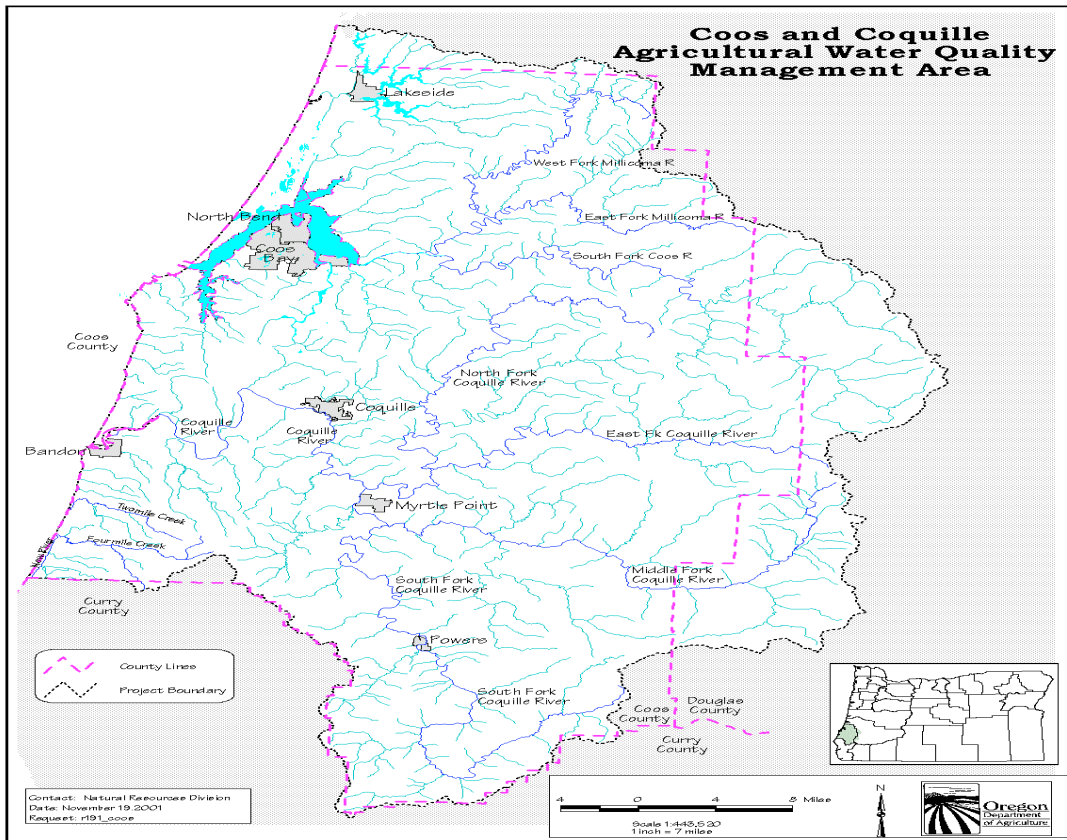


# *Coos and Coquille*

## AGRICULTURAL WATER QUALITY MANAGEMENT AREA PLAN AND RULES

### BIENNIAL REVIEW REPORT TO THE OREGON STATE BOARD OF AGRICULTURE

June 2008





## I. INTRODUCTION

The Local Advisory Committee (LAC) submits this report to the Board of Agriculture to summarize and evaluate implementation of the Coos and Coquille Agricultural Water Quality Management Area Plan and Rules.

The Area Plan and Rules were created following passage of the Agricultural Water Quality Management Act in 1993. The Oregon Legislature adopted the Act to address concerns about agricultural effects to water quality.

From 1998 through 2002, the Oregon Department of Agriculture (ODA) and the LAC developed an Area Plan and associated Administrative Rules for the Coos and Coquille Area. ODA adopted the Area Plan and Rules in January 2001. In 2004 and 2006 the LAC met for reviews of the Area Plan and Rules. The Coos Soil and Water Conservation District (SWCD) has served as the Local Management Agency for the development and implementation of the Area Plan and Rules.

