



**Oregon**  
Department  
of Agriculture

# Curry County Agricultural Water Quality Management Area

June 2010

## Local Advisory Committee Meets

### Meeting summary

The Curry County Local Advisory Committee (LAC) met to evaluate the implementation of the Curry Agricultural Water Quality Management Area Plan and Rules. The LAC listened to a report on water quality monitoring and compliance cases from the Oregon Department of Agriculture (ODA) and summaries of implementation accomplishments from the Curry Soil and Water Conservation District (SWCD).

### Compliance summary

From January 2008 to December 2009, one complaint was filed with ODA relating to the placement of manure next to a stream. The landowner removed the manure before ODA conducted an investigation and the landowner was issued a Letter of Compliance.

### Background

From 2000 through 2004, the ODA and the LAC developed an Area Plan and associated Administrative Rules for the Curry County Area. ODA adopted the Area Plan and Rules in 2004. In 2006, the LAC met to review the Area Plan and Rules. The LAC elected not to meet in 2008, although a report to the Board of Agriculture was developed with the assistance of ODA. The SWCD serves as the Local Management Agency for the development and implementation of the Area Plan and Rules.



The Curry County Agricultural Water Quality Management Area boundaries include the California border to the south, Josephine County boundary to the east, the Pacific Ocean on the west, and the Coos/Coquille Management Area on the north.

## Summary of Accomplishments

Progress, as reported by Curry Soil and Water Conservation District, South Coast Watershed Councils, Lower Rogue Watershed Council and the USDA Natural Resource Conservation Service occurring on agricultural lands.

### *Curry SWCD:*

- 536 Landowners contacted
- 64 Landowners provided technical assistance
- 10 Farm plans completed on 1,786 acres
- 93 On-site evaluations
- 10 Grants submitted for funding
- 14 Water quality projects implemented
  - 8 Livestock off-stream watering systems
  - 12,635 feet of riparian exclusion fencing
  - 660 feet of rotational grazing fencing
  - 4 new or improved livestock stream crossings
  - 7 fish passage improvement bridges
  - 7 gully stabilizations
  - 1 acre of native wetland planting for filtering agricultural runoff
- 100+ Newsletters distributed
- 2 Workshops presented
- 3 Tours
- 16 Conservation Reserve Enhancement Program (CREP) conservation plans on 98.6 acres along 7.3 miles of stream bank

### *NRCS:*

- 2,018 acres conservation plans written
- 3,369 acres conservation practices applied to improve water quality

### *Curry SWCD, South Coast & Lower Rogue Watershed Councils, & Curry County Weed Board*

- 26 acres and 19 stream miles treated for noxious weeds
- 2 stream channel relocation projects involving 2 miles of Coho habitat
- 2 bio-swale projects
- 17,879 trees planted along streams and rivers
- 1 mile of upland pasture gullies stabilized
- 136 large wood structures placed in 5 miles of streams/rivers
- 2 year Cranberry Reduced Risk Pesticide & IPM conversion project – 30 acres
- 2 acre Cranberry Slow-Release Fertilizer conversion project
- 1 acre Cranberry Organic Fungicide project
- 2 acre Cranberry erosion control/native pollinator habitat project
- 1.5 acre Cranberry bog renovation
- 1 Organic/Conventional Cranberry Grower meeting/knowledge exchange
- 29 miles of ranch roads inventoried for sediment contributions to waterways

### *Hastings Bulb Growers (independently implemented project)*

- 5 acres of trial soil erosion control projects (75 total acres to be treated)

## LAC Plan Review: *continued*

### Monitoring

#### **Ambient Monitoring Sites**

Five sites in the Curry County Basin were listed in the Oregon Department of Environmental Quality Laboratory Analytical Storage and Retrieval database that met ODA criteria. These are the Elk River upstream of Highway 101, the Elk River at Hwy. 101, Floras Creek at Hwy. 101, the Pistol River at Pistol River Loop Road, and the Chetco River at the USGS gauge. Of these, all but the Elk River upstream of Hwy 101 are suitable for trend monitoring.

As of June 2010, there was no recent data for the Elk River site upstream of Highway 101. The Elk River site at Highway 101 did not have any notable water quality problems. The Chetco site had one low Dissolved Oxygen (DO) reading. The Floras Creek site had some low DO, but no other problems, showing an improvement from 2008. The Pistol River site had some high turbidity values with two high measurements in March of 2010. Dissolved oxygen measurements for this site ranged from very high to extremely low. However, this may be an error in the data.

#### **Local Monitoring Efforts**

From January 2008 through December 2009, Watershed Council and Curry SWCD personnel conducted assessments (to help focus restoration activities), project-specific monitoring (to determine effectiveness of the restoration), and a trial of a potential Best Management Practice.

An ongoing storm runoff assessment at over 100 sites, sampled by 45 stormchaser volunteers during a two-hour period, was concluded with the last of eight storms sampled from 2004 - 2008. Statistical analysis of these eight storms is presented in a report available from the watershed council. Although more rainfall fell within the 72 hours before each sampling in the south half of Curry watersheds, the median turbidity was higher in the north half. Sites with elevated turbidity on Fourmile Creek, Floras Creek, and Sixes River correspond with areas of high percentages of clay in some areas of the watersheds. Elevated turbidity was also associated with soil-disturbing land uses. *E.coli* concentrations were higher in the north area than the south area during all but two storms.

Assessment of turbidity and *E.coli* runoff was completed on three ranches to identify sources of elevated storm levels along streams that already have healthy riparian vegetation buffers. Runoff from lowland pasture ranches did not cause appreciable increases in turbidity and *E.coli* levels, primarily due to the small flow volumes entering larger streamflows. However, state standards were exceeded in flows that entered the ranches from upstream, and the origin of these elevated levels is unknown.



#### **LAC Members Present at Meeting**

Ted Fitzgerald  
Vice Chair

Knute Andersson

Jim Donaldson

Robert McKenzie

Lee Riddle

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*We're on the Web!*

*See us at:*

[http://egov.oregon.gov/ODA/NRD/water\\_quality\\_front.shtml](http://egov.oregon.gov/ODA/NRD/water_quality_front.shtml)



## LAC Plan Review: *continued*

For ranch road improvement effectiveness, turbidity and specific conductivity samples were collected during storm runoff from upstream and downstream at ten road-stream crossings to characterize pre-project conditions.

Monitoring the effectiveness of riparian restoration has focused primarily on small streams, where the most rapid response is likely to be detected. Summer stream water temperature, shade, stream flow, macroinvertebrate (aquatic insect) community diversity, and sediment were measured on riparian treatment and control reaches in 2008 and 2009.

Between the summers of 2004 and 2009, the diversity of macroinvertebrates increased, remained the same, and decreased along stream reaches that were sampled. The expected diversity increases may not be expressed in part because 2009 had only one-third of the streamflow measured in 2004. In 2010, macroinvertebrate diversity on these stream reaches will be analyzed with more sophisticated methods (predator and stressor tools).

Phosphorus in cranberry flood harvest was subjected to a filtration media experiment to determine the feasibility of this treatment as a best management practice. Technical problems occurred with the movement of the flood harvest water through the media, which may have caused the removal of phosphorus to be less than anticipated.

The LAC was very intrigued by and appreciative of the detailed monitoring information presented by the Curry SWCD. The LAC believes seeing clear, concise, and easily accessible science as a very strong tool for communicating with the agricultural community.

### *Impediments to Plan Implementation*

The LAC identified the largest impediment to implementing the Area Plan to be a lack of knowledge that the Area Plan and Rules exist. This is particularly true of new landowners who are moving to Curry County and buying agricultural lands. Their lack of knowledge of how to manage agricultural lands in the coastal climate and environs can lead to water quality issues. Agricultural properties are often subdivided for new homes and these subdivisions can compound the problem. The LAC recommended working with the county planning department and local realtors to provide new landowners with copies of the Area Plan and Rules, similar to the current practice of informing new forestland owners of the Forest Practices Act requirements. The LAC also recommended sending the Biennial Review Report out to as many landowners as possible.

The LAC also discussed the impact of wildlife on and off of agricultural lands that impact water quality and riparian vegetation establishment.

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