

# **BURNT RIVER AGRICULTURAL WATER QUALITY MANAGEMENT AREA PLAN**

Developed by the

**BURNT RIVER  
LOCAL ADVISORY COMMITTEE**

with assistance from

**OREGON DEPARTMENT OF AGRICULTURE  
and  
BURNT RIVER SOIL AND WATER CONSERVATION DISTRICT**

**March 2006**

## **Local Advisory Committee Members**

Lynn Shumway, Co-chair  
Keith Shollenberger  
Mark Nelson  
Ted Bloomer

Kent Nelson, Co-chair  
Bonnie Clugston  
Eugene Hawes  
Rodd Bunch

Jerry Franke  
Pat Sullivan  
Dick D'ewart  
Rob Otheim

Blank

# Table of Contents

<b>ACRONYMS</b> .....	<b>5</b>
<b>FOREWORD</b> .....	<b>7</b>
<b>SECTION 1. PURPOSE</b> .....	<b>7</b>
<b>SECTION 2. GOALS</b> .....	<b>7</b>
<b>SECTION 3. GEOGRAPHIC AREA</b> .....	<b>8</b>
<b>SECTION 4. PHYSICAL SETTING</b> .....	<b>8</b>
<b>SECTION 5. HISTORY OF CONSERVATION IN THE BURNT RIVER BASIN</b> .....	<b>9</b>
BURNT RIVER STREAMBANK STABILITY STUDY .....	9
BURNT RIVER COORDINATED RESOURCE MANAGEMENT PLANNING (CRMP).....	9
BURNT RIVER TEMPERATURE STUDY .....	10
<b>SECTION 6. WATER QUALITY ISSUES OF CONCERN</b> .....	<b>11</b>
<b>SECTION 7. BENEFICIAL USES ADVERSELY AFFECTED</b> .....	<b>11</b>
<b>SECTION 8. WATER QUALITY OBJECTIVES</b> .....	<b>12</b>
<b>SECTION 9. PREVENTION AND CONTROL MEASURES</b> .....	<b>12</b>
POLLUTION AND WASTE MANAGEMENT.....	13
STREAMSIDE CONDITIONS .....	14
<b>SECTION 10. IMPLEMENTATION STRATEGY</b> .....	<b>15</b>
AREA PLAN IMPLEMENTATION.....	16
AREA PLAN PROGRESS AND SUCCESS .....	17
<b>SECTION 11. SCHEDULE FOR IMPLEMENTATION</b> .....	<b>17</b>
<b>SECTION 12. LANDOWNER PARTICIPATION</b> .....	<b>18</b>
<b>SECTION 13. ENFORCEMENT PROCESS AND RESOLUTION OF COMPLAINTS</b> .....	<b>19</b>
<b>APPENDIX A</b> .....	<b>22</b>
<b>APPENDIX B</b> .....	<b>23</b>

Blank

## ACRONYMS

AgWQM	Agricultural Water Quality Management
CWA	Clean Water Act
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
LAC	Local Advisory Committee
NRCS	Natural Resources Conservation Service
ODA	Oregon Department of Agriculture
OSU	Oregon State University
SWCD	Soil and Water Conservation District
TMDL	Total Maximum Daily Load
USDA	United States Department of Agriculture

Blank

## **Foreword**

This Agricultural Water Quality Management (AgWQM) Area Plan provides guidance for addressing agricultural water quality issues in the Burnt River Agricultural Water Quality Management Area. The Purpose of this Area Plan is to identify strategies to reduce water pollution, where present, from agricultural lands through a combination of educational programs, suggested land treatments, management activities and monitoring.

The provisions of this AgWQM Area Plan do not establish legal requirements or prohibitions.

The Oregon Department of Agriculture (ODA) will only exercise its enforcement authority for the prevention and control of water pollution from agricultural activities under administrative rules for the Burnt River AgWQM Area, and Oregon Administrative Rules (OAR) 603-090-0060 through 603-090-0120.

### **Section 1. Purpose**

The purpose of this plan is to address possible water quality issues on private agriculture land within the Burnt River Basin in as much as the main stem and several tributaries are on DEQ's 1998 303(d) list pursuant to the Federal Clean Water Act.

The Local Advisory Committee (LAC) determined that an extensive Plan was not necessary because of the previous work, such as the Burnt River Temperature Study, done in this basin. Interested readers can obtain a copy of the Burnt River Temperature Study from the Bureau of Reclamation and Oregon State University. All studies and related materials are available at the Baker County Soil and Water Conservation District (SWCD) office in Baker City. This Plan will present a summary of the study in Section 5, "History of Conservation in the Burnt River Basin." This plan relies on the findings of this study, which was conducted to identify factors affecting water temperature in the basin. We will use the results of the study to identify strategies that will minimize the affects of agricultural activities on water temperature.

### **Section 2. Goals**

The goals of the plan are to:

- A. Work toward a reduction in any identified undesirable water quality areas by attempting to prevent and control characteristics on agricultural lands in the plan area that contribute to undesirable water quality;
- B. Aid in achievement of attainable water quality standards within the plan area;
- C. Continue and expand, if necessary, the current water quality monitoring program established by the SWCD and the Burnt River Irrigation District; and
- D. Apply the lessons learned from the Burnt River Temperature Study.

### **Section 3. Geographic Area**

This Area Plan applies specifically to agricultural activities on all agricultural, rural, and forest lands within the Burnt River Agricultural Water Quality Management Area that are not owned by the federal government. The Area Plan applies to agricultural lands in current use, those lying idle or on which management has been deferred, and lands (like private roads) not strictly in agricultural use but that support agricultural activities.

Activities governed by the Forest Practices Act are outside the jurisdiction of this Area Plan and the associated Rules. Pesticide use is governed by the Pesticide Control Act (Oregon Revised Statutes 634). Oregon Department Agriculture's Pesticides Division administers those laws.

### **Section 4. Physical Setting**

The Burnt River basin generally drains east from the Blue Mountains to the Snake River. After leaving the forested lands, the Burnt River and its main tributaries, the North, West, Middle and South Forks, pass through meadowlands in the area above Unity Reservoir. These streams converge into Unity Reservoir.

Downstream from the reservoir the river flows through mountainous terrain for more than a mile. It then emerges into a relatively flat meadow near Hereford. After meandering through these flat meadow areas for about 35 miles, the river enters the 16-mile long Burnt River Canyon—a steep, rocky canyon with limited irrigation and very limited grazing. After leaving the canyon the river meanders through another meadow area around Durkee. This meadow reach is 7.5 miles, and then the river enters another canyon. East of Huntington the Burnt River joins the Snake River. The river drains about 1,100 square miles, ranging in elevation from about 7,900 feet above sea level at the headwaters to some 2,100 feet near Huntington.

The irrigated portions of the basin, or the valley floors, were primarily settled in the mid-to-late 1800s. Much of the uplands were taken up later under the Grazing Homestead Act in the early 1900s. Cow/calf beef operations are the predominate industry in the plan area. Most ranches are situated along the Burnt River and its tributaries where water is diverted from the river system to supplement sparse rainfall for forage production. Ranchers use these irrigated lands adjacent to the river primarily for pasture and forage production with about 25 to 30 percent dedicated to alfalfa production. There are also large areas of public and private land adjacent to streams that are suited for livestock grazing, wildlife habitat, recreation, timber production and limited mining.

Flood irrigation is the predominate practice for most of the 20,000 acres in the Burnt River Irrigation District and for several thousand acres outside the irrigation district. A few sprinkler systems are used on bench areas. Historically, 85 percent of the Burnt River watershed's runoff occurs from March through June with very low stream flows occurring the remainder of the year. The U.S. Bureau of Reclamation completed construction of the Unity Reservoir in 1939 to provide supplemental irrigation water for about 12,000 acres of land. Prior to the construction of the reservoir, this land depended entirely on natural stream flow from the Burnt River for its irrigation supply. At that time late summer flows on the main stem were often intermittent. At

times ranchers in the Bridgeport area had to go up stream tearing out beaver dams to get stock water in the fall. Records tell of pioneers coming over the Oregon Trail in late summer and fall being able to use the Burnt River's dry river bed for the trail in an area below Durkee Valley.

The average Unity Dam stream flow release to the Burnt River is about 90 cubic feet per second (cfs), 125 to 140 cfs during the irrigation season (April 1 to October 1) and 2 to 40 cfs during the non-irrigation season. The reservoir holds about 25,000 acre-feet, which is less than one-third the average annual runoff for the basin. Sediment accumulation during the past 60 years has resulted in a negligible reduction in reservoir storage capacity.

## **Section 5. History of Conservation in the Burnt River Basin**

Landowners in the Burnt River Basin have been practicing good stewardship for many, many years. This section of the Plan highlights a few programs to show the concern local citizens have for the well being of their watershed.

### **Burnt River Streambank Stability Study**

In the late 1980's the Burnt River SWCD initiated a study of the Burnt River Basin's hydrology because of possibly accelerated streambank erosion. The SWCD hired an engineering firm to assess the entire system. A copy of the final report can be obtained from the Burnt River SWCD office.

The engineers concluded that, for the most part, the streambank erosion rates in the basin were not unusually high. However, some areas do need corrective measures. The SWCD, with the help of the NRCS, is working with landowners, to obtain funding assistance, to implement projects and to correct the problems. Most projects implemented to date have successfully curbed erosion and have endured the last 10, or more, years.

In recent years, many landowners have installed more bank protection measures. One notable practice is the use of juniper rip-rap. This is the practice of cutting juniper trees in the uplands, placing them on streambanks to protect the bank and to capture sediment. This practice not only slows erosion, it also thins overstocked juniper stands and provides good fish habitat.

### **Burnt River Coordinated Resource Management Planning (CRMP)**

Local citizens, working with state and federal agencies, have developed three CRMPs for the Burnt River drainage. The three CRMPs are the South Fork Burnt River, the North Fork Burnt River and the Middle Burnt River. These plans are available at the Baker City SWCD office.

The plans follow the CRMP process and include a list of natural resource and community objectives. Some examples of the issues discussed include:

- Water quality and quantity,
- Wildlife management,

- Noxious weeds, and
- Range management.

## **Burnt River Temperature Study**

During 1997 through 2000 the Burnt River Water Quality Study was conducted as a cooperative effort involving landowners, Burnt River Irrigation District, and a number of federal and state agencies, Oregon State University Rangeland Resources and the U.S. Bureau of Reclamation. Implicit within the development of the studies and modeling effort was the collective intent of the cooperators to determine if natural conditions within the drainage would allow attainment of the statewide standards.

Proper Functioning Condition assessments were conducted along most of the river at landowner request. Assessments were conducted and completed with the landowner with the understanding that they would be placed in private landowner files. Large segments of the river were classified as being at or near proper functioning condition.

Two parts of the project were initiated: a model was developed to assess the influence of various factors on water temperature and field studies and data analyses were conducted to test actual river basin conditions. Two field research studies were conducted by Oregon State University Rangeland Resources Department and the modeling study was conducted by Bureau of Reclamation. The modeling runs and field investigations were undertaken to evaluate factors that could influence how fast stream temperatures approach thermal equilibrium and influences that could occur after a thermal equilibrium was achieved. The results of the studies provide a description of vegetation site potential, and associations between headwater, elevation, weather, and land use to observed patterns of stream temperature.

Model runs and field tests were performed to determine if there was an association between elevation and mean air, soil, and water temperature. Results from both the model and field observations showed a strong association between elevation and mean daily air, soil, and water temperatures. Mean daily air, soil, and water temperatures increased several degrees with each 500-foot drop in elevation (adiabatic rate of heating). This natural rate of heating raised stream temperatures above 64 degrees on a regular basis at and below 4,500 feet in elevation.

Monthly water temperature differences in 1998 and 1999 were strongly associated with air temperature differences. Water temperature patterns followed air temperature patterns.

Meteorological conditions were dominant when compared to existing anthropogenic attributes that may influence water temperature along the Burnt River. Climatic conditions determine the feasible range of water temperature and are a dominant component of the equilibrium temperature for the environment.

The shade potential for most of the main-stem channel is between 2 and 5 percent. The pattern of woody vegetation establishment is dictated by channel characteristics, soils, and the growth characteristics of the vegetation.

The influence of land use was evaluated by comparing segments of the main-stem that are managed for a specific land use. Temperature increases of water flowing (river) through hay meadow (approximately 1 hour flow periods) and summer grazing treatments were not different at the 95 percent level. River segment uses of hay meadow and grazing were found to be temperature neutral in their impact upon river temperature. Study results indicate that each segment of the river accumulated similar (non-significant) amounts of energy regardless of the treatment.

Ecosystem function along the Burnt River is dependent upon the ability of riparian systems to capture resources and facilitate further use by the biotic communities. Current land use has more-or-less maintained the natural structure of the plant communities along the Burnt River and has been managed to stabilize and/or enhance biomass production.

The model and field data both recognized that flood irrigation and dam management enhance desirable watershed characteristics along the Burnt River. Without Unity Reservoir the stream flows in the Burnt River during the summer and fall would be much lower than current levels. Summertime releases from the bottom of Unity reservoir often exceed 70 degrees. Main-stem temperatures from above Hereford to Bridgeport also exceed 70 degrees in late summer and then continue to heat with the thermal environment (adiabatic heating) down the canyon to above 80 degrees near Huntington. Model runs evaluated at 2 times the shade potential of the main-stem were ineffective in reducing river temperature.

The effect of irrigation diversion dams on in-stream temperatures was insignificant in the Burnt River. Return flows tend to reduce the in-stream temperatures in the river due to the lower water temperature of subsurface return flows. Modeling comparisons of conservation management alternatives indicate that increased irrigation efficiencies would increase in-stream temperatures due to a lower subsurface return flow gained by current irrigation practices.

## **Section 6. Water Quality Issues of Concern**

The complete list of water bodies in the Plan Area the Environmental Quality Commission has determined to be water quality limited are in Appendix A. Readers should note that most of these streams are almost entirely on U.S. Forest Service land. Most of the listings that occur within private lands are for the main stem of the Burnt River. The Burnt River is listed for:

- Temperature
- Chlorophyll a (Burnt River from Clarks Creek to Unity reservoir)
- Flow modification

## **Section 7. Beneficial Uses Adversely Affected**

The following beneficial uses have been identified as adversely affected in the plan area:

- Salmonid fish rearing and spawning (OAR 340-41-762)
- Resident fish and aquatic life (OAR 340-41-762)

## **Section 8. Water Quality Objectives**

To achieve its purpose and goals, the LAC establishes the following water quality related objectives for agricultural land in the plan area:

- Objective One- Stream bank erosion remains within expected levels.
- Objective Two- Maintain or improve the ability of riparian vegetation to function within the capabilities of the site.
- Objective Three- Continue and expand, if necessary, the current monitoring program as outlined in the Burnt River Temperature Study.

Chlorophyll a and stream flow modification are not the focus of this plan because:

1. Chlorophyll a problems primarily originate in Unity Reservoir as a result of it being a shallow, warm, stagnant pool during the hot summer months, which is a situation landowners have no control over.
2. Flow modification is largely the result of legal and authorized irrigation withdrawals and to date landowners have shown no interest in giving up their irrigation rights to provide in-stream flows.

However, the Burnt River studies by Borman, Larson and Mangelson have indicated that irrigation withdrawals on the main stem are beneficial to water quality in as much as they provide late-season, cool-subsurface return flows. It has also been pointed out, although not mentioned in the studies, that the withdrawals are also beneficial in filtering out chlorophyll a.

One solution that could be beneficial to both problems would be the construction of the two proposed storage projects on the headwaters of the Burnt River—the 14,000 acre foot Hardman project on the South Fork Burnt River and the 6,500 acre foot Ricco project on the North Fork. Both projects could provide additional in-stream flows to address flow modification and at the same time provide fresh water infusion to Unity Reservoir. This would avert the stagnation, which could reduce chlorophyll a concentrations and improve water quality.

## **Section 9. Prevention and Control Measures**

Voluntary efforts are the focus of the ODA, the Burnt River SWCD and the LAC. However, if a particular landowner refuses to correct a verified adverse condition on his or her property the ODA must have a regulatory backstop to ensure pollution control. At the same time, the ODA does not want to mandate or prohibit any specific agricultural activity. To maintain this flexibility, this plan and its associated administrative rules describe Prohibited Conditions.

Readers should note that this AgWQM Area Plan is only a guidance document. By itself it is not regulatory. However, it does refer to administrative rules that set requirements for landowners. To help distinguish between this Area Plan and its associated rules, all rule language is separated from the rest of the text by solid lines.

The 2001 session of the Oregon State legislature amended the original 1993 SB 1010 law in key areas. The following is an important amendment that describes how ODA may impose a civil penalty for a first violation:

**(ORS 568.933)**

(2) The department may not impose a civil penalty on a landowner for a first violation under this section unless the department:

- (a) Has notified the landowner of the violation in a writing that describes, with reasonable specificity, the factual basis for the department's determination that a violation has occurred; and
- (b) Has prescribed a reasonable time for the landowner to correct the violation that may not exceed 30 days after the first notice of a violation, unless the violation requires more than 30 days to correct, in which case the department shall specify a reasonable period of time to correct the violation in a plan of correction issued to the landowner.

**OAR 603-095-3240**

**Prohibited Conditions**

(1) A land owner shall be responsible for only those conditions caused by activities conducted on land owned or managed by the landowner. Criteria do not apply to conditions resulting from unusual weather events or other exceptional circumstances that could not have been reasonably anticipated.

**Pollution and Waste Management**

ORS 468B.025 was developed to address water pollution from all sources. The LAC did not write this Condition. A Department of Justice Opinion dated September 12, 2000, clarifies that ORS 468B.025 applies to point and non-point source pollution as that term is commonly applied.

SB502 was passed in 1995 so that ODA could be the state agency responsible for direct regulation of farming activities for the purpose of protecting water quality. A Department of Justice opinion dated July 10, 1996, states, '...ODA has the statutory responsibility for developing and implementing water quality programs and rules that directly regulate farming practices on EFU and agricultural lands.' In addition this opinion states, 'The program or rule must be designed to achieve and maintain EQC's water quality standards.'

To implement SB502, the Department is incorporating ORS 468B.025 and 050 into all of the Basin Agricultural Water Quality Management Administrative Rules in the state. ORS 468B.025 and 050 are incorporated by including the following language into the individual basins administrative rules.

As this is an existing statute, this rule will go into effect when the rules are filed with the Office of the Secretary of State.

**OAR 603-095-3240****(2) Pollution And Waste Management**

Effective upon adoption, no person subject to these rules shall violate any provision of ORS 468B.025 or ORS 468B.050.<sup>1</sup>

**Streamside Conditions**

Maintaining and improving riparian vegetation is an important factor to help achieve our goal of working toward a reduction in any identified undesirable water quality issues related to agricultural land use practices. Healthy, functioning riparian vegetation communities in the Burnt River will help stabilize stream banks, filter sediments and nutrients and protect critical aquatic and riparian habitat.

Healthy riparian vegetation can also help control stream temperatures in certain circumstances. However, because of natural factors and the technical and biological challenges (e.g. site capability, and beaver, ungulate and rodent damage) of developing riparian vegetation it is unlikely that any of the listed tributaries of the Burnt River will meet the temperature criteria of 64 degrees. It is also noted that no amount of riparian vegetation can of itself produce sufficient

---

<sup>1</sup> **2001 amendment to ORS 568.933**

- (2) The department may not impose a civil penalty on a landowner for a first violation under this section unless the department:
- (a) Has notified the landowner of the violation in a writing that describes, with reasonable specificity, the factual basis for the department's determination that a violation has occurred; and
  - (b) Has prescribed a reasonable time for the landowner to correct the violation that may not exceed 30 days after the first notice of a violation, unless the violation requires more than 80 days to correct, in which case the department shall specify a reasonable period of time to correct the violation in a plan of correction issued to the landowner.

**ORS 468B.025 Prohibited Activities.**

- (1) Except as provided in ORS 468B.050 or 468B.053, no person shall:
- (a) Cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means.
  - (b) Discharge any wastes into the waters of the state if the discharge reduces the quality of such waters below the water quality standards established by rule for such waters by the Environmental Quality Commission.
- (2) No person shall violate the conditions of any waste discharge permit issued under ORS 468B.050.
- (3) Violation of subsection (1) or (2) of this section is a public nuisance.

**ORS 468B.050 When permit required.**

- (1) Except as provided in ORS 468B.053 or 468B.215, without first obtaining a permit from the Director of the Department of Environmental Quality, which permit shall specify applicable effluent limitations, no person shall:
- (a) Discharge any wastes into the waters of the state from any industrial or commercial establishment or activity or any disposal system.
  - (b) Construct, install, modify or operate any disposal system or part thereof or any extension or addition thereto.
  - (c) Increase in volume or strength any wastes in excess of the permissive discharges specified under an existing permit.
  - (d) Construct, install, operate or conduct any industrial, commercial, confined animal feeding operation or other establishment or activity or any extension or modification thereof or addition thereto, the operation or conduct of which would cause an increase in the discharge of wastes into the waters of the state or which would otherwise alter the physical, chemical or biological properties of any waters of the state in any manner not already lawfully authorized.
  - (e) Construct or use any new outlet for the discharge of any wastes into the waters of the state.
- (2) As used in this section, "confined animal feeding operation" has the meaning given in ORS 468B.205.

benefit to bring any portion of the main stem into compliance with the 64-degree criterion in as much as summertime releases from Unity reservoir often exceed 70 degrees.

However, the numerical criteria are only part of the temperature standard. The standard itself focuses on limiting human-caused warming of surface waters to the extent it is feasible.

Industries, agencies, cities and other groups including agriculture are required to write and implement a basin-wide management plan, such as this Agricultural Water Quality Management Area Plan, that describes how these groups will attempt to control stream temperatures if a stream in the basin exceeds the temperature criterion.

#### **OAR 603-095-3240**

##### **(3) Streamside Conditions**

(a) By January 1, 2006, activities will allow the establishment and development of riparian vegetation, consistent with site capability. Site capability will be determined by ODA in consultation with local resource management agencies.

(b) Landowners are not responsible for browsing and grazing by wildlife.

The Riparian Rule requires activities that prevent vegetation from developing to cease by 2006; it does not require that adequate riparian vegetation be present by 2006. The rule does not specify any activities that must cease and does not require any particular activity to take place. Landowners are not responsible for wildlife browsing and grazing.

The Rule allows for management activities to take place. Some examples of management that are compatible with water quality objectives are:

- properly managed grazing
- hazard tree removal
- traditional harvesting of forages

This rule only applies to the streamside area of natural streams and not to authorized irrigation ditches and diversion points which are used for the primary purpose of delivering irrigation and stock water to lands that hold a valid water right. The streamside area is defined as the area near the stream where management practices can most directly influence the conditions of the water.

## **Section 10. Implementation Strategy**

### **A. Education and Cooperation**

Education and cooperation are the keys to the success of this plan. The local offices of the NRCS, ODA and the SWCD will work together to provide farmers and ranchers in the plan area with information about the goals, objectives and requirements of this plan.

Individual farmers and ranchers in the plan area may request assistance to determine what can be done to meet the goals and objectives of the plan by contacting the local office of the Burnt River SWCD or the NRCS.

## B. Monitoring And Evaluation

A monitoring program will be developed to:

- Continue and expand, as necessary, existing monitoring to establish baseline conditions  
(Responsible parties: Burnt River Irrigation District, Burnt River SWCD)
- Track Area Plan implementation and compliance with the Area Rules  
(Responsible parties: ODA, Burnt River SWCD, Burnt River LAC)
- Evaluate Area Plan effectiveness (improvements in water quality and land conditions)  
(Responsible parties: ODA, Burnt River SWCD, Burnt River LAC)
- Identify priority areas and annual and long-range strategies for Area Plan implementation  
(Responsible parties: ODA, Burnt River SWCD, Burnt River LAC)

Water quality monitoring will be coordinated by representatives of the LAC, ODA, Burnt River SWCD, Burnt River Irrigation District, and other agencies and groups conducting monitoring in the basin. Area Plan success will be evaluated by the LAC, ODA, the Burnt River Irrigation District, and the Burnt River SWCD.

The Oregon Plan for Salmon and Watersheds' Water Quality Monitoring Technical Guide Book (July 1999) is the state's preferred reference manual. Specific monitoring protocols will depend on the condition being assessed.

### **Baseline Conditions**

The LAC believes that the existing monitoring system needs to be continued. The data already collected provides documentation of current conditions. Continued monitoring will help determine trends in water quality. If problems are noted in the monitoring data, the Burnt River SWCD will be notified and they will provide assistance.

Funding is a critical issue. The Burnt River Irrigation District pays for its own monitoring program, and the SWCD depends on grant money to continue its monitoring program.

The Burnt River SWCD and ODA are responsible for implementing the Area Plan. The Burnt River SWCD, as the Local Management Agency, will maintain a Memorandum of Agreement with ODA that outlines their responsibilities for providing educational outreach and technical assistance. The Burnt River SWCD will:

- Participate in developing and evaluating outreach and education programs designed to provide public awareness and understanding of water quality issues.
- Review reports, projects, demonstrations, and tours used to showcase successful management practices and systems.
- Evaluate the adequacy of technical and financial assistance sources available to the agricultural community to implement recommended best management practices, monitoring, and education.

## Area Plan Progress and Success

The Burnt River SWCD, ODA, and the LAC are responsible for determining whether the goals will be met within the time frames identified in the Area Plan. Progress and success of implementation efforts will be assessed through compliance with Area Rules and State standards and the measurement of water quality changes over time. Monitoring methods will be determined before the next review of this Area Plan, when the specific targets are better understood and quantified. Two types of monitoring are described below. The appropriate monitoring design depends on the purpose for monitoring.

1. Trend monitoring: This type of monitoring will be used to determine long-term changes in water quality. It requires the establishment of "stable" sites and collection of a data record over time for comparison to baseline or initial information. Ideally, areas picked for baseline monitoring will also be used for trend monitoring. In the Burnt River, most of these sites have already been established.

The *Monitoring Technical Guide Book* provides detailed information on how to set up and perform water quality monitoring, including considerations for site selection, quality assurance, quality control, and data storage. When combined with compliance monitoring, trend monitoring can indicate improvement in water quality conditions related to changes in land use practices.

2. Compliance monitoring: ODA will review the water quality data collected in the Burnt River on a regular basis. As part of its determination of basin-wide compliance, ODA will consider such things as expected annual averages for the area, "normal" daily fluctuations in temperature, trends over time and other factors. DEQ also conducts monitoring to determine compliance with State water quality standards.

### C. Supporting Measures

Before the next review of this Area Plan, ODA and the Burnt River SWCD may develop a map of general vegetative site capability that continues and expands the preliminary work already completed.

## Section 11. Schedule for Implementation

The following should be the schedule for implementation to comply with the time frames established by this plan:

### A. Plan Period

This plan is intended to be put into full effect over a period of two years from the date of its adoption until which time it anticipates meaningful progress toward achievement of the stated objectives.

## B. Management Objectives

This plan encourages farmers and ranchers to manage their land to control conditions that have been identified as contributing to undesirable water quality using adaptive management techniques that should go into effect as of the date and time identified in each condition.

## C. Monitoring

The Water Quality monitoring in the Burnt River Drainage began in 1992. Monitoring intensified in 1998 and will continue for the foreseeable future.

