



Oregon
Department
of Agriculture

Lower Willamette Agricultural Water Quality Management Area Plan

May 26, 2011

Local Advisory Committee Recommends Focusing Efforts

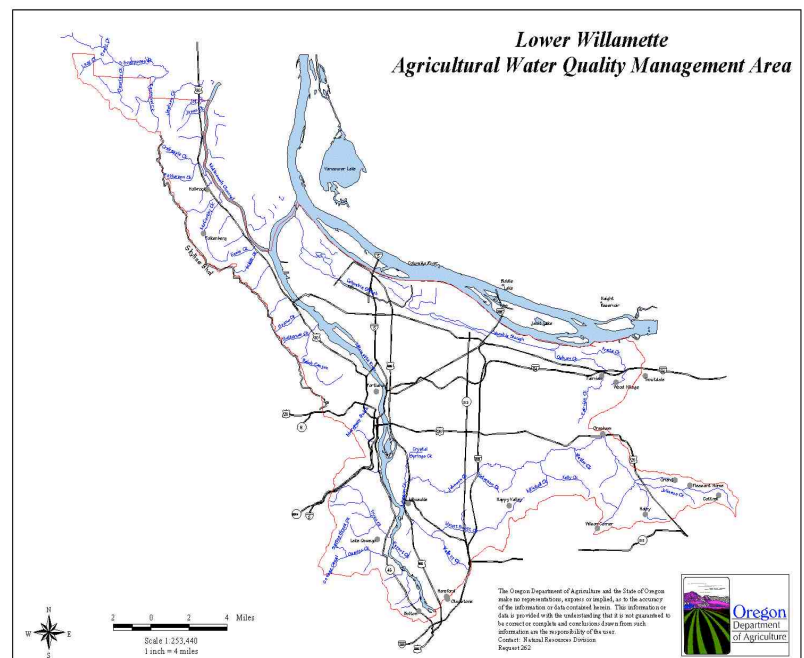
Executive Summary

Members of the Lower Willamette Agricultural Water Quality Management Area Local Advisory Committee (LAC) reconvened on May 26, 2011, to receive an update on activities and provide their recommendations. They suggested focusing implementation resources in smaller geographical areas within the basin to assist in the efforts of measuring progress over time. This would include identifying milestones and timelines to achieve those milestones towards the goal of meeting water quality standards.

The LAC discussed the need for secured funding to support on-going monitoring activities and riparian vegetation restoration efforts. Members of the LAC agreed that monitoring included not only water column data but landscape conditions as well. Additionally, the consensus among the LAC was that with continued monitoring data, the local Soil and Water Conservation Districts (SWCDs) can further target their outreach, technical assistance, project development, and implementation of management practices in identified priority areas throughout the basin.

The LAC members also recognized the challenge to engage commercial agricultural operators, in addition to small acreage landowners, in available cost-share conservation programs, particularly due to the economic downturn.

There were no recommended changes to the Area Plan or Rules at this time.



The Lower Willamette Agricultural Water Quality Management Area is located in northwest Oregon surrounding the greater Portland Metropolitan area. The management area is almost entirely within Multnomah County and the northwest corner of Clackamas County with a small portion in Washington County. In total, the management area covers 234.49 square miles (129.97 sq. miles are within the city limits of Portland).

LAC MEMBERS for 2011

Scott Schaeffer, Chair
Dean Apostol*
Chris Foster
Roy Iwai

Martha Mitchell
Kathy Taggart*
Gordy Webster

*not present

East Multnomah SWCD Monitors Upper Johnson Creek

During the 2007 and 2009 biennial reviews, members of the LAC identified the need for water quality monitoring. The Department of Environmental Quality (DEQ) initially took the lead, but there are no longer sufficient funds available for DEQ to continue the monitoring project. The Oregon Department of Agriculture (ODA) staff asked the East Multnomah SWCD (EMSWCD) to dedicate resources to develop a monitoring plan and conduct the water quality sampling.

