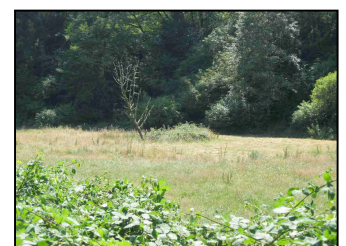
Compliance investigations

In 2009 and 2010, ODA investigated four new compliance cases and followed up on two existing compliance cases. There were no requests for alternate measures.

Issue	Resulting Action
Excessive foam in stream	Not enough information
Manure Management	Initial: Letter of Warning Follow-up: Water Quality Advisory
Livestock impacts to riparian vegetation	Initial: Letter of Warning Follow-up: Letter of Warning Follow-up Letter of Compliance
Livestock impacts to riparian area and manure management	Letter of Warning: Will follow-up after October 2011
Follow-up to previous years investigations	
Livestock impacts to riparian vegetation	Oct. 2006: Letter of Warning July 2008: Follow-up March 2009: Letter of Compliance
Livestock impacts to riparian vegetation	Nov. 2006: Letter of Warning May 2007: Water Quality Advisory March 2008: Letter of Warning July 2008: Notice of Non-Compliance July 2009: Letter of Compliance



November 2008



July 2009



Lincoln Soil and Water Conservation District



Lincoln SWCD gets trendy

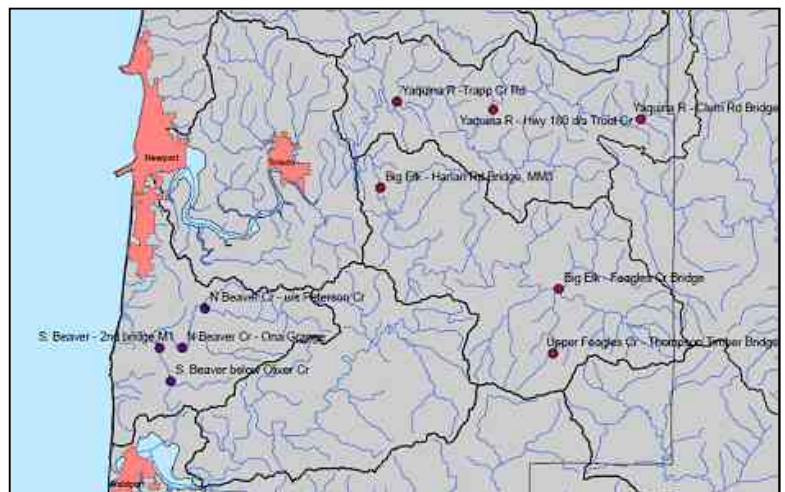
Lincoln SWCD (District) has revamped their water quality-monitoring program in an effort to establish a water quality baseline for the several streams of the Mid Coast Basin. The District began baseline or trend monitoring, throughout the Yaquina and Big Elk watersheds in October 2009. These efforts were expanded to the Beaver Creek (Alsea) watershed in October 2010. The program's objective is to gather sufficient data to characterize the water quality conditions through time and space within these watersheds. This information will give the District, and other interested stakeholders, the ability to see how stream conditions change from season to season, year after year. High quality and consistent data will be a valuable tool to:

- Isolate non-point source pollution (NPS) sources
- Determine restoration, monitoring, and outreach priorities
- Quantify project and TMDL effectiveness over time
- Inform policy and land/water use decisions

The sampling locations are spread throughout the watershed and vary in local land use, elevation in the watershed, and stream conditions. Every three to four weeks the district samples for temperature, conductivity, dissolved oxygen, bacteria (*E. coli*), pH, turbidity, and stage height. On the day of sampling, the District also takes note of precipitation, changes in the landscape that may affect the local water quality, and the flow measured by a stream gauge at a sampling site on the Yaquina River. The results are disseminated monthly to the public via the District's listserv and to the Department of Environmental Quality to be included in the statewide LASAR (Laboratory Analytical Storage and Retrieval) database. To sign up to receive the water quality results, email: stacy@lincolnswcd.org.

