

Irrigators

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 Malheur Experiment Station of Oregon State University at (541) 889-2174, visit their website (<http://www.primenet.com/mesosu/waterq.htm>) or call the Oregon Water Resources Department at (503) 378-8455.

This guide for irrigators 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 irrigators can help restore clean water and salmon

irrigation scheduling

- Improve irrigation scheduling by measuring soil water. Both under-irrigating and over-irrigating can damage crops. Over-irrigating also wastes valuable and costly water that could otherwise be conserved instream. By monitoring the water conditions of soil, irrigation scheduling can help maximize crop yield and water use efficiency.

drip irrigation

- Use drip irrigation wherever possible. Drip irrigation conserves water and allows more accurate application of both water and soil additives, all of which benefit fish and other aquatic life instream.

sediment ponds

- Consider using sediment ponds to help increase water use efficiency, control erosion and nutrient losses, and improve water quality in nearby waterways. Sediment ponds can help trap, store and filter water that might otherwise runoff into streams, carrying with it loads of sediment, chemicals and nutrients that can be harmful to natural systems.

erosion control

- Use techniques like laser leveling, gated pipes, mechanical straw mulching and others to control erosion caused by irrigation. Erosion causes excess sediment to flow into stream systems, which can reduce the amount of oxygen available to fish and other aquatic life and act to cover gravel spawning and rearing beds needed by salmon.

fertilizer use

- Adjust, and when possible, reduce your use of nutrients by considering crop needs, testing soil conditions, tissues-testing or changing the frequency of fertilization. Fertilizers enter stream systems through groundwater, where they can stimulate growth of harmful aquatic plants and algae that deplete dissolved oxygen

levels when they begin to break down. Low oxygen levels are harmful to fish and other aquatic life.

vegetation near waterways

- Leave natural vegetation in place near waterways and reduce tillage on land that is not irrigated. Removing natural vegetation and disturbing non-irrigated land can cause erosion and loss of nutrients from those areas.

native trees and shrubs along streambanks

- Plant native trees and shrubs along streambanks. Healthy, native vegetation in wetland and riparian areas helps stabilize streambanks, prevent erosion and shade streams, which creates the cool, shaded and clean instream conditions essential to fish and other aquatic life.

upland management techniques

- Practice upland pasture management techniques like planting and reseeding, noxious weed control, controlled burns, and fencing or establishing out-of-stream watering facilities. When conducted at appropriate locations and times, these management strategies can not only help improve production of irrigated lands, but can help maintain healthy riparian areas and improve water quality.

“fish-friendly” structures

- Replace temporary diversion structures, such as push-up gravel dams with “fish-friendly” alternative structures. Examples include infiltration galleries, screened pumping systems and permanent diversions that provide fish passage.

your watershed council

- Participate in your local watershed council. Sharing information, ideas and resources with other members of your community who rely on the watershed will help us all preserve water resources for generations to come.