Oregon Plan for Salmon and Watershed
Oregon Coast Coho Assessment
Agriculture
Prepared by Department of Agriculture

Introduction

The Oregon Department of Agriculture (ODA) has specific legal authorities and is responsible for addressing water pollution associated with agricultural lands and activities through the following programs.

1. Agricultural Water Quality Management (SB 1010)
2. Confined Animal Feeding Operation (CAFO)
3. Pesticides
4. Weed Control and Invasive Species
5. Soil and Water Conservation Districts

These programs collectively work with the agricultural and general public to develop and implement economically viable, basin-specific strategies that protect the waters of Oregon from agricultural impacts while allowing for a viable agricultural industry.

Addressing water pollution from agricultural activities addresses the following potential threats to Oregon Coast coho:

- Riparian condition
- Water Quality

The following sections briefly describe the legal and institutional framework of each of these programs and how they address factors for decline of coho within the Oregon Coast Coho ESU. The information is provided to address questions from the federal Policy for Evaluation of Conservation Efforts (PECE) to help us assess the certainty of implementation and effectiveness of these programs.

Description of Regulatory and Programmatic Measures

Threats to the viability of Oregon Coast coho associated with agricultural lands are addressed by the programs of a number of federal, state, and local entities. Agencies in addition to the Oregon Department of Agriculture that are typically identified as working directly with agricultural landowners to address water quality issues are: the USDA Natural Resources Conservation Service; USDA Farm Services Agency; local Soil and Water Conservation Districts; and, the Oregon State University Cooperative Extension Service. The department in partnership with these agencies helps landowners address water quality issues associated with agriculture, and thus issues associated with endangered species, through a diversity of resources and tools. The tools include outreach and education, technical assistance, financial assistance and regulatory backstops when necessary.

There are a number of other agencies and organizations that address specific issues related to agriculture. The authority for water rights distribution and regulation rests with the Oregon Water Resources Department. Irrigation affects stream flow and the "loading capacity" for pollutants. Water rights regulate the amount of water available for designated beneficial uses. Watershed Councils provide outreach and also can contribute assessment and monitoring data related to water quality. Other sources of water monitoring data include the Oregon Department of Environmental Quality and the US Geological Service. To avoid duplicating efforts, the state looks first to existing efforts to needs and conditions, and augments these where necessary.

The challenge for agencies concerned about issues associated with agricultural lands is to be able to recognized the array of efforts available and identify how these efforts meet and exceed the needs regarding coastal coho. Furthermore, documenting the progress and effectiveness of multiple programs by multiple entities with diverse, dynamic resources derived from different county, state, federal, and private authorities and sources will be a challenge as this documentation is presently not supported by any one organization.

Following is a description of the programs for which the Oregon Department of Agriculture is directly responsible.

1. AGRICULTURAL WATER QUALITY MANAGEMENT PROGRAM

In 1993, the Oregon Legislature passed an Agricultural Water Quality Management Act (SB 1010), Oregon Revised Statute (ORS) 568.900 to 933. This statute directed ODA to address water pollution from agricultural activities and rural lands. SB 1010 authorized ODA to develop and carry out an Agricultural Water Quality Management Area Plan (Area Plan) and to enforce associated Area Rules for agricultural or rural lands when a water quality management plan is required by state or federal law.

In 1995, the Oregon Legislature passed SB 502 (ORS561.191), which generally requires that ODA take the lead to develop and implement programs or rules that directly regulate agricultural activities for the purpose of protecting water quality.

Implementation of the agricultural water quality management act (SB 1010)
The SB 1010 process is triggered in an area when a water quality management plan is required by state or federal law. Area Plans and Rules identify local water quality problems associated with agricultural lands, conditions in the watershed that need to be addressed to meet water quality standards, and ways to correct those problems.

The state Board of Agriculture provided ODA with the following policy directions for Area Plan and Rules development around the state:

- Develop goal-oriented approaches, not prescriptive approaches.
- Accommodate differences between geographic areas.
- Focus on voluntary initiatives and approaches to plan goals

- Provide clear enforcement provisions to be utilized where needed as a backstop.
- Proactively address agricultural water quality issues.
- Address fish habitat concerns related to water quality so as to provide the broadest possible protection for farmers and ranchers relative to both water quality and fish regulatory programs.

Goal-orientated approach, which is also referred to as an outcome based approach, refers to identifying conditions on the land that are needed for prevention and control of water pollution. This is in contrast to a practices based approach, in which the program identifies specific practices that must be used by landowners. The state chose a goal oriented approach because it believed that a prescriptive approach would not be effective in light of Oregon's diversity of geography and crop production. One important advantage of a goal-oriented approach is that landowners often voluntarily go above and beyond the minimum requirements of a practices-based approach. In a practices-based approach, landowners often feel that traditional regulatory language does not allow them much opportunity to respond to requirements, whereas an outcome-based approach can encourage individual initiative and creativity.

ODA worked cooperatively with local partners and other agencies to develop Area Plans and Rules, satisfy state and federal water quality laws, inform and involve the public in the process, and provide technical and financial assistance to landowners as they implement conservation practices that benefit water quality.

Industry groups, Oregon State University (OSU) Extension Service, watershed councils, and local SWCDs are essential players in achieving the goals of Area Plans and Rules. Each group may conduct outreach to its members and constituents about the process, provide technical expertise to help farmers and ranchers address water quality issues, conduct education programs on management practices that will achieve water quality goals, and monitor water quality and land conditions to determine the effectiveness of actions taken.

Area Plans and Rules do not apply to federal or tribal trust lands; however, federal and tribal land managers of federal lands are consulted about the local Area Plan and Rules and were encouraged to participate in the planning and implementation process.

Area Plan and Rules Development

Water quality management plans were developed for an area because of the federal Clean Water Act, Coastal Zone Management Act, Groundwater Management Act, Safe Drinking Water Act, or other state or federal law. The most common trigger is the Clean Water Act and associated Total Maximum Daily Loads. ODA established a Local Advisory Committee and a Local Management Agency to assist with development of the Area Plans and Rules. The following elements were included in each plan:

- Description of geographical and physical setting
- Identification of water quality concerns in the area and beneficial uses of water that are adversely impacted
- Water quality goals and objectives.

- Measures necessary to achieve goals and objectives.
- Implementation schedule for necessary measures.
- Guidelines for public participation process, including state and local government roles and responsibilities.
- Guidelines for evaluation, review and update of the plan.

Associated with each plan are Oregon Administrative Rules (OAR) (OAR 603-095) that provide an enforceable backstop for addressing water pollution from agricultural activities and rural lands. Once these rules were finalized and filed with the Secretary of State, individual farmers, ranchers and other rural landowners became responsible for managing their lands to meet the Area Rules.

Landowners may choose to proactively address the Area Plan and Rules by developing an individual Voluntary Water Quality Farm Plan (Voluntary Plan). Voluntary Plans address the farmers' economic and natural resource goals, as well as natural resource concerns on their lands. Many funding programs, including the Environmental Quality Incentives Program and Conservation Reserve Enhancement Program, may be available to landowners who need financial assistance to carry out management changes.

Landowners who choose not to address the requirements of Area Rules will be notified if violations occur, corrective actions will be scheduled, and assistance will be offered. If violations persist because of inattention on the part of the landowner, the landowner will be issued a Notice of Noncompliance. ODA may enter into a compliance agreement with the landowner and may seek additional enforcement remedies. Landowners with chronic or egregious violations of Area Rules will be subject to civil penalty assessments.

Review and Update of Area Plan and Rules
On a biennial basis, the LAC and ODA review the implementation progress of the Area Plan and Rules and determine whether the plan is sufficient to meet and address water quality standards. If timeframes and benchmarks are being met, no modifications will be required. If deficiencies are noted, the Area Plan and/or Rules will be revised. If there are any changes to the Area Rules, there will be a public comment period.

2. CONFINED ANIMAL FEEDING OPERATION PROGRAM

The Oregon Department of Agriculture's (ODA) Confined Animal Feeding Operation (CAFO) program (Oregon Revised Statute 468B.050 and 468B.0125) was expanded by the state legislature in 2001 to bring the program into compliance with EPA's CAFO regulations. This has expanded the types of CAFOs that must have a permit to be consistent with EPA's definition. The new definition removes the exclusion of larger CAFOs that have facilities where animals are confined for four months or less duration and facilities without a prepared surface and without wastewater treatment works.

The state's policy is to protect the quality of the waters of this state by preventing animal wastes from discharging into waters of the state. In further defining the state's CAFO

program, process wastewater includes any water that comes into contact with any raw materials, products, or by products including manure, litter, feed, milk, eggs, or bedding (OAR 603-074-0010(17)). Wastewater treatment works and/or disposal systems are defined in OAR 603-074-0010(24) as all or any part of a system or systems used in connection with a CAFO or holding operation for the collecting, conveying, storing, treating, or stabilizing of manure, litter, process waste water or contaminated storm water runoff.

In 1998, ODA shifted its emphasis from a complaint response system of inspections to a routine annual inspection program for permitted CAFOs. Since June 1999, ODA has committed to inspecting all permitted CAFOs at least once annually.

The permit for CAFOs prohibits discharges from properly designed and operated facilities except during unusually high rainfall events. An unusually high rainfall event is defined as a 25-year, 24-hour storm, which is defined by EPA as a mean precipitation event with a probably recurrence interval of once in 25 years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, or equivalent regional or state rainfall probability information developed from this source[40 CFR 412.2(i))]. Land application of wastes must be at agronomic rates and as specified in an approved waste management plan. The permit requires the plan to be consistent with OAR 340-051, the NRCS Nutrient Management practice standard guidance 590, and cites minimum performance criteria for waste management.

3. PESTICIDE MANAGEMENT

The ODA Pesticide Division regulates all activities of pesticide use in Oregon, not just agricultural use (ORS 634). The pesticide program is achieving the expectations of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as it pertain to pesticide through the oversight of EPA (as laid out in an MOA between the two agencies). The label contains the guidelines and regulations as they relate to aquatic species and is the means by which this program addresses violations.

ODA is the EPA –designated agency to enforce FIFRA in Oregon. The State has had a Pesticide Control Act since 1973, which in part, allows ODA to further regulate pesticide use, across the entire state or within a specific area. The Oregon Department of Forestry (ODF) also administers the Forest Practices Chemical Rules, which are designed to protect water quality and other natural resources on forestland. These rules establish further requirements to ensure that forest use of pesticides, and petroleum and other chemical products, are not '…injurious to water quality or to the overall maintenance or terrestrial wildlife or aquatic life…"

ODA's regulation of pesticides encompasses commercial as well as homeowner use. This program is implemented under a cooperative agreement with the EPA through the Region 10 Pesticide Program Office. This agreement lays out the responsibilities of the state and the EPA to achieve the goals of the EPA's pesticide responsibilities in Oregon.

ODA's responsibilities under this agreement are described below. In addition the department has formalized working relationships with the following organizations to assure coordination on issues related to pesticide use.

- Oregon Health Division, particularly as it relates to the drinking water program
- DEQ- air quality, water quality, land quality, hazardous waste programs
- Oregon OSHA - worker safety
- Oregon Department of Fish and Wildlife - fish and habitat divisions
- Oregon Department of Forestry. Forest protection division, forest management division
- Water Resources Department - chemigation, well head protection

The division seeks to protect people and the environment from adverse effects of pesticide use while maintaining the availability of pesticides for beneficial uses. The division regulates the sale and use of pesticides; provides testing and licensing of all users of restricted-use pesticides; is responsible for fertilizer registration; and investigates incidents of alleged pesticide misuse.

Pesticide User Licensing

Certain persons who use pesticides in Oregon are required to be licensed by the Oregon Department of Agriculture prior to conducting pesticide applications. Certification of applicators is accomplished through the administration of pesticide category-specific examinations to demonstrate a quantifiable level of awareness of pesticide related issues. Once a person is certified, they may apply for an applicator license. Certification is limited to a 5-year period and may be renewed by accumulating a required number of recertification educational hours or by retaking the examinations. Other pesticide licenses issued include pesticide dealers, pesticide consultants and pesticide operators. Activities related to this division function include:

* Writing certification examinations
* Preparing examination study guides
* Proctoring examination sessions
* Grading examinations
* Evaluating educational sessions
* Recording training session attendance for individual licensees
* Processing license renewals
* Providing pesticide technical information to the public and licensees
* Developing, conducting, and/or participating in training sessions

Annual Licenses

* Private Pesticide Applicator 5,517
* Commercial Pesticide Operator 801
* Commercial Pesticide Applicator/Trainee 4,097
* Public Pesticide Applicator/Trainee 1,734
* Pesticide Consultant 945
* Pesticide Dealer 248

* Recertification Sessions Accredited 950
* Certification Examinations Administered 4,456

Pesticide Registrations

Pesticide products offered for sale or distribution in Oregon must be registered with ODA on an annual basis. EPA determines the uses and restrictions of each pesticide product. Those requirements are contained in the product labels, filed as part of the registration process. With the vast diversity of minor crops in Oregon, special conditions sometimes exist which require some pesticide products to be reviewed and registered as an Oregon Special Local Need, allowing use on crops otherwise not included on EPA approved labels.

Under circumstances which could potentially devastate a crop or industry in Oregon, the department requests special authorizations from EPA for specific pesticide uses. Also, experimental use permits are issued to facilitate data development. Data submitted and reviewed include product toxicity to humans and wildlife, economic impact, environmental fate, efficacy, phytotoxicity, worker protection, use and cropping patterns, etc.

Pesticide Compliance Monitoring

Approximately 10,000 licensed pesticide applicators in Oregon plus anyone who applies pesticides and are not required to be licensed, make up the audience of the pesticide compliance section of ODA's Pesticide Division. Oregon maintains a cooperative agreement with EPA in monitoring pesticide compliance with federal regulations in addition to the state regulations outlined in Oregon Revised Statutes Chapter 634 and Oregon Administrative Rules Chapter 603, Division 57. Salem remains the headquarters for most of the pesticide compliance monitoring staff; however, district offices are also located in Central Point and Hermiston to improve response time and address unique local issues. Pesticide investigative staff primarily serve as the "front line" representatives of the Pesticides Division to respond to complaints and assess potential violations. In addition, compliance personnel are an extremely valuable resource for disseminating technical information, and providing regulatory education and compliance assistance.

Pesticide sales, use, and distribution in Oregon are regulated under ORS Chapter 634. If pesticide use restrictions beyond label requirements are necessary to protect water quality in coastal areas, ODA has the authority, under ORS Chapter 634, to implement necessary use restrictions to protect water quality. No new rules directly regulating pesticides will be developed through the Agricultural Water Quality Management Program. If additional use restrictions are needed, this will be accomplished through changes to the label by the Pesticides Division. Individuals that have specific concerns regarding existing pesticide laws and regulations or specific pesticide product label language should contact the ODA Pesticides Division.

Pesticide Use Reporting System

The 1999 Oregon Legislature passed, and Governor John Kitzhaber signed, legislation

known as House Bill 3602 - Pesticide Use Reporting Program (Chapter 1059, Oregon Laws 1999). This legislation directed the Oregon Department of Agriculture to develop and implement a comprehensive, reliable and cost effective system for collecting, organizing and reporting information on all categories of pesticide use in Oregon. Insufficient funding and spending authority were provided to operate the system during the 2003-2005 biennium. While statutes still require reporting, the department is not taking enforcement action for failure to comply since no means exists for operators to file and for the department to collect pesticide use reports.

Currently there is not a statewide monitoring program related to all pesticides for all surface and ground water. However, DEQ monitors identified areas of concern such as ground water management areas. This involves both surface and groundwater monitoring for contaminants including pesticides. In addition, where indicators of potential problems exist, monitoring programs are put in place.

Two good examples of such specific monitoring for pesticides are the aerial pesticides application study completed in 2000 and the study on fish deformities in the Newberg Pool of the Willamette River in 2002.

In the first study, ODF contractors monitored aerial pesticide applications during the fall of 1997 and the spring of 1999. The final report found that the Forest Practice Rules, as currently written, are appropriate for protecting water quality, fish and wildlife habitat, and riparian vegetation.

The second example is a study funded by a $500,000 appropriation by the 2001 legislature. The study, by the Molecular and environmental Toxicology Department, Oregon State University, was a toxicological investigation to determine the cause of deformed fish in one section of the Willamette River. The investigation began with highly detailed analyses for pesticides in the water and ruled them out as the cause, finding no levels of harm to fish. The cause was eventually determined to be parasites. Studies such as these had verified results obtained by other agency monitoring.

4. WEEDS AND INVASIVE SPECIES

Weed Program

The Noxious Weed Control Program provides leadership and technical expertise for weed control programs throughout the state. This involves coordinating the weed control efforts of federal, state, and county agencies as well as private landowners. Program staff also conduct weed surveys to detect new infestations and to manage such infestations while they are still small and before they become significant problems, and administer county assistance and special project funds appropriated for weed control by the legislature. ODA staff work closely with the State Weed Control Board to prioritize weed projects. ODA strives to develop and implement biological control programs wherever feasible and to promote the integration of methods of control so as to maximize that effectiveness while reducing environmental impacts.

ODA cooperates with federal and state agencies to prevent the introduction and spread of exotic plant pests and noxious weeds through effective regulations, detection and eradication programs. Additionally, a grant program has successfully funded high-priority noxious weed projects that protect and enhance natural resources. Grants, using Measure 66 lottery funds, are being awarded to County Weed Control Programs, Watershed Councils, Soil and Water Conservation Districts, Irrigation Districts, non-profit groups like The Nature Conservancy and to private landowners statewide. Priority weed grant projects are those that protect, enhance or restore fish and wildlife habitat and overall watershed function. All of these functions contribute to the goals of the Oregon Plan for Salmon and Watersheds.

Invasive Species Program

Invasive species pose a threat to the survival of native biota throughout the United States, and many other areas of the world. Invasive species are those plants, animals, and microbes not native to a region which, when introduced either accidentally or intentionally, out-compete native species for available resources, reproduce prolifically, and dominate regions and ecosystems. Because they often arrive in new areas unaccompanied by their native predators, invasive species can be difficult to control. Left unchecked, many invasives have the potential to transform entire ecosystems, as native species and those that depend on them for food, shelter, and habitat disappear.

The Oregon Invasive Species Council, which was created by the Oregon legislature, was initiated on January 1, 2002. The enabling legislation (ORS 561.685) identifies four main functions for the Council. First, the Council is directed to create and publicize a system for reporting sightings of invasive species and referring those reports to the appropriate agency. Second, the Council is directed to undertake educational activities to increase awareness of invasive species issues. Third, the statute directs the Council to develop a statewide plan for dealing with invasive species. Finally, the Council is authorized to administer a trust account for funding eradication and education projects.

Ecologically and economically, it would be desirable to keep all of the organisms on the 100 Most Dangerous Invaders list out of the state. Realistically, 100% success is not feasible; the "ambitious but realistic" target set for our state by the Oregon Progress Board is 99% success each year. Benchmark #89 measures the "Number of most threatening invasive species not successfully excluded or contained since 2000." This is equivalent to five or fewer species from the annually updated list of 100 Most Dangerous Invaders becoming permanently established by 2005.

ODA tracks invasive exotic plants, insects and animals through a number of detection programs including reporting from citizens and other agencies. These efforts have been successful in controlling species such as the European gypsy moth and other insects that hitch rides on vehicles and other material transported to Oregon. Clearly this is a challenge that Oregon will continue to face and for which there is no single means to track invasive species.

5. SOIL AND WATER CONSERVATION DISTRICTS (SWCDs)

Oregon's 45 Soil and Water Conservation Districts (SWCDs) are organized under Oregon Revised Statutes (ORS) Chapter 568 and are governed by an elected board of directors who serve without pay. SWCDs identify and address natural resource concerns within their respective boundaries and work with local, state, federal and private interests to deliver conservation services. SWCDs provide direct technical assistance to landowners to plan, design, survey, and implement conservation practices and systems.

SWCDs also serve as Local Management Agencies for the department and assist with development and implementation of agricultural water quality area management plans. The coastal SWCDs include Clatsop, Coos, Curry County, Lincoln, Siuslaw, Tillamook County, and Umpqua SWCDS. The coastal SWCDs have provided assistance to landowners that have contributed to streambank stability and improvement in riparian condition, livestock manure management, and education and outreach related to salmon and watersheds.

Through these means the SWCDS effectively address riparian condition, sediment, water temperature, pH, dissolved oxygen, bacteria, and excessive nutrients from agricultural and rural lands.

Discussion

Agricultural Water Quality Management Program

The department has adopted plans and rules for the basins associated with the Oregon Coast coho ESU. These are the North Coast, Mid Coast, Umpqua, the Coos and Coquille, and Curry County Agricultural Water Quality Management Areas. The plans and rules for these areas were adopted between 1999 and June 2004 (Curry). All of these areas are subject to a waste management rule reflecting existing statute (Oregon Revised Statute 468B.025) that went into effect upon adoption and a riparian rule that is presently in effect for the Umpqua and North Coast planning areas, and will go into effect in 2005 for the Coos/Coquille and Mid Coast planning areas, and in 2007 for the Curry planning area.

BASIN ADMINISTRATIVE RULES
The waste management rule reads:

Effective on rule adoption, no person subject to these rules shall violate any provision of ORS 468B.025 or ORS 468B.050.

Upon adoption of this Rule, ODA assumes responsibility for implementing ORS 468B.025 and 468B.050.

The Waste Management Rule currently is State Law (ORS 468B.025 and ORS 468B.050). ORS 468B.025 states that no person shall:

(1) (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) Violate the conditions of any waste discharge permit issued under ORS 468B or ORS 568.

ORS 468B.050 refers to situations when permits are required, such as for certain confined animal feeding operations.

This rule ensures that concentrated nutrients, pathogens associated with high animal density areas, high sediment concentrations in run-off, toxics, or other potential pollutants are not readily transported to waters of the state.

Wastes associated with livestock operations can include manure from seasonal feeding and birthing areas, gathering areas and corrals, rangelands and pasture, and any other situations not already covered by Oregon's Confined Animal Feeding Operation laws. Fecal coliform counts that exceed state water quality criteria indicate noncompliance with the Waste Management Rule. Livestock grazing is allowed to the extent it does not violate state water quality standards and complies with the Area Rules. Compliance with the Streamside Riparian Area Management Rule will help keep wastes from being carried into waters of the state.

Wastes may also include excess sediment discharges. Landowners who are actively discharging significant quantities of sediment may be in violation of the Waste Management Rule.

Definitions:
Wastes include manure, commercial fertilizers, soil amendments, composts, vegetative materials, or any other substances that will or may cause water pollution (OAR 603-095-0010(53)).

Waste discharge means the discharge of waste, either directly or indirectly, into waters of the state (OAR 603-095-0010(54)).

Water pollution means 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 (ORS 468B.005(7)).

Waters of the State include lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, marshes, inlets, canals, and all other bodies of surface or underground waters, natural or artificial, public or private (except those private waters which do not connect to natural surface or underground waters) within Oregon (from ORS 468B.005(8)).

The **riparian rules** vary somewhat from basin to basin but achieve the goal of addressing existing management that does not allow the establishment and maintenance of vegetation appropriate to the site capability along streams to provide for streambank stability and shade. Following is a list of the riparian rules for each of the coastal coho basins. A complete listing of all of the rules and plans associated with each basin can be viewed at www.oda.state.or.us.

North Coast
603-095-0840
(1) All landowners or operators conducting activities on lands in agricultural use shall be in compliance with the following criteria. A landowner or operator shall be responsible for only those required and prohibited conditions caused by activities conducted on land managed by the landowner or operator. Criteria do not apply to conditions resulting from unusual weather events or other exceptional circumstances that could not have been reasonably anticipated.
(2) Healthy Riparian Streambank Condition. Effective upon rule adoption.
(a) Allow the natural and managed regeneration and growth of riparian vegetation -- trees, shrubs, grasses, and sedges -- along natural waterways (as defined in OAR 141-085-0010(27)) to provide shade to moderate water temperatures and bank stability to maintain erosion near background levels.
(b) The technical criteria to determine compliance with OAR 603-095-0840(2)(a) are:
(A) Ongoing renewal of riparian vegetation that depends on natural processes (including processes such as seed fall, seed bank in soil, or sprouting from roots, rhizomes, or dormant crowns) is evident.

(B) Ongoing growth of riparian vegetation that has a high probability of remaining or becoming vigorous and healthy is evident.
(C) Management activities minimize the degradation of established native vegetation while allowing for the presence of nonnative vegetation.
(D) Management activities maintain at least 50% of each year's new growth of woody vegetation -- both trees and shrubs.
(E) Management activities are conducted in a manner so as to maintain streambank integrity through 25-year storm events.
(c) Exemptions:
(A) Levees and dikes are exempt from the Healthy Riparian Streambank Condition OAR 603-095-0840(2)(a) and (b), except for areas on the river-side of these structures that are not part of the structures and which can be vegetated without violating U.S. Army Corps of Engineers vegetation standards.
(B) Drainage areas where the only connection to other waterbodies are through pumps shall be exempt from the Healthy Riparian Streambank Condition OAR 603-095-0840(2)(a) and (b).
(C) Access to natural waterways for livestock watering and stream crossings are allowed such that livestock use is limited to only the amount of time necessary for watering and crossing the waterway.
(D) Drainage and irrigation ditches managed in compliance with OAR 603-095-0840(3) are exempt from the Healthy Riparian Streambank Condition OAR 603-095-0840(2)(a) and (b).

Mid Coast
603-095-2240
(1) All landowners or operators conducting activities on lands in agricultural use shall comply with the following criteria. A landowner shall be responsible for only those conditions caused by activities conducted on land controlled by the landowner. A landowner is not responsible for violations of Prevention and Control Measures resulting from actions by another landowner. Conditions resulting from unusual weather events (equaling or exceeding a 25-year, 24-hour storm event) or other exceptional circumstances are not the responsibility of the landowner. Limited duration activities may be exempted from these conditions subject to prior approval by the department.
(2) Near-Stream Management Areas. Effective January 1, 2005:
(a) Agricultural activities must allow for the establishment and development of riparian vegetation consistent with site capability. Vegetation must be sufficient to provide the following riparian functions: shade, streambank integrity during stream flows following a 25-year storm event, and filtration of nutrients and sediment.
(b) Exemptions:
(A) Levees and dikes are exempt from OAR 603-095-2240 (2)(a) except for areas on the river-side of these structures that are not part of the structures and which can be vegetated without violating U.S. Army Corps of Engineers vegetation standards.
(B) Drainage areas where the only connection to other water bodies is through pumps shall be exempt from OAR 603-095-2240 (2)(a).
(C) Access to natural waterways for stream crossings and livestock watering are allowed provided OAR 603-095-2240(2)(a) is met.

(D) Legally constructed drainage and irrigation ditches as defined in Division of State Lands Rules and ditches subject to Division of State Lands fill-removal laws are exempt from OAR 603-095-2240(2).

Umpqua
603-095-0740
(6) Agricultural management or soil-disturbing activities that preclude establishment and development of adequate riparian vegetation for streambank stability and shading, consistent with site capability, along a perennial stream which has a site potential for such vegetation is considered an unacceptable condition. Minimal breaks in shade vegetation for essential management activities are considered appropriate.

Coos and Coquille
603-095-1540
Riparian Management
(a) Effective three years after rule adoption, 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.
(A) Exemptions shall include stream crossings, access for irrigation equipment and other accepted water dependent agricultural uses when conducted in a manner that minimizes impacts on streambank stability.

Curry
603-095-3540
(3) Effective June 3, 2007, agricultural management activities in the riparian area of perennial streams will be conducted in a manner that allows for the establishment, growth, and maintenance of riparian vegetation consistent with vegetative site capability so as to provide streambank stability and shade.
(a) Exemptions from OAR 603-095-3540 (3) are:
(A) Stream crossings, access for irrigation equipment and other accepted water dependent agricultural uses when conducted in a manner that minimizes impacts on streambank stability.
(B) Streams that do not support native trout and are inaccessible to anandromous fish because of barriers at their junction with the Pacific Ocean.
(C) This rule is not intended to prohibit riparian grazing where it can done while meeting the above vegetative conditions.

IMPLEMENTATION
Since adoption of these plans and rules, ODA continues to work with the Local Management Agency to help the local agricultural community address agricultural water quality issues in a proactive, nonregulatory manner. ODA and LMA implementation activities include education programs on successful agricultural conservation practices, assisting landowners with addressing water quality concerns, helping landowners access programs to share the cost of water quality improvements, and monitoring the

effectiveness of the Area Plan and Rules. ODA's goal is to have 100% compliance by landowners with the Agricultural Water Quality Management program rules. While this expectation is high, the reality is that compliance with water quality laws is good conservation and good for the resource. Since land ownership is in a constant flux, there will always be a need for an outreach and education and periodic compliance action.

Biennial reviews

On a biennial basis, the LAC and ODA have been and continue to review the implementation progress of the Area Plan and Rules to determine whether the plan is sufficient to meet and address water quality standards. Biennial reviews include review of compliance actions, outreach activities, on-the-ground projects that have been reported to the Local Management Agency (typically an SWCD), and any monitoring results that are available to evaluate the effect of the program. To date, biennial reviews for the Coho ESU planning areas have documented a large amount of relevant activity and indicated that no changes are needed to address rule or implementation deficiencies.

Compliance

The department had been conducting investigations of alleged occurrences of agricultural pollution when it receives a notice through a written complaint, observation, notification by another agency, or by other means. These inspections may be coordinated with the local management agency if possible or with other agencies when needed. If the department determined that a violation of ORS 568.900 to 568.933 or any rules adopted there under has occurred, the landowner is subject to enforcement procedures outlined in the department's administrative rules. Table 1 provides a summary of compliance activities associated with the AgWQM program for the coastal basins since 1998. The number of complaints, thus inspections, has been increasing statewide, not because there has been an increase in problems but because the number of adopted basin rules in place and the public's awareness of this regulatory program have increased.

Table 1 **Summary table of compliance actions in the North Coast, Mid Coast, Umpqua, Coos-Coquille, and Curry Agricultural Water Quality Management Areas as of November 15, 2004**

Year	Complaints	Determinations of Compliance	Water Quality Advisories	Letters of Warning	Notices of Noncompliance	Civil Penalties
1998	0	0	0	0	0	0
1999	0	0	0	0	0	0
2000	1	1	0	0	0	0
2001	1	1	0	0	0	0
2002	3	0	1	0	0	0
2003	1	0	0	1	0	0
2004	3	0	2	0	0	0
TOTALS	**9**	**2**	**3**	**1**	**0**	**0**

Since ODA's water quality program is not practice based but condition based, landowners are not required to fence riparian areas. However, rules require landowners to provide conditions that result in streambank stability and shade, which is good for water quality and provides habitat for salmonids. Many landowners are voluntarily doing so as part of their management strategy or through programs such as the USDA Conservation Reserve Enhancement Program. If in pursuing a complaint observed by the department or received by any other means, the department documents a violation of existing riparian rules, then as part of the notice of non compliance riparian fencing may be identified as the solution.

Monitoring

Where necessary and when resources are available the department augments monitoring conducted by other entities. TMDLs and SB 1010 plans and rules completed in the coastal coho ESU have only recently been finished and implementation is just getting started. As a result there has not been enough time to assess effectiveness. Where TMDLs and SB 1010 plans and rules have been implemented for a number of years, improvements in water quality have been documented. For example in the Tualatin Basin where a TMDL and a SB 1010 plan and rules have been in place since 1996 and data has been collected from 1994, the following trends have been documented:

Baker Creek Decrease in temperature trend from ~15 C to ~14 C (1994-2002). Not significant at a 95% confidence level. Increase in dissolved oxygen from 7.8 to 9 mg/l (1994-2002). Significant at a 95% confidence level.

Burris Creek: Decreasing temperature trend and increasing dissolved oxygen, though neither significant at 95%.

Carpenter Creek: Increase in 0.6 mg/l dissolved oxygen. Significant at 95%.

Christiansen Creek: Decreasing temperature trend and increasing dissolved oxygen. Significant increase of 1.3 mg/l dissolved oxygen at 95% confidence, temperature trend not significant.

McFee Creek: Upward trend in dissolved oxygen with a significant increase of 0.8 mg/l.

While some of these trends have not reached a 95% significance level, given the long term nature of improving riparian condition and addressing nutrient levels in the water, these when combined with the significant trends are positive indicators that these programs are achieving their purpose. By improving the conditions along agricultural coastal streams, where needed, comparable improvements are expected to occur.

Riparian condition monitoring along agricultural lands is a critical tool the department has been pursuing to fill a void in monitoring efforts. The department has implemented a program using digital, aerial photographs that are orthorectfied and taken at a fine enough

scale to provide a statistically acceptable tool for determining state-wide riparian trends based on a planned 4-5 year schedule to renew photos and analyze data.

Use of remotely-sensed imagery allows the department to assess the condition of large areas without requiring as much labor as with a ground-based effort. In addition, using GIS-compatible imagery allows for direct comparison of the same locations to identify long-term trends. The goal of the department is analyze riparian condition along approximately 20% of the stream miles along streams in each basin. Photos of the North Coast, Mid-Coast, and Coos & Coquille basins were taken and analyzed in 2003. The next year for retaking the photos is scheduled for 2008. Establishing this process was funded through an EPA 319 grant and that report is available upon request.