A useful relationship the District looks at is how different precipitation amounts affect *E. coli* levels. For example, if *E. coli* levels are high with or without any rainfall, it tells a different story than if *E. coli* levels are elevated only after a heavy rainfall in the late summer or the "fall flush". If a site has a consistent record of high *E. coli* levels, it is useful to look at the surrounding land uses for clues to the bacteria sources, such as septic systems, heavy wildlife use, agricultural activities, etc. It is also useful to add an additional sampling site along a reach that can help identify the stream segment that is being polluted. This supplemental information guides the District's outreach and assistance efforts to areas where projects can be most effective at improving water quality.

The Mid Coast Management Area has water bodies that are 'water quality limited' for bacteria, temperature, sedimentation, nutrients, aquatic weed or algae, chlorophyll A, dissolved oxygen, and pH.



Lincoln SWCD Monitoring Locations

Siuslaw Soil and Water Conservation District Fiddle Creek Stream Enhancement

In 2008, the Siuslaw Soil and Water Conservation District (District) held a landowner workshop at the Fiddle Creek Grange primarily for residents of the Coastal Lakes Basin. Fiddle Creek is one of the larger tributaries to Siltcoos Lake, and supports one of the healthiest runs of Coho salmon in the state of Oregon. One landowner on Fiddle Creek followed up with the District for assistance to develop a conservation plan for his property.

The landowner has a 42-acre parcel that had historically been used as a dairy operation. Currently, he leases the land to ranchers to graze cattle for beef production. The landowner was concerned about one stream bank area where several feet of pastureland were lost annually during high winter flows. After several meetings with the District and District liaison, Jeff Jones of Habitat Contracting, the landowner agreed to set aside and re-vegetate a 50-foot wide riparian buffer (approximately nine acres) and build an exclusion fence the entire length of the 1.2 miles. The District agreed to address the re-occurring washout with plans to re-contour the stream bank to a slope of 3:1. The design also incorporated placing smaller (10-14 inch diameter) conifer plantation trees with root wads, within the toe of the bank to provide both further bank protection and native fish habitat. Following the wood placement, the excavation area was slated for intense willow planting on a two-foot grid pattern.

With funds from the Department, the United States Fish and Wildlife Service, the Siuslaw Resource Advisory Council, and the Oregon Department of Fish and Wildlife's Restoration and Enhancement Board, the District began implementation in the summer of 2010. The stream bank re-contouring was completed in July, and a New Zealand style, four-strand exclusion fence was completed in early December. The remaining riparian planting and livestock off-stream watering components will be completed in Spring 2011.

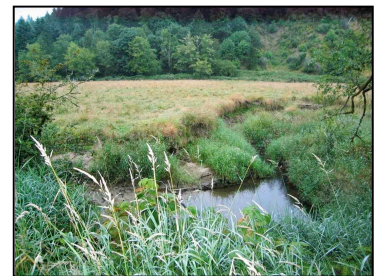
This project compliments an adjacent restoration on Kimberly Creek, funded by an OWEB Small Grant and implemented by Natural Resources Conservation Service (NRCS). Kimberly Creek is a tributary to Fiddle Creek, and flows through the same landowner's property. The landowner has since enrolled the riparian buffer in the Conservation Reserve Enhancement Program. In conclusion, the Fiddle Creek Stream enhancement is a prime example of how a cattle-grazing operation can be managed with multiple objectives including production, improvement of water quality, and habitat for multiple species.

Project Partners:

- Seth Mead (Watershed Conservationist, Siuslaw SWCD)
- Kate Danks (District Liaison, NRCS)
- Jeff Jones (District Liaison, Habitat Contracting)
- Paul Burns (Fisheries Biologist, Siuslaw National Forest)
- Sharon Corrigan (former Watershed Conservationist, Siuslaw SWCD)
- Kevin Fenn (Mid Coast Water Quality Specialist, ODA)

Results:

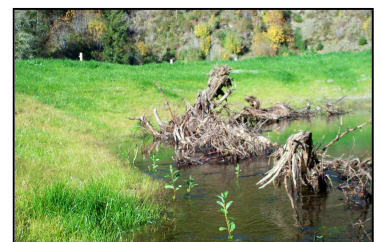
- Approximately nine acres of riparian buffer; approximately 400 native shrubs/trees per acre.
- 1.2 miles of exclusion fence.
- 200 feet of stream bank re-contoured to slope of 3:1.
- Approximately 50 conifer trees placed within the toe of the re-contoured stream bank.
- Three off-stream livestock watering facilities.



Erosion control area prior to excavation



Summer 2010-Excavation and rootwad placement complete



November, 2010-groundcover and willow growth

DEQ TMDL update, David Waltz

The Oregon Department of Environmental Quality's (DEQ) Nonpoint Source (NPS) and Total Maximum Daily Load* (TMDL) program efforts over the past 18 months have focused on a lawsuit from September 2010 involving Oregon's Coastal Nonpoint Pollution Control Program (CNPCP) program. DEQ is responding to regulatory, administrative, and technical challenges presented by the lawsuit and settlement. In response to the CNPCP lawsuit, Oregon DEQ has committed to preparing the Mid Coast TMDL by June 30, 2012. A legal and technical update on the Mid Coast TMDL was widely distributed to stakeholders in early January 2011 (contact DEQ if interested). DEQ plans to reconvene a TMDL stakeholder process this spring. Regular updates will be provided following re-establishment of the TMDL stakeholder group.

While developing the Mid Coast TMDL, DEQ will work closely with stakeholders to identify high priority areas for Agricultural Water Quality Program implementation. An assessment of new and existing data, including near-stream/riparian and streambank conditions and other key indicators of water quality parameters, will be used to identify priority areas. DEQ will work closely with ODA and other partners to assess water quality conditions in areas that have complex physical, chemical or seasonal characteristics or cycles,

such as tidally influenced areas and wetlands, including areas heavily impacted by invasive plants. This information would assist with developing best management practices (BMPs) or restoration plans appropriate to those areas.

After the Mid Coast TMDL is completed, DEQ commits to working with partners to locate funding for implementation of BMPs on agricultural lands. DEQ's experience is that successful funding requires partners working together towards specific, common objectives that have been developed from a basin planning process. DEQ has been successful leveraging funding for TMDL related projects. Most of the funds from these projects have a positive impact on the local economy.

In March 2009, DEQ updated the Committee regarding coordinated monitoring and assessment efforts conducted in cooperation with partners throughout the Mid Coast Basin. In summary, the monitoring was designed to (a) provide the information necessary for TMDL development and (b) to inform implementation and water quality improvement activities for all land uses. DEQ is evaluating statistical and modeling tools to develop load allocations and NPS

reductions. Load allocations have yet to be developed, however, DEQ has identified one specific area of concern.

Data and local partner observation have documented elevated bacteria levels that appear to be associated with rural residential land use. Failing or poorly functioning septic systems may be contributing to elevated bacteria levels in some streams. DEQ raises this issue because failing septic systems affect downstream water quality for all uses and pose a health risk. Compared to many types of NPS pollution, there are straightforward methods to identify and correcting problems. Homeowners should regularly test the function of their septic system, and if needed, a qualified contractor should maintain the system. Replacing a septic system is costly, and may be difficult for low- and fixed-income households. DEQ has been working with local governments to find ways to fund septic repairs and replacement. DEQ will provide updates to the Committee, the counties, and other Mid Coast stakeholders of any progress on this issue. DEQ encourages the Committee to continue to support outreach and public education on this important topic.

*Total Maximum Daily Load is a process of identifying the amount of pollutant a waterbody can receive without exceeding water quality standards. This includes waste load allocations for point sources, load allocations for non-point sources, a load allocation for background levels, a margin of safety, and a reserve capacity.

Updates Regarding Committee Requests from March 2009

In March of 2009, the Committee met and the following recommendations were made:

- Partners should contact landowners and attempt to implement voluntary riparian restoration activities.
- Funding should be made available for the SWCDs to develop rural living handbooks.

In response to the Committee's recommendations, ODA and the SWCDs made landowner outreach, technical assistance, riparian restoration, and development of rural living handbooks a priority. Following is a summary of accomplishments related to the recommendations from 2009:

- Two landowner workshops on manure management and riparian restoration.
- 212 landowners were provided with technical assistance.
- 148 site visits with landowners.
- Lincoln SWCD hosted a native plant sale.
- 18 riparian projects were planned and implemented. Total 25 acres, 6.2 stream miles, 9,600 plants, 10,000 feet of riparian fencing, five heavy use areas, and three off-stream watering facilities.
- Lincoln SWCD sought and received funds to develop and print a Rural Living Handbook.

Reed Canarygrass Control Demonstration Project Update

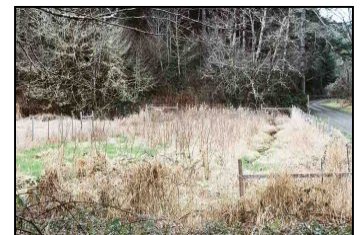
At the 2009 review, the Committee recognized that the bottomlands of many watersheds in the Management Area are dominated by reed canarygrass. Reed canarygrass out competes most other vegetation and does not provide the shade function as required in the Area Rules.

Although shade is not provided, the Area Rules are enforced based on current agricultural activities and impacts. It was identified that voluntary actions by landowner were necessary to control reed canarygrass and establish vegetation that provides shade. To help with this, ODA and the Siuslaw SWCD designed and implemented a reed canarygrass control demonstration project. The purpose of this project was to determine ideal planting densities for willow cuttings and benefits of site preparation. The site was planted in the spring of 2009 and was monitored for growth, survival, and impacts on reed canarygrass biomass in the fall of 2009 and 2010.

Monitoring results show higher survival of planted willow cuttings in areas with higher density plantings vs. lower density plantings. Conclusions regarding impact to reed canarygrass biomass cannot yet be determined. ODA and the Siuslaw SWCD will continue to monitor this site for a minimum of five years. For additional information, contact either ODA or the Siuslaw SWCD.



Reed canarygrass is the dominant vegetation on many coastal valley streams and prevents other vegetation from establishing. It also does not provide the required function of shade.



Willows have two years of growth at the reed canarygrass site. Shade function will be provided by the willows when established.



Oregon Department of Agriculture

Water Quality Program
635 Capitol St. NE
Salem, OR 97301

Regional Water Quality Specialist
Kevin Fenn

Phone:
503-986-6486

Fax:
503-986-4730

E-mail:
kfenn@oda.state.or.us

For more assistance, you can also contact your local Soil and Water Conservation District office:

Lincoln SWCD

Stacy Polkowske
23 North Coast Highway
Newport, OR 97365
(541) 265-2631
www.lincolnswcd.org
info@lincolnswcd.org

Siuslaw SWCD

Seth Mead
1525 12th Street, Ste., 10A
Florence, OR 97439
(541) 997-1272
www.siuslawswcd.org
siuswcd@questoffice.net

Education and Outreach

Lincoln SWCD:

- One presentation to a watershed council about TMDLs
- 203 landowners contacted by direct mailings
- Two community film series about various water topics. One film per month for five months (10 films total, Jan – March 2009, Jan – March 2010)
- 904 fact sheets distributed
- 21 newspaper articles/PSAs published
- One information booth at the Beaver Creek Open House; Seven additional informational displays at local events
- One Native Plant Sale
- Attended 50 meetings representing water quality

Siuslaw SWCD:

- Identified North Fork Siuslaw and Lakes Basin as priority watersheds
- 64 landowners invited to North Fork Siuslaw Landowner Workshop by direct mailing
- Eight newsletters completed with 430 copies of each sent to landowners
- Two landowner workshops; North Fork Siuslaw and Fiddle Creek (35 attendees)
- One Knotweed Fact Sheet developed
- One Scotch Broom best management practices flyer developed with Dunes City
- Developed reed canarygrass control site at Fiddle Creek (one tour of the site)
- Three information booths: Dune City Festival of the Lakes; 1st Annual Florence Green Fair, Siuslaw Estuary Partnership's Wetland and Riparian Team's Public Meeting
- Participated in Forest Field Day, SWC Summer Camp, State Parks, and several Stream Team field trips: 12 days; reaching 466 students in total
- Attended 74 meetings representing water quality

Land Stewardship and Water Quality Projects

Lincoln SWCD:

- 80 landowners provided with information about the Area Plan
- 120 landowners received technical assistance regarding best management practices
- 109 on-site evaluations/visits with landowners
- 16 riparian function projects planned and implemented
- Invasive Control Program addressed over 1,100 knotweed sites (14 acres) in 2009 and 2010 in Lincoln County
- Nine projects to reduce nutrient, fine sediment and bacterial from agricultural activities implemented
- Six agricultural water quality plans completed

Siuslaw SWCD:

- 62 landowners provided with information about the Area Plan
- 92 landowners received technical assistance regarding best management practices
- 39 on-site evaluations/visits with landowners
- Gorse control via herbicide on 44 acres @ Southview Property
- Treated 37 acres of knotweed @ 25 sites throughout the Siuslaw Watershed, the Lakes Basin, and the Big Creek Sub-Basin
- Worked with four landowners to reduce nutrient, fine sediment, and bacteria from agricultural activities
- Three agricultural water quality plans completed
- Fiddle Creek Stream Enhancement Project: developed, funded, and implemented (completion in Spring 2011)
- Voluntary Habitat Restoration on Misery Creek: developed and implemented

Funding and Administration

Lincoln SWCD:

- Two – DEQ 319 grants submitted and approved to address “Non-point Source Pollution Implementation” in the Mid-Coast, Part I & II
- 49 additional grant applications submitted for support of District programs and project implementation; 43 approved
- 20 landowners provided with information on federal and local cost-share programs
- Four additional grants submitted (pending funding) to improve water quality
- Implementation of the Area Plan included in the Lincoln SWCD long-range work plan
- Funding granted for knotweed control efforts summer of 2009 and 2010. Funds are secure for the 2011 season
- Financial assistance for “Rural Living Handbook” submitted and received

Siuslaw SWCD:

- 62 landowners provided with information on federal and local cost-share programs
- 3 landowners assisted to enroll into the Conservation Reserve Enhancement Program
- 4 landowners assisted to enroll into USDA cost-share programs
- Funding granted from the Siuslaw Stewardship Group, the Siuslaw Resource Advisory Council, and the Oregon State Weed Board for knotweed control in 2010
- Funding granted from the Siuslaw Resource Advisory Council for Fiddle Creek Stream Enhancement (April 2010)
- Additional funding secured from Oregon Dept of Fish and Wildlife Restoratio and Enhancement Program for Fiddle Creek Stream Enhancement (December 2010)
- Nelson Creek Riparian Restoration developed and submitted to OWEB and the FSA for funding (Oct. 2010)
- North Fork Siuslaw Riparian Restoration developed and submitted to OWEB and the Siuslaw Stewardship Group for funding (2010)
- Applied to the OSWB and ODA’s S&P Fund for knotweed control in 2011 (December 2010)
- Administrated Siuslaw Stream Team OWEB small grants
- Implementation of the Area Plan included in the Siuslaw SWCD annual and long-range work plan

Monitoring

Lincoln SWCD:

- Two TMDL Technical Advisory meetings
- Trend water quality monitoring in the Yaquina/Big Elk and Beaver Creek (Alsea) watersheds continued through December 2010 for pre-TMDL baseline data, project effectiveness and non-point source pollution identification

Siuslaw SWCD

- Two TMDL Technical Advisory meetings
- Partner on Siuslaw Watershed Council water quality sub-committee