## II. BACKGROUND

When developing the Area Plan and Rules, the LAC identified several objectives to protect and improve water quality:

- To maintain, to protect, and to improve water quality;
- To encourage the voluntary development of farm plans for all agricultural producers;
- To raise public awareness of agriculture's contribution to improving water quality;
- To provide public education about positive management practices and implementation;
- To encourage and assist landowners in developing monitoring plans that will continue to reinforce the idea of water quality improvement in the Coos, Coquille, and Tenmile watersheds.

Six Area Rules describing unacceptable conditions were adopted:

1. Soil erosion associated with agricultural cultivation shall not deliver sediment sufficient to violate water quality standards.
2. Application and storage of manure, commercial fertilizer and other added nutrient inputs to agricultural lands will be done in a manner that minimizes the introduction of nutrients into the waterways.
3. In cranberry production, water storage systems that intercept agricultural drainage containing pesticides and that reapply this water will be designed to minimize percolation of drainage waters to groundwater or overflow of the impoundment of waters.
4. Management activities in the riparian area will be conducted in a manner that allows the establishment, growth, and maintenance of riparian vegetation consistent with vegetative site capability so as to provide some combination of filtering capacity, sediment trapping, stream bank stability, and shade.
5. Application (direct, chemigation, and fertigation) and irrigation systems will be managed to minimize runoff and the introduction of nutrients and farm chemicals into waterways.
6. No person subject to these rules shall violate any provision of ORS 468B.025 or ORS 468B.050.

### **III. IMPLEMENTATION, 2006-2007**

#### **A. Technical Assistance and Outreach**

The Coos and Curry SWCD worked closely with the USDA Natural Resources Conservation Service (NRCS), USDA Farm Service Agency (FSA), and local watershed council staff to provide competent technicians, coordinators, workshop presenters, and initiate mass media campaigns. See attachments for project descriptions.

#### **B. Monitoring and Evaluation**

##### DEQ database

There is a large amount of water quality data for this basin. The Laboratory Analytical Storage and Retrieval (LASAR) database had nine monitoring stations listed that met ODA criteria for review, and five that are still being monitored.

Data from these nine stations show a wide variety of water quality problems. Low Dissolved Oxygen (DO) was measured on Bear Creek at Highway (Hwy) 42S. Total Suspended Solids (TSS) and turbidity were elevated on the mainstem Coquille River at Sturdivant Park, on the Middle Fork Coquille at Hwy 42, and the North Fork Coquille at Hwy 42. Elevated fecal coliform and/or Escherichia coli (E. coli) was reported for Cunningham Creek and the North Fork Coquille at Hwy 42. Monitoring stations on the South Fork Coos River, mainstem Coquille River at river mile (RM) 23, and Millicoma River did not have elevated concentrations of the analyses we reviewed.

The six stations that are still being monitored provide sufficient data to characterize water quality trends in the basin. These sites are the mainstem Coquille River at Sturdivant Park, the

Middle Fork Coquille at Hwy 42, the North Fork Coquille at Hwy 42, the South Fork Coquille at Broadbent Rd, the Millicoma River at a boat ramp around RM 3, and the South Fork Coos at A. Rogers Bridge.

LASAR data through 2005 showed some changes in water quality at the six ambient monitoring sites. The Coquille River at Sturdivant Park showed a recent increasing trend in E. coli, with high values starting late in 2003. This site continues to have elevated turbidity. The Middle Fork Coquille shows a slightly increasing trend in turbidity. An increasing trend in TSS is apparent at the South Fork Coos monitoring stations, and the Millicoma River shows a slight upward trend in DO.