While remotely sensed imagery can be used to assess long-term trends in riparian condition, it has limited function by itself to identify the status of riparian vegetation in relation to site capability. Because site capability is variable across the state, the status expected for each stream reach will vary depending on soils, location in the state and other biophysical parameters. Thus, until site capability can be described on a landscape basis and captured in a GIS framework, the existing imagery can only be used for trend analysis. While a GIS site capability data layer based on biophysical determinants is presently not available, it is a task the water quality program is actively pursuing. We hope to have the ability to establish a GIS – based site capability data layer within the next three to five years.

CAFO

Table 2 contains a summary of the activities related to the CAFO program in the coastal basins between 1999 and 2004 Routine inspections focused attention on how each operation performed and whether each CAFO operated is in compliance with its permit and federal and state water quality laws. In 2004 a significant amount of time was spent by each inspector reviewing and recording *applications to register* (*ATR).* The ATR is a new requirement to meet the new federal and state requirements for permitting and *concentrated animal feeding operations.* A continued goal of the CAFO program is to inspect each permitted CAFO once every year.

ODA also reviews for approval or rejection Animal Waste Management Plans (AWMP) and specifications for animal waste control facilities to verify they have been prepared in accordance with OAR 340-051 design criteria, and USDA-NRCS conservation practice standard guidance 590 for Oregon dated May 2001 entitled *Nutrient Management*. In 2003 in this area, ODA reviewed and approved 9 AWMPs in 2003.

As a result of this increased effort, we have seen an overall improvement in compliance found on permitted operations in the coastal area and expect this to continue.

Table 2 **Summary table of regulatory activities related to the Confined Animal Feeding Operations Program in the Coastal coho region (i.e. Clatsop, Coos, Curry, Douglas. Lincoln and Tillamook counties from 1999 to 2004.**

Year	Routine inspection	Complaints	Notice of Noncompliance (NON)	NON/Plan of Correction	Civil Penalty
1999	122	3	11	30	1
2000	159	13	15	35	0
2001	178	6	12	9	0
2002	150	16	8	9	3
2003	156	18	9	15	1
2004	248	26	37	75	3

The substantial increase of NONs in 2004 reflects new regulations that went into effect in October 2003 and that required operations to submit an application to register by October 2004. The new regulations also established definitions of operations by size and those exceeding a certain size were required to submit an animal waste management plan by October 2004. The increase in NONs was primarily for the failure of permitted operations to submit the newly required application to register by October 2004 and for the larger operations for failure to submit an animal waste management plan by October 2004. The majority of these NONs have been resolved. Since these failures were primarily related to documentation procedures under the new regulations, the increased number of NONs does not reflect any new substantial impact on the resource.

PESTICIDE PROGRAM

The department continues to maintain its responsibilities in regard to regulating pesticides and their use. These responsibilities are coordinated with EPA. There are no new issues or activities unique to the Oregon Plan for Salmon and Watersheds. The primary types of agricultural activities that occur in the Coho ESU are cranberry production and livestock grazing. Pesticide use associated with livestock production is generally light. Pesticides associated with cranberry production are not only subject to the state and federal regulations but are also monitored by the commercial buyers for residues in the harvested product. Thus, there are several layers of controls to maintain responsible use of pesticides by the agricultural industry in the Oregon Coast coho ESU.

WEEDS AND INVASIVE SPECIES PROGRAMS

The department continues to coordinate a state funded grant program to help landowners control high-priority noxious weeds and protect and enhance natural resources. Grants, using Measure 66 lottery funds, have been awarded to County Weed Control Programs, Watershed Councils, Soil and Water Conservation Districts, Irrigation Districts, non-profit groups like The Nature Conservancy and to private landowners statewide. Priority weed grant projects are those that protect, enhance or restore fish and wildlife habitat and overall watershed function. All of these functions contribute to the goals of the Oregon Plan for Salmon and Watersheds. Following is information on the grants awarded for the past three biennium in the coastal coho counties.

Biennium	# of projects	Dollars awarded	Weeds addressed
99-01	4	$61,179	French broom, gorse, distall thistle,

01-03	19	$225,650	Japanese knotweed, purple loosetrife, scotch broom, butterfly bush, giant hogweed, Portuguese broom
03-05	15	$147,710	

While funding provided for this grant program by itself is insufficient to address all of the weed issues in the stae, it is just one of a number of means by which weeds and invasive species are addressed. Noxious weeds are also being addressed by ODA working in cooperation with public and private land managers to help direct limited resources to the highest priority weed targets where we hope to have the most success in effective control. Early detection and rapid response is the highest priority for new invader weeds. For the widespread established infestations we are implementing biological control efforts for specific weeds and are getting significant control on some species. In addition, land managers are utilizing their own resources to address weeds and invasive species. In total, these resources are still not enough to address the magnitude of the problem however they do provide a means to limit or slow the spread of undesirable species and in many cases achieve significant control that is a benefit to both our economy and our natural resources.

The Invasive Species Council coordinates public and private sector activities on unwanted, non-native species, and has issued its 100 most dangerous invaders for the past three years. The list is especially helpful to agencies, landowners, environmental groups, industry and the general public, and could easily contain thousands of invasive species, but is confined to a grouping worthy of focus from all Oregonians. With limited resources available to battle such species, the council wants to create an awareness of high priority organisms to exclude from Oregon. The list includes mammals, birds, insects, weeds, microorganisms, and more.

Names on the list of 100 suggest exotic, even non-threatening species. African rue, European water chestnut, silverleaf nightshade, Japanese shore crab, Mexican bean beetle, and even Atlantic salmon and mute swan- all are notorious invaders deserving a concentrated effort at exclusion. The complete list can be found online at http://oda.state.or.us/Plant/Inv_spp/100_worst_inv.html.

The 2004 list looks very much like the one issued in 2003. There has been only one change the quagga mussel (*Dreissena bugensis*), an aquatic invertebrate which is a relative of another invasive species on the list- the zebra mussel, has been added. The Quagga mussel can cause the same kind of damage to irrigation systems and dams, and can change the entire fresh water environment in which it is found. Moving off the list was brown root rot, a microorganism-caused disease that affects agricultural crops. It is still considered an important invader but may not have the environmental impact of others on the list. When evaluated in regard to potential impacts for coastal basins, all of the species on this list have the potential to establish and impact the basins occupied by coastal coho.

Through this means the Invasive Species Program is helping to protect the environment in the Oregon Coast coho ESU.

SOIL AND WATER CONSERVATION DISTRICTS

SWCDs have contributed to addressing natural resource issues associated with agriculture that affect coastal coho in a number of ways. These include assessments of natural resource conditions, providing education and public information, conducting outreach, and working with landowners and managers, community groups, and citizens to implement measures that reduce soil erosion, protect and improve water quality, enhance fish and wildlife habitat, and address other natural resource concerns.