In the Lower Willamette Agricultural Management Area, the predominant land uses are not agricultural. Because the majority of the agricultural land is in the upper portion of Johnson Creek, this area is the focus of monitoring for this project. A monitoring plan was developed to collect the information needed to answer three questions that were developed and prioritized by the LAC:

1. Are improvements being made in riparian conditions?
2. Is there a reduction in amounts of sediment from agricultural sources reaching streams?
3. Is water quality improving?

The ODA water quality staff evaluates aerial photos of upper Johnson Creek every five years. This information will be used to answer the first question: Are improvements being made in riparian conditions? Aerial photographs were taken of Johnson Creek in 2004 and 2009. Analysis of these photographs showed no appreciable change in land cover in the five year interval. The 2009 air photos show that riparian vegetation had no net degradation.

EMSWCD began collecting monthly water samples from upper Johnson Creek in the fall of 2010. The data collected in the first year will be considered baseline data. Total suspended solids are measured in the monthly samples by a laboratory to establish a baseline to answer the second question. To answer the third question, the monthly samples are evaluated for pH, dissolved oxygen (DO), conductivity, *E. coli*, total phosphorous, and nitrate. In addition, continuous temperature loggers are used to monitor summer water temperatures at three locations.

The EMSWCD will continue monitoring in upper Johnson Creek and will work with ODA to evaluate the baseline data and adjust the monitoring plan as needed.

Please contact Julie DiLeone at the EMSWCD for more detailed information regarding the monitoring results. (503) 935-5360 or julie@emswcd.org

West Multnomah SWCD's Macros Monitoring Project

In 2009 West Multnomah SWCD (WMSWCD) started a modest water quality monitoring program to track progress made by conservation practices installed in target watersheds. Of those chosen, four watersheds (Balch, Miller, McCarthy and Crabapple) fall within the Lower Willamette Management Area.

In three of the four, other partner agencies had varying levels of ongoing water quality monitoring at the time WMSWCD began its program. In Balch and Miller creeks, the city of Portland Bureau of Environmental Services collected temperature, conductivity, DO, *E. coli*, fecal coliform (dropped 12/20/04), pH, ammonia-nitrogen, nitrate-nitrogen, total phosphorus, ortho-phosphate phosphorus, hardness, total dissolved solids, total solids, total suspended solids, total metals (Cu, Pb, Zn), dissolved metals (Cu, Pb, Zn), and semi-volatile organics. Starting in 2009, Multnomah County collected data for McCarthy Creek including: temperature, DO, conductivity, pH and *E. coli*. Since 2010, monitoring on both Miller and McCarthy creeks has been discontinued.

In order to not duplicate the ambient and grab sampling being conducted by the City and County, WMSWCD chose instead to concentrate on benthic macroinvertebrate ("macros") collection. The water quality monitoring plan called for 2-3 years of data collection to establish a "baseline" for each of the streams followed by collection every 3-5 years thereafter to track progress.

Starting in 2009, WMSWCD staff collected samples in all four creeks (including two sampling sites in Balch). While macros sampling was not continued in Balch in 2010 – Crabapple, McCarthy and Miller were sampled again in 2010. Staff considered the baseline data sufficient and will not switch to the periodic collection on the three creeks sampled in 2010.

Please contact Scott Gall at the WMSWCD for more detailed information regarding the monitoring results. (503) 238-4775 ext. 105 or scott@wmswcd.org

LAC Plan Review: continued

Background

The SWCD and the landowners involved in writing the Lower Willamette Area Plan identified goals and objectives to reduce undesirable water quality by promoting good land stewardship, identifying incentives with financial and educational support to promote adaptive management, and defining clear enforcement guidelines. The Area Plan does not tell anyone how to farm, ranch, or otherwise utilize his or her natural resources. Rather it is a resource for landowners to address water quality issues.

