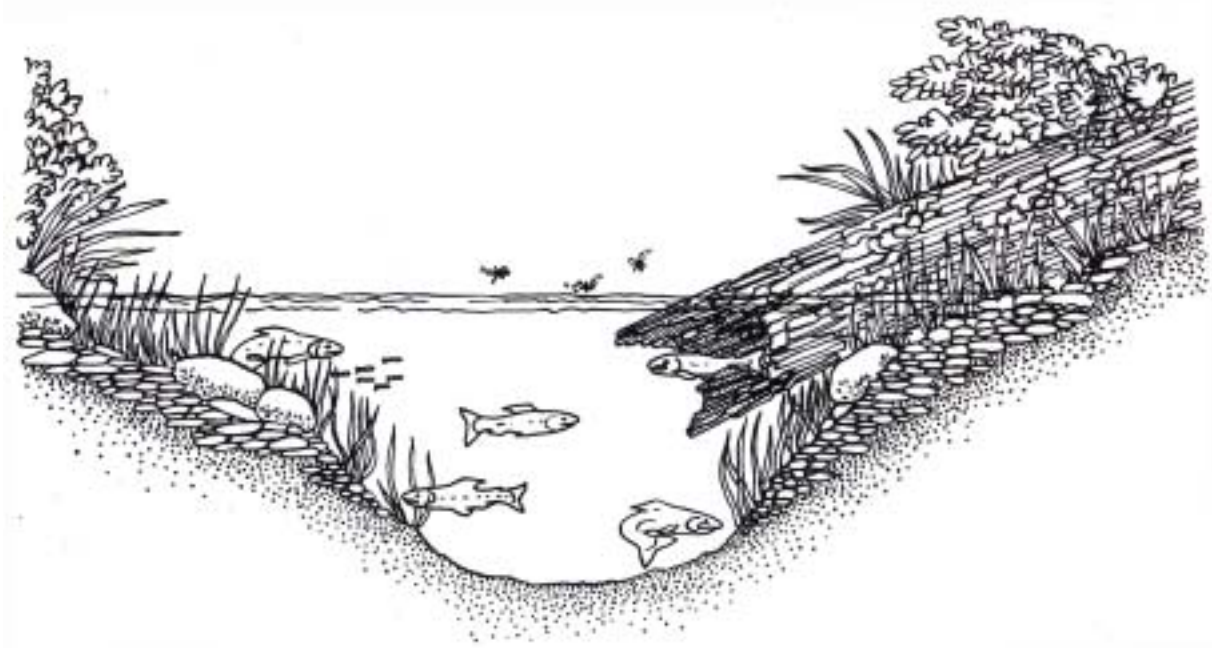


Pesticide Management

Fact sheet



Improper use of pesticides (herbicides, insecticides, fungicides, etc.) may impact fish and other aquatic species.

These impacts can include:

- Decreased survival rate in juvenile fish.
- Birth defects.
- Altered reproduction.
- Lower productivity.
- Changes in fish and macroinvertebrate populations.

Integrated Pest Management (IPM) is a sustainable approach

to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.



This fact sheet was produced by the Coos Soil & Water Conservation District in conjunction with the Coos & Coquille Agricultural Water Quality Management Area Plan and in partnership with the Oregon Department of Agriculture and the Natural Resources Conservation Service.

Fact sheet 3 of 7

We are all effected by pesticide use

Aquatic plants that provide food and cover to fish are particularly sensitive to some herbicides.

Amphibians are especially prone to effects from aquatic contaminants as many species respire through their skin, which increases absorption of water and waterborne toxins.

Many insecticides kill both target and nontarget species, therefore they can reduce the amounts of macroinvertebrates which affects the food supply for fish.



Integrated Pest Management (IPM) is a sustainable approach to managing pests...

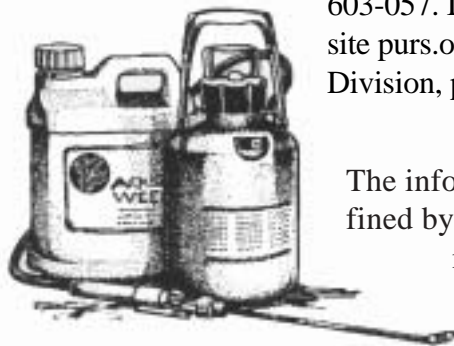
by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. Adoption of an IPM program can not only help to prevent pest problems from developing, but can reduce or eliminate the use of chemicals in managing problems that do arise. Careful monitoring, positive pest identification, and knowledge of pest lifecycles are key to planning effective IPM programs.