The coastal SWCDs have provided assistance to landowners that have contributed to streambank stability and improvement in riparian condition, livestock manure management, and education and outreach related to salmon and watersheds.

Table 3 summaries the outreach activities, conservation planning, and conservation practices reported by SWCDs as accomplishments for the period July 2003 to June 2004 from state technical assistance funds administered by ODA. Table 4 summarizes the conservation practices installed between July 2003 - June 2004 using SWCD Watershed Technical Assistance Funds. This is not a complete listing of all SWCD activities but only those accomplished using state Technical Assistance funds. This is an example of what is accomplished at a minimum in any one year given the existing support to SWCDs. This list also does not take into account activities that that are done solely by the landowner with no funding or technical support from state or federal entities.

Table 3. Summary of the outreach activities, conservation planning, and conservation practices reported by SWCDs in Oregon Coast coho ESU (Clatsop, Curry, Coos, Lincoln, Siuslaw, Tillamook, Umpqua SWCDs) for July 2003 to June 2004 from state technical assistance funds administered by ODA. This is not a complete listing of all SWCD or landowner activities but only those accomplished using these funds in the Coho ESU.

Outreach	
No. Landowners Contacted	199
Workshops presented	10
No. of workshop participants	127
Meetings held	31
No. of meeting participants	479
Tours	18
No. of tour participants	340
Displays	10
Potential attendees observing displays	2646
Newsletters	
Total No. of newsletter	22
Potential audience reached	4502
News Articles	
No. of articles	63
Potential audience reached	142,300
Conservation Plans	
No. of farm plans in progress	65
Total number of acres	5040
No. of farm plans completed	30
Total number of acres	5890
Projects to improve Water Quality	95
No. of monitoring sites maintained	19

Table 4. Conservation Practices Installed between July 2003 - June 2004 using SWCD Watershed Technical Assistance Funds in the coastal SWCDs (Coos did not report any practices during this period). This is not a complete listing of all SWCD assisted conservation practices or landowner activities but only those accomplished using technical assistance funds.

CONSERVATION PRACTICES

SWCD	Practice Name	NRCS Practice Code	Units	Program
Clatsop	Brush Management	314	1.5 acres	OWHF
Clatsop	Tree/Shrub Establishment	612	1 acre	USFW
Clatsop	Tree/Shrub Est.	612	.01 acres	OWEB
Curry	Pipeline Low	430EE	500 feet	ODA
Curry	Fence	382	15220 ft	CREP
Curry	Fence	382	3925	N/A
Curry	Use Exclusion	472	70.5 acres	CREP
Curry	Use Exclusion	472	6.7 acres	CREP
Curry	Use Exclusion	472	22.7 acres	N/A
Curry	Forest Site Prep.	490	24.5 acres	CREP
Curry	Forest Site Prep.	490	12 acres	EQIP
Curry	Forest Site Prep.	490	6.7 acres	CREP
Curry	Forest Site Prep.	490	22.7 acres	N/A
Curry	Pasture Planting	512	5 acres	EQIP
Curry	Prescribed grazing	528A	1200	CREP
Curry	Access Road	560	450 ft	EQIP
Curry	Tree & Shrub Est.	612	6.7 acres	CREP
Curry	Tree & Shrub Est.	612	22.7 acres	N/A
Lincoln	Watering Facility	614	1 acre	OWEB
Lincoln	Watering Facility	614	1 acre	OWEB
Lincoln	Restoration and management of Declining Habitats	643	1 acre	BLM Title II
Lincoln	Restoration and Management of Declining Habitats	643	1 acre	BLM
Lincoln	Restoration & Management	643	2 acres	BLM
Lincoln	Restoration & Management	643	1 acre	BLM

Lincoln	Restoration & Management	643	1 acre	BLM
Lincoln	Restoration & Management	643	1 acre	BLM
Siuslaw	Brush Management	314	2	NW Youth Corps
Siuslaw	Brush Management	314	30	ODA
Siuslaw	Brush Management	314	.5 acres	OWEB
Siuslaw	Riparian Forest Buffer	391	0.2	NW Youth Corps, riparian release
Siuslaw	Brush Management	391	0.2	OWEB
Siuslaw	Riparian Buffer	391	2 acres	OWEB
Siuslaw	Riparian Buffer	391	.5 acres	Volunteers
Siuslaw	Streambank Stabilization	580	0.2	OWEB
Tillamook	Site Maintenance		.25 acres	TEP
Tillamook	Riparian stabilization		18000 ft	ODFW
Tillamook	Site Maintenance		20000 ft	TEP
Tillamook	Site Maintenance		10.4 miles	OWEB
Tillamook	Planting Stabilization			Landowners
Tillamook	Planting Stabilization			TEP/Private
Tillamook	Planting Stabilization		3.67 miles	R & E
Tillamook	Planting Stabilization		2500'	
Tillamook	Use Exclusion	472	2200 feet	DEQ, TCCA, Owner
Tillamook	Use Exclusion	472	500 feet	BLM, Volunteers
Tillamook	Use Exclusion	472	8000 feet	Tillamook, SWCD
Tillamook	Use Exclusion	472	4800 feet	DEQ, TCCA, Owner
Tillamook	Use Exclusion	472	1500 ft	DEQ, TCCA, Landowner
Tillamook	Use Exclusion	472	2000 ft	DEQ, TCCA, Landowner
Tillamook	Use Exclusion	472	1200 ft	DEQ, TCCA, Landowner
Tillamook	Pipeline	516	2000 feet	DEQ, TCCA, Owner
Tillamook	Pipeline	516	450 feet	BLM, Volunteers
Tillamook	Pipeline	516	2000 feet	Tillamook, SWCD
Tillamook	Water pipeline	516	575 ft	BLM, Volunteers
Tillamook	Trough - 2	614	2 each	DEQ, TCCA, Owner
Umpqua	Fence	382	3300 feet	CCRP
Umpqua	Fence	382	38935 ft	CREP
Umpqua	Riparian Forest Buffer	391	2.8 acres	CCRP
Umpqua	Riparian Forest Buffer	391	100 trees	DEQ
Umpqua	Fish Stream Improvement	395	1	BLM, RAC

Umpqua	Forest Site Preparation	490	490	CCRP
Umpqua	Animal Crossing	560	1	CCRP
Umpqua	Heavy use area	561	2	CCRP
Umpqua	Animal Control	612	1218 tubs	CCRP
Umpqua	Tree & Shrub Establishment	612	2.8 acres	CCRP
Umpqua	Tree Planting	612	1218 trees	CCRP
Umpqua	Moisture Conservation	612	2.8 acres	CRRP
Umpqua	Troughs	614	2	CCRP
Umpqua	Wildlife Upland Habitat Management	645	2.8 acres	CCRP
Umpqua	Use Exclusion	645	2.8 acres	CCRP
Umpqua	Release	666	3..8 acres	CCRP,DEQ
Umpqua	Forest Stand Improvement	666	2.8 acres	CCRP

