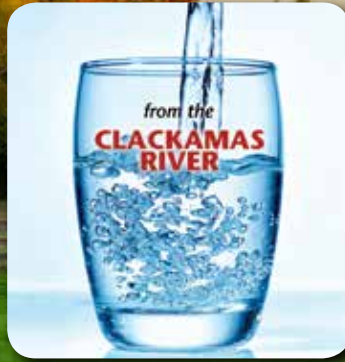
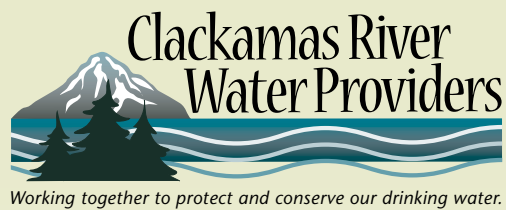


# FIELD TO FAUCET

## A Partnership for Clean Water in the Clackamas River Watershed



Supported by the Clackamas River Water Providers and the Clackamas Soil and Water Conservation District



*Working together to protect and conserve our drinking water.*



CLACKAMAS SOIL AND WATER

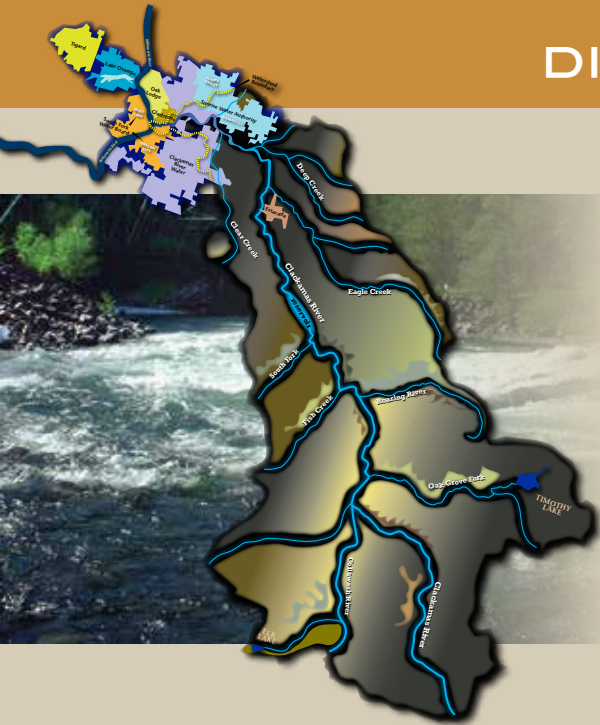
CONSERVATION  
DISTRICT

Good dirt. Clean water.

Learn more about the:

**Partnership for Clean Water in the  
Clackamas River Watershed.**

# DID YOU KNOW?



## Over 300,000 people get their drinking water from the Clackamas River?

This does not include the hundreds of recreationalists who rely on clean water in the river for swimming and fishing. If you look further down the food chain, you find fish and other aquatic organisms whose life depend on the water in the Clackamas River being clean.

**As a landowner in the Clackamas River Watershed,** you play an important role in protecting the natural resources. Connected by the flow of water, your land provides a variety of benefits to downstream drinking water consumers, recreational users, and wildlife.

The Clackamas River Water Providers and the Clackamas Soil and Water Conservation District invite you to join our partnership for Clean Water. Learn more about how conservation practices can improve your property as well as water quality in the Clackamas River. Find out what kind of technical and financial assistance is available to help you implement these practices. Visit our websites for more information on workshops, pesticide collection events, and the Soil and Water Conservation District equipment rental program.

To learn more about the **Clackamas River Water Providers** Source Water Protection efforts go to [www.clackamasproviders.org](http://www.clackamasproviders.org).

To get help from the **Clackamas Soil and Water Conservation District** go to <https://conservationdistrict.org/>



## PESTICIDE MANAGEMENT

**Low levels of pesticides continue to be detected** in the Clackamas River and its tributaries. This is due to urban uses, right of ways, and agricultural uses of these chemicals. Several ways to avoid the transport of pesticides to surface water include reducing spray drift, calibrating sprayers, using drift-reducing spray tips, not spraying right before it rains, and following label directions on all chemicals. Many Clackamas County growers are already implementing practices that promote beneficial insects to manage pest populations and reduce their pesticide needs. You can too! Participate in our:

- **FREE Windsock Program** - know wind speed and direction in YOUR field
- **Sprayer Efficiency Cost Share Program** – let us help you make your sprayer more efficient
- **Participate in workshops and free pesticide collection events**
- **Learn more about the Clackamas Pesticide Partnership**  
<https://conservationdistrict.org/programs/pesticide-stewardship-partnership>



## BE GROUNDWATER AWARE

**Pay careful attention** to the places where you mix or store chemicals and fuel. These substances can pose a risk to your well and the groundwater. Prevent contamination from seeping into valuable underground water sources by monitoring above-ground and underground storage tanks for leaks. Keep a safe distance between your chemical/fuel storage or manure piles and your well or spring.

- ✓ Test your well water annually for coliform bacteria and nitrates
- ✓ Decommission old wells

# PLