

Farmers

Working together, Oregonians have the opportunity to help restore clean water and wild salmon for the benefit of us all and for future generations. The suggestions in this guide are practical changes we can consider making in our daily land management, work and lives to support this statewide restoration effort. These suggestions do not substitute for any local, state or federal legal regulations.

For more information on these and other ways we can modify our activities to help restore clean water and salmon, please call the Oregon Department of Agriculture at (503) 986-4550 or the USDA Natural Resource Conservation Service at (503) 414-3200.

This guide for farmers is part of a series of lists targeting a wide variety of groups in Oregon. For information on other guides in this series, please contact the Governor's Natural Resources Office at (503) 378-3589.



THE OREGON PLAN
for salmon & watersheds

Ten ways farmers can help restore clean water and salmon

cultivation practices

- Use cultivation practices that reduce runoff, such as contour farming, interseeding, growing winter cover crops and using crop residues to protect bare surfaces. These management practices can significantly reduce water erosion of soils and chemicals that might be attached to sediment. Excess soils and sediment that run off land reach waterways and can increase turbidity, degrade gravel spawning and rearing beds needed by salmon, and reduce the amount of dissolved oxygen available to fish and other aquatic life.

compaction

- Avoid tilling, harvesting or grazing when soils are wet and most vulnerable to compaction. Compaction restricts rooting depth, which reduces the uptake of water and nutrients by plants. It can also decrease pore size and soil temperature, which affect the activity of soil organisms by decreasing the rate of organic matter decomposition and nutrient release. In addition, compaction decreases infiltration and thus increases runoff and water erosion.

fertilizer use

- Use only the amount of fertilizer required by the crop. Test soils on a regular basis to monitor soil conditions and crop needs, allowing adjustment and reduction of fertilizer use when possible. Applying more fertilizer than is needed by crops can increase nutrient runoff to waterways where it can stimulate growth of harmful plants and algae, impairing beneficial vegetation and significantly altering aquatic habitats.

crop rotation

- Rotate crops where feasible or necessary to use excess nutrient, nitrogen or phosphorus that may build up in soils. Efficient use of nutrients present in soils can help reduce fertilizing needs and nutrient runoff to groundwater stores and surface waterways.

product instructions

- Follow label instructions completely when applying pesticides and herbicides to crops. Product instructions contain important, precise information to help achieve intended results and reduce

environmental risks that may result from misuse. Overuse of these chemicals can increase the likelihood of groundwater and surface water pollution. Once these substances reach streams, they can kill aquatic invertebrates and streamside vegetation, essential to the proper function of stream systems.

chemical containers

- Recycle or properly dispose of pesticide, herbicide and other chemical containers to reduce the risk of these chemicals polluting waterways, threatening both human health and aquatic environments.

buffer strips

- Where possible, protect or create buffer strips between crops and waterways. Native wetland and streamside vegetation acts to stabilize streambanks, provide habitat for wildlife, shade the stream channel, and filter sediment and chemicals from runoff water before it enters waterways.

native trees

- Protect or plant native trees along the stream. In addition to bank stabilization and channel shading, trees provide a future source of large woody debris to the stream, which creates the complex structures and pools needed for fish to rest and feed.

native grasses and groundcovers

- Establish native grasses or groundcovers on ditch banks, in ditches or on any areas of bare soil. Vegetation helps to stabilize the banks and beds of ditches, reduces soil erosion from bare surfaces to the waterway and helps to filter sediment and chemicals from runoff.

your watershed council

- Participate in your local watershed council. Sharing information, ideas and resources with other community members will enable us to work together to ensure the health and productivity of our natural resources for future generations.