PECE (Policy for Evaluation of Conservation Efforts) Policy

Following are direct responses to the questions (**in bold**) identified in the PECE Policy that will be used in evaluating the ODA formalized conservation effort contribution

A. The certainty that the conservation effort will be implemented.

1. The conservation effort, the party(ies) to the agreement or plan that will implement the effort, and the staffing, funding level, funding source, and other resources necessary to implement the effort are identified
Support for the CAFO and AgWQM programs was enhanced in 1997 and has remained at comparable levels since then. At that time the state provided resources for 18 additional staff to support these programs. As of November 2004, of these additional staff approximately 2 FTE are CAFO inspectors and 2 FTE are water quality planners for the coastal counties. State resources for support of the SWCDs as local management agencies and to provide technical assistance was enhanced to $2.4 million in 1999 and has been maintained since that time. This is equivalent to an addition of approximately $271,000 for the coastal basins. Support for the Weeds Grant program and the Invasive species council was established in 1999 and 2001, respectively, and that level of funding has been maintained to date. Between July 1, 1999 and November 15, 2004, 38 grants totaling $434,539 have been granted to requests in the coastal coho basins. The pesticide program has been on going under an agreement with EPA and support for the activities described in the above report have been stable through a combination of funds from state government, federal government, and from fees associated with aspects of the program.

2. The legal authority of the party(ies) to the agreement or plan to implement the formalized conservation effort, and the commitment to proceed with the conservation effort are described.
The statutory authority regarding the CAFO, AgWQM, SWCD, pesticide, weed, and invasive species programs is established and is described in this report. These programs are ongoing.

3. The legal procedural requirements (e.g. environmental review) necessary to implement the effort are described, and information is provided indicating that fulfillment of these requirements does not preclude commitment to the effort.
No additional legal procedural requirements are necessary to implement these programs.

4. Authorizations (e.g., permits, landowner permission) necessary to implement the conservation effort are identified, and a high level of certainty is provided that the party(ies) to the agreement or plan that will implement the effort will obtain these authorizations. No permits are required for ODA's regulatory programs. ODA has statutory authority to enter lands for the purpose of enforcing these programs. The department pursues a policy involving landowner cooperation and very seldom has

needed to pursue the required warrants to conduct an investigation where permission has not been granted.

5. The type and level of voluntary participation necessary to implement the conservation effort is identified, and a high level of certainty is provided that the party(ies) will implement the conservation effort will obtain that level of voluntary participation.

While voluntary participation by landowners in conservation efforts can never be guaranteed, our experience over the last 8 years has shown a large degree of participation in conservation efforts as a result of the programs for which ODA is responsible. This work compliments that contributed by other members of the agricultural partnership (SWCDs, Natural Resources Conservation Service, Farm Service Agency, Oregon State University and the Extension Service) and provides a high degree of participation when landowners understand the issues they have control over.

6. Regulatory mechanisms (e.g., laws, regulations, ordinances) necessary to implement the conservation effort are in place.

The statutory authority regarding the CAFO, AgWQM, SWCD, pesticide, weed, and invasive species programs are established and are described in this report. These regulatory programs are ongoing with no identified termination date.

7. A high level of certainty is provided that the party(ies) to the agreement or plan that will implement the conservation effort will obtain the necessary funding.

Support for the CAFO and AgWQM programs was enhanced in 1997 and has remained intact to date. At that time the state provided resources for 18 additional staff to support these programs. State resources for support of the SWCDs as local management agencies and to provide technical assistance was enhanced to $2.4 million in 1999 and has been maintained since that time. Support for the Weeds Grant program and the Invasive Species Council was established in 1999 and 2001, respectively, and that level of funding has been maintained to date. The pesticide program has been on going under an agreement with EPA and support for the activities described in the above report have been stable through a combination of funds from state government, federal government, and from fees associated with aspects of the program.

8. An implementation schedule (including incremental completion dates) for the conservation effort is provided.

The framework, legal authority, policy and procedures associated with these programs have been completed. Implementation of these programs is an ongoing effort to insure compliance with the regulations and continued education and assistance to landowners. For the AgWQM program, plans and rules are reviewed on a biennial basis to determine their compatibility with TMDLs and other issues. All of the programs themselves are also scrutinized each biennium during the legislative session when the department reports to the legislature regarding our use of state monies to implement these programs.

9. The conservation agreement or plan is approved by all parties to the agreement or plan.
The department is a party to and has committed to fulfilling our responsibilities identified in the Oregon Plan for Salmon and Watersheds.

B. The certainty that the conservation effort will be effective.

1. The nature and extent of threats being addressed by the conservation effort are described, and how the conservation effort reduces the threats is described.
These efforts do not directly describe the nature and extent of the threats to species but rely on reports developed by other entities such as DEQ and ODFW. Their reports provide direction to the department in developing statewide programs. Programs that evaluate their efforts, such as EPA review of the DEQs TMDLs, are the means used to assess adequacy of the programs.

2. Explicit incremental objectives for the conservation effort and dates for achieving them are stated.
Each program has established specific goals to address concerns associated with water quality or with the invasion of undesirable species. While these may not be direct measures of the programs effect on the species of concern, they do contribute to addressing one or more factors of decline and their effect is measured through data directly pertaining to the species that is collected by other agencies, such as ODFW.

3. The steps necessary to implement the conservation effort are identified in detail.
These programs have been recognized by EPA and other agencies as having the appropriate steps necessary to address the threats that they are designed to address.

4. Quantifiable, scientifically valid parameters that will demonstrate achievement of objectives, and standards for these parameters by which progress will be measured, are identified.
These programs operate under quantifiable performance measures established under statewide benchmarks, and agency measures. Furthermore, the impacts of these programs when combined with other land use activities, are evaluated through cumulative performance tools such as TMDL water quality monitoring and ODFW monitoring of fisheries.

5. Provisions for monitoring and reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort are provided.
These programs operate under quantifiable performance measures established under statewide benchmarks, and agency measures. The department has established procedures and conducts monitoring on the effectiveness of the Agricultural Water Quality Program, CAFO program, pesticide program, and the invasive species and weeds programs. Thus, provisions are available and are being pursued to address the effectiveness of the conservation efforts associated with these programs.

6. Principles of adaptive management are incorporated.
Implementation of these programs is an ongoing effort to insure compliance with the regulations and continued voluntary efforts by landowners and to adapt to new information. All of the programs are scrutinized regularly including each biennium during the legislative session when the department reports to the legislature regarding accomplishments and need for these programs.