As of March 2008 the Coquille River at Sturdivant still had many high E. coli concentrations - up to 1400 Most Probable Number (MPN) per 100 ml sample - for the period 2005-2008 (the state five sample mean standard is 126 MPN/100 ml), some moderately high turbidity (to 35 nephelometric turbidity unit (ntu)), and moderately low DO saturation (down to 77%). The state turbidity standard prohibits a greater than 10% increase in turbidity from human activity; the DO 30-day mean standard for cold water is 8 mg oxygen/L of water, or 90% saturation. The North Fork Coquille at Hwy 42 also had some high E. coli (up to 205 MPN). The previously reported increasing trend in turbidity was no longer present in the Middle Fork, after looking at the data for 2005 - 2008. This site did not have any notable water quality concerns. The Millicoma River site had some low DO saturation - down to 63% - negating the previously reported upward trend. Data for the South Fork Coos showed that TSS concentrations had declined, though since 2005 there has been some low DO saturation, down to 67%.

### **C. Complaints**

In the years 2006 and 2007, ODA received the following complaints in the Management Area:

- A complaint from a member of the public regarding the placement of animal wastes and pasture management near Coos Bay. A Letter of Warning was sent. The landowner addressed water Quality concerns and a Letter of Compliance was sent.
- A complaint from a member of the public regarding the placement of manure waste near Coos Bay. No water quality violations were found and a Letter of Compliance was sent.

### **IV. BIENNIAL REVIEW PROCESS**

The Local Advisory Committee (LAC) elected to not meet during this review period. The LAC developed the biennial report with the help of ODA staff. ODA staff will be updating the Coos and Coquille Area Plan to include information regarding the Ten Mile TMDL Water Quality Management Plan

### **V. RECOMMENDATIONS**

The Local Advisory Committee did not have any recommendations at this time. Staff will revise the Area Plan to update information about the Ten Mile TMDL Water Quality Management Plan.

**Attachment A: Implementation activities by the local Soil and Water Conservation District and Watershed Councils: 2006-2007.**

Coos Soil and Water Conservation District

Landowners contacted: 1,295

Landowners assisted: 354

Workshops: 2          Attendees: 76

Facilitated water quality workshop with emphasis on the Pesticide Use Reporting System (PURS), pesticide use and safety, sprayer calibration, and understanding water quality.

Presentations: 6          Attendees: 142

Demonstrations: 1          Attendees: 44

Tours: 11                  Attendees: 81

Field tours were targeted to successful management and innovative ideas relating to water quality. Showcased were innovative irrigation systems, pasture/seeding management, rotational grazing and water quality compliance.

Displays: 20

On-site evaluations: 88

Water Quality Projects: 36

Sites monitored for water quality: 6

Grant applications: 5

Fact sheets distributed: 1,940

Newsletters: 8 quarterly newsletters with distribution of 500 each

Newspaper articles: 9

Farm Plans completed: 7          Total acres: 2,106

## Ten Mile Lake Basin Partnership Projects on Agricultural Land

- 8 bridge/culvert replacements
- 12 bank stabilization projects
- 6 miles of exclusion fencing
- 3 off stream watering projects
- 4,000+ trees planted in watershed on agricultural lands

### Coos Watershed Association

- One agricultural landowner on Palouse Creek, project was 2,600 ft of bank resloping, planting and fencing.
- Four adjacent agricultural landowners on tributary (field ditch) to Catching Slough, 0.55 miles of planting and fencing.
- One agricultural landowner on Daniel's Creek, 1,700 ft of fencing and planting with average 25-foot fence setback, and 400 feet of bioengineered woven willow wall for bank restoration. Project was implemented winter 2007-2008.

Also, Coos Watershed Association currently maintains approximately 50 acres of riparian plantings on agricultural land. Plantings are released at least annually for at least five years.

### Coquille Watershed Council

- Riparian Fencing projects- 12.5 acres of exclusion
- 2 Riparian Planting projects- .5 acres of planting
- 8 Riparian Fencing and Planting projects- 24.8 acres of riparian exclusion and planting (10.5 miles of fencing)
- 9 In-stream Log and/or Boulder projects
- 1 In-stream Boulder repair project
- 1 Wetland Construction/Enhancement project
- 8 Fish Passage projects- Culvert Replacements
- 1 Rock Crossing within a tributary to Middle Fork