## D. Reporting and Amendment

The LAC, ODA, and the SWCD will conduct biennial reviews of the progress of implementation of the water quality management area plan, including enforcement actions taken, and requests for alternate measures that have been granted and/or denied. The SWCD and ODA will submit annual, written reports to the Board of Ag and the director, summarizing any meetings held, advisory committee members present, actions taken, and progress and impediments toward achievement of water quality management area plan goals. If necessary they will provide recommendations to the board and the director regarding modifications to the area plan that may be necessary to achieve water quality goals and objectives.

## **Section 12. Landowner Participation**

The following guidelines apply for landowner participation in implementation and review of the plan:

### Landowner Participation and Cooperation

- A. Landowners will receive copies of the plan and monitoring summaries upon request.
  - 1. Comments from the public and landowners will be received and response given.
  - 2. Adaptive management specific to the landowners' needs should be used to strive to avoid conditions of Section 9.
  - 3. Landowners and producers will be offered the opportunity for adaptive management.
- B. Property rights will be observed as guaranteed by the US and Oregon Constitution.
- C. Burnt River landowners will maintain ownership of data collected by them or their agents on their property.
- D. Assistance for problem resolutions will be provided by the Burnt River SWCD to landowner upon request.
- E. Background information and research publications relevant to the water quality issues should be made available by the Burnt River SWCD.
- F. Specialized assistance from professional scientists, researchers, extension agents, or others will be sought by ODA and the SWCD when questions and concerns require such assistance.
- G. ODA will assist the landowner in data interpretation, or other information.

- H. Secondary characteristics of soil type, hydraulic function, plant community, geological attributes or other factors can be used to compliment any data and data analysis that meets the goals and objectives of the plan in these areas.
- I. Landowners may provide information and/or cooperation and maintain options to adapt management actions that meet the plan objectives.

### **Section 13. Enforcement Process and Resolution of Complaints**

The Oregon Department of Agriculture will have the responsibility for enforcing rules derived from the AgWQM Area Plan. Fines and civil penalties are used as a last resort in the effort to address management impacts on water quality. That is consistent with the direction given to the Department through Oregon Administrative Rules for Agricultural Water Quality Management Program (OAR 603-090-0000 through 603-090-0120). This plan includes an enforcement policy because it is a required element of a Water Quality Plan and to provide a mechanism when reasonable attempts at voluntary solutions have failed.

The primary focus of the AgWQM Area Plan is education toward voluntary compliance with the plan, and even the enforcement procedure is designed to educate first and penalize only as a last resort. In the event that a situation comes to the attention of the Oregon Department of Agriculture that may be in violation of the Water Quality Management Area Administrative Rules, certain procedures will be followed, as indicated in OARs 603-095-0010 through 0040 and OARs 603-090-0000 through 0120.

The following is a general summary of the procedures: Except for flagrant<sup>2</sup> discharge of pollutants or flagrant removal of riparian vegetation necessary for streambank stability and shading, at any point in the process, the landowner may choose to address a problem and not incur civil penalties under the basin rules.

#1. Any person alleging a violation of the AgWQM Area Administrative Rules may file a complaint with the ODA. The department will evaluate a complaint filed by a person if the complaint is in writing, signed and dated by the complainant. It must indicate the location and description of the alleged violation of the basin's AgWQM Area Rules.

#2. If after evaluating the complaint ODA determines there might be a possible violation, ODA will contact the landowner, manager or lessee to schedule a meeting. Prior to the meeting ODA will:

- a) Provide a summary of the complaint to the landowner.
- b) Inform the landowner of their right under the Public Records Law (ORS 192.410 through 505) and Public Information Administrative Rule (OAR 603-001-0125 through 0155) to file for a complete copy of the complaint, including name of complainant.

---

<sup>2</sup> As defined in OAR 340-012-0030 - any documented violation where the respondent had actual knowledge of the law and had consciously set out to commit the violation.

- c) Provide adequate time (30 days) for the landowner, if they desire, to:
  - 1) contact other experts and
  - 2) request the SWCD to obtain site specific water quality monitoring data (except in cases where it appears to be a flagrant violation in need of immediate attention)
- d) Inform the landowner that ODA will not enter the property to gather information without permission or a search warrant.

#3. The alleged violation will be reviewed on site by the ODA representative and the landowner. The landowner may invite members of the LAC or the SWCD or any other person to be present at this visit. The on-site review will include an investigation by the ODA, which will include collection of samples as appropriate, for testing and consultation with experts at the ODA expense. In the case of an alleged violation in the Burnt River Plan Area where extensive monitoring data has been collected, ODA will review this data. ODA will consider such things as expected annual averages for the area, “normal” daily fluctuations in temperature, trends over time and other factors. If no violation of the basin AgWQM Area Rules exists, the complaint will be dropped.