Biological control, or biocontrol, attempts to recreate a balance of plant species with their natural enemies. Natural enemies, or biocontrol agents, may include insects, nematodes, mites, plant pathogens, and grazing animals. Often more than one biocontrol agent is introduced on a weed with each agent detrimentally affecting the weed to some degree. This effect may be obvious, such as when the plant is defoliated, or it may be subtle, such as when slight damage caused by the biocontrol agent allows secondary organisms (such as pathogens) to inflict greater damage.

Careful grazing management for control of weeds is a form of biological control, and is a popular, low-input component of an IPM program.

To maintain product efficiency, it is best to use the lowest possible rates and frequency of applications of pesticides.



Pesticide use reporting

The use of all pesticide products, except those classified as antimicrobials, in producing or preserving an agricultural or forestry crop must be reported to the Oregon Department of Agriculture (ODA) beginning January 1, 2002. Specific requirements of reporting are contained in the Oregon Administrative Rule (OAR) 603-057. Information can also be found at the internet site purs.oda.state.or or through the ODA, Pesticides Division, ph. 503-986-4635.

Stick to the Label

The information found on a pesticide label is defined by law, and it is illegal to use a pesticide in a manner not permitted by its labeling.

Labels for pesticides can be found on the internet at Crop Data Management Systems website: www.cdms.net.

The following management practices have been recommended by the Coos and Coquille Local Advisory Committee and the Oregon Department of Agriculture as a means to avoid water quality problems.

Positive Management Practices

- ◆ Read and follow the label instructions.
- ◆ Apply pesticides only when the economic threshold will most likely be exceeded by pest damage.
- ◆ Consider using biological control or mechanical means of Integrated Pest Management instead of chemical means.
- ◆ Explore techniques of organic agriculture.

Conditions That May Lead To A Water Quality Problem

- ◆ Mixing, loading, transporting, application and cleaning of containers or equipment in a manner that may contaminate surface or groundwater.
- ◆ Application of pesticides in riparian areas that are not intended for use near waterways.
- ◆ Water storage facilities that allow contaminated runoff or seepage into waterways or groundwater resources.
- ◆ Performing any pesticide application in a manner prohibited by Oregon Revised Statute (ORS) 634.

Unacceptable Conditions

- ◆ Harmful amounts of pesticides entering waterways.

Note: Pesticide use is presently regulated by ODA under ORS Chapter 634 and OAR 603 division 57, which specifies that the label is the law regarding use.

The following OAR concerning pesticide management was developed from the Coos and Coquille Agricultural Water Quality Management Area Plan which was adopted in March 2002.



Oregon Administrative Rule (OAR) 603-095-1540

(4) Pesticide Management

(a) Effective three years after rule adoption, in cranberry production, water storage systems that intercept agricultural drainage containing pesticides and that reapply this water will be designed to minimize percolation of drainage waters to groundwater or overflow of the impoundment to surface waters.

Conservation practices addressed here, such as the Positive Management Practices, may be eligible for USDA's Natural Resources Programs, such as the Environmental Quality Incentives Program (EQIP) and the Conservation Reserve Enhancement Program (CREP). These programs provide producers with financial, technical, and educational assistance for implementing conservation practices. Contact NRCS or FSA (below) for more information.

Development of an individual conservation plan for your operation may help you comply with the SB 1010 Coos & Coquille Agricultural Water Quality Management Area Plan. Contact the Coos SWCD Watershed Technical Specialist for assistance.

For More Help Contact...

Coos Soil and Water
Conservation District (SWCD)
382 N. Central Blvd.
Coquille, OR 97423
(541) 396-6879
www: <http://or.nacdnet.org/coosswcd/>

Oregon Dept. of Agriculture
Natural Resources Division
635 Capitol Street NE
Salem, OR 97301
(503) 986-4700

Natural Resources Conservation
Service (NRCS)
382 N Central Blvd
Coquille, OR 97423
(541) 396-2841

Farm Services Agency (FSA)
380 N Central Blvd
Coquille OR 97423
(541) 396-4323

Oregon Dept. of Environmental Quality
340 N Front Street
Coos Bay OR 97420
(541) 269-2721 ext 27

OSU Extension Service
Coos County Office
290 N Central Blvd
Coquille OR 97423
(541) 396-3121 ext 240

Information in this fact sheet was gathered from the Coos and Coquille Agricultural Water Quality Management Plan, the Oregon Department of Agriculture, the Natural Resources Conservation Service and the Washington County Soil and Water Conservation District.

Illustrations used by permission. Stream habitat illustration by Patty Bowers, et al, The Stream Scene, Watersheds, Wildlife, and People, Second Edition, Oregon Department of Fish and Wildlife, Portland, OR, 1999.

Giant salamander illustration by Sandra Noel, Adopting A Stream A Northwest Handbook, Adopt-A-Stream Foundation, 1988.

Produced by Bessie Joyce, 2002.

The Coos Soil and Water Conservation District prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status.