The following is a summary of regulations that apply in the Lower Willamette Management Area. Landowners and operators are required to manage their land to:

1. *Control nutrients from manure pile leachate, from overland runoff, and by using appropriate fertilizer application rates;*
2. *Prevent those conditions already prohibited under ORS 468B.025 and 468B.050 (Water Pollution Control)*
3. *Control erosion so that there is no visible evidence of erosion resulting from agricultural activities contributing, or having the likelihood of contributing, sediment to waters of the state, and;*
4. *Promote natural or managed development of riparian vegetation appropriate to site capability that provides riparian function over time.*

**We're looking for a few good men and
women to join the
Local Advisory Committee!**

Do you fall into one of these categories?

- *State Board of Agriculture representatives
- *Persons serving on Soil and Water Conservation Districts
- *Private landowners
- *Representatives of local, state, and federal boards
- *Members of Indian Tribes
- *Members of the public
- *Persons associated with industry
- *Members of academic, scientific and professional communities
- *Public and special interest groups

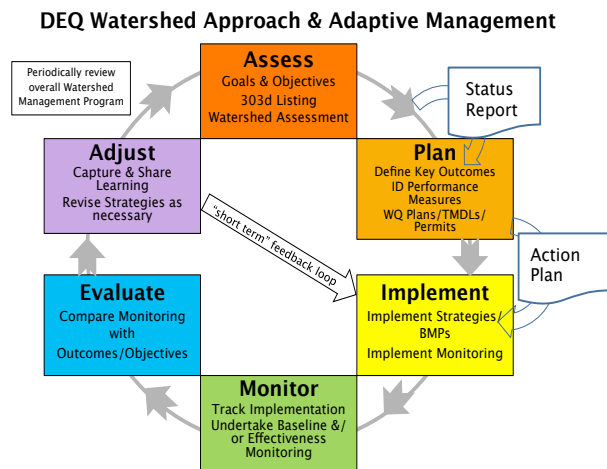
If you are interested in learning more about the important role that LAC members play, please contact Sheila Marcoe for information.



DEQ's Watershed Approach – Partnerships, Priorities and Progress

Oregon DEQ defines the Watershed Approach as stewardship and management activities that occur at watershed scales that lead to the restoration and protection of sustainable human and ecological beneficial uses.

DEQ is undertaking a Watershed Approach (WA) to assist in managing water quality in the state of Oregon. This new approach will provide a broad assessment of the status of water quality and other environmental indicators within a basin, along with greater opportunities for stakeholder involvement and interagency cooperation. This approach will also address some of the limitations of the Total Maximum Daily Load (TMDL) process and improve internal DEQ sub-program coordination. It is intended that the WA process will eventually be implemented statewide. It is hoped that this broad-based approach will allow greater flexibility in the assessment process and more assurance that the WA will be iterative in nature. It is currently envisioned that each DEQ region (Eastern, Western and Northwest Oregon) will complete a WA for one basin each year. There are approximately 15 basins within the state. This would allow the findings of the WA to be revisited and updated every five years.



The WA is intended to provide a basin-scale resource assessment process with more opportunities for direct, interactive feedback from local stakeholders than the TMDL process. Unlike a TMDL, the WA process is not limited to addressing 303(d) listings using available water quality data. It addresses surface water status for both 303(d) listings and other surface water related concerns, groundwater and upland conditions, and provides an evaluation of the environmental status of the basin as a whole. While the WA process is being designed to address some of the limitations of the TMDL process, it will not replace TMDLs. The WA does not have the regulatory authority of a TMDL and should be viewed more as a guidance document than a regulatory requirement.

Each year the three WA basin teams, one from each DEQ region, will produce a Basin Plan that consists of a Status Report and an Action Plan that summarizes the important water quality problems and the strategies needing to be implemented. Together these two "halves" of the plan will allow for the adaptive management (see graphic) of water quality at a watershed scale. It is expected that the Lower Willamette Basin Planning effort will occur in 2013.

**Oregon Department
of Agriculture
Water Quality
Program**

Regional Water Quality
Specialist
Sheila Marcoe

**635 Capitol St. NE
Salem, OR 97301
(503) 986-4707
smarcoe@oda.state.or.us**



We're on the web!

http://www.oregon.gov/ODA/NRD/water_quality_front.shtml

Table 1. Summary of Area Plan goals and progress of Area Plan implementation May 2009 to May 2011.

Goal	Progress
<p>1. Control nutrients from manure pile leachate, from overland runoff, and by using appropriate fertilizer rates.</p>	<ul style="list-style-type: none"> • Clackamas County SWCD (CCSWCD) and East Multnomah SWCD (EMSWCD) workshops were advertised in local newspapers with circulation that includes the residents within the Lower Willamette Ag Water Quality Management Planning Area. CCSWCD Workshops include: Horse Pasture & Manure Management and Healthy Pastures...Healthy Horses (five part series). EMSWCD workshops included Pasture Management and Mud & Manure Management. • CCSWCD offered an 'Ask Your Conservationist' information table at Naomi's Organic Farm Supply. EMSWCD tabled annually at Burns Feed Store with a focus on manure management. • The shared SWCD and NRCS booth at the 2009 NW Ag Show included a demonstration of the NRCS nitrogen cost estimator.
<p>2. Prevent conditions already prohibited under ORS 468B.025 and .050</p>	<ul style="list-style-type: none"> • CCSWCD provided technical assistance to 70 landowners. Topics included water quality issues, rainwater harvesting, rain gardens and other practices affecting storm water control. • CCSWCD partnered to hold two pesticide collection events that would have included agricultural operators. • CCSWCD publications include 'Rural Lifestyles Handbook and Pocket Guide' and the updated 'Tips on Land & Water Management for Small Acreages in Oregon'. • EMSWCD provided technical assistance to landowners that led to the implementation of the following practices: <ul style="list-style-type: none"> ○ Two off-channel watering facilities. ○ 200 feet of fence to exclude livestock from the creek. ○ Two projects to route roof runoff away from livestock and manure storage areas. ○ Two heavy use areas.
<p>3. Control erosion so that there is no visible evidence of erosion resulting from agricultural activities contributing, or having the likelihood to contribute, sediment to waters of the state</p>	<ul style="list-style-type: none"> • CCSWCD began the Equipment Rental Program for Conservation that offers equipment for erosion and manure control, also a water wagon and box seeder for plant establishment. • EMSWCD and CCSWCD partnered with NRCS on a display at the 2010 NW Ag Show. The display highlighted No-Till vs. Traditional tillage. The CCSWCD 3' No Till Drill was on display. • EMSWCD provided technical assistance to landowners that led to the following erosion prevention and management practices: <ul style="list-style-type: none"> ○ Four acres of cover crop. ○ Three grassed waterways. ○ Two sediment control basins. ○ Two farm road repairs. ○ One culvert replaced with a bridge.
<p>4. Promote natural or managed development of riparian vegetation appropriate to site capability that provides riparian function over time</p>	<ul style="list-style-type: none"> • The CCSWCD created a riparian brochure to encourage riparian restoration and posted articles on riparian planting on their website and other publications. • The EMSWCD StreamCare program has enrolled 23 of the 151 properties in Multnomah County on the main stem and north fork of Johnson Creek (15%). Of the properties enrolled, nine are agricultural. Currently, 2.5 stream miles are in the program (11%), with 1.26 of this on agricultural properties. The buffer area on the agricultural properties totals 16 acres that has been re-vegetated with over 11,000 native trees and shrubs. • CCSWCD is partnering with the Johnson Creek Watershed Council on a program called Creekcure, modeled after the EMSWCDs StreamCare program. At this point, the District is working with Council staff on creating a brochure/flier for the Creekcure, targeting areas for outreach, and responding to Creekcure inquiries.