#4. If the ODA determines through the investigation, based on scientific data, that a violation of the basin AgWQM Area Rule exists, the ODA will advise the landowner of the violation (i.e. issue a Notice of Noncompliance) and work with the landowner and other experts the landowner may want to involve to develop a Plan of Correction to resolve the problem. The Plan of Correction includes a timetable of specific actions and an agreement to revisit the site as necessary to confirm that progress is being made to correct the violation within the timetable agreed upon. If progress is being made on schedule, this will complete the process.

#5. If the landowner does not agree to the specific actions required by the ODA, the landowner may request a review under the procedures outlined in OAR 603-090-0040 through 603-090-0050. The ODA shall determine whether alternate measures proposed by the landowner are sufficient to protect water quality.

#6. If there is a confirmed violation that a landowner refuses to address after the department’s on-site visit and the department attempts to work with the landowner to develop a mutually agreeable solution civil penalties can be levied. Civil penalties are issued by the ODA director or the director’s designee under the provisions of OAR 603-090-0060 through 603-090-0120 and will be based on the seriousness of the violation and the magnitude of the effect. OAR 603-090-0120(3) describes the civil penalty matrix for first violations which begins at \$50 and ranges to \$1200 and the civil penalty matrix for repeat violations which begins at \$100 and ranges to \$5000.

#7. A landowner issued a civil penalty due to a violation of the basin AgWQM Area Rules may request an informal conference with the Director of the ODA. The conference provides an opportunity for the landowner to present their perspective and may result in a settlement.

#8. A landowner issued a civil penalty due to a violation of the basin AgWQM Area Rules may request a formal hearing by an independent hearings officer assigned from the Hearings Officer's Panel in accordance with applicable contested case procedures as described in ORS 183.413 to 183.550.

#9. A landowner may appeal the outcome of a formal hearing concerning a civil penalty by filing a petition with the Court of Appeals. The court will consider whether the ODA has properly interpreted the applicable law and has acted within the discretion delegated by law that is consistent with agency rule, official agency position or prior practice. The court may also assess whether the ODA action is based on substantial evidence and is consistent with the constitution.

## APPENDIX A

<b>Waterbody Name</b>	<b>Boundaries</b>	<b>Parameter</b>
Burnt River	Mouth to Clarks Cr	Flow Modification
Burnt River	Clarks Cr to Unity Res	Flow Modification
Burnt River	Clarks Cr to Unity Res	Chlorophyll a
Burnt River	Mouth to Clarks Cr	Temperature
Burnt River	Clarks Cr to Unity Res	Temperature
Camp Creek (Burnt River)	Mouth to East/West Forks	Habitat Modification
Camp Creek (Burnt River)	Mouth to East/West Forks	Sedimentation
China Creek	Mouth to Headwaters	Sedimentation
China Creek	Mouth to Headwaters	Habitat Modification
China Creek	Mouth to Headwaters	Temperature
East Camp Creek	Mouth to King Creek	Temperature
Geiser Creek	Mouth to Headwaters	Sedimentation
Geiser Creek	Mouth to Headwaters	Habitat Modification
Gimlet Creek	Mouth to Headwaters	Sedimentation
Gimlet Creek	Mouth to Headwaters	Habitat Modification
Meadow Creek	Mouth to Headwaters	Temperature
North Fork Burnt River	Mouth to Pete Mann Ditch	Flow Modification
North Fork Burnt River	Mouth to Pete Mann Ditch	Sedimentation
North Fork Burnt River	Mouth to Pete Mann Ditch	Habitat Modification
North Fork Burnt River	Mouth to Pete Mann Ditch	Temperature
Patrick Creek	Mouth to S end of Patrick Meadows	Sedimentation
Patrick Creek	Mouth to S end of Patrick Meadows	Habitat Modification
Patrick Creek	Mouth to S end of Patrick Meadows	Temperature
Trout Creek	Mouth to Headwaters	Sedimentation
Trout Creek	Mouth to Headwaters	Habitat Modification
Trout Creek	Mouth to Headwaters	Temperature
West Fork Burnt River	Mouth to Headwaters	Sedimentation
West Fork Burnt River	Mouth to Headwaters	Habitat Modification

## **APPENDIX B**

### **Definitions**

“Pollution” has the meaning given in ORS 468B.005(3) which states: such alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, silt or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the state, which will or tends to, either by itself or in connection with any other substance, create a public nuisance or which will or tends to render such waters harmful, detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof.

“Wastes” has the meaning given in ORS 468B.005(7) which states: sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive or other substances which will or may cause pollution or tend to cause pollution of any waters of the state. Other substances, which will or may cause pollution, include commercial fertilizers, soil amendments, composts, animal wastes, and vegetative materials.

“Adaptive management” means making adjustments in management based on feedback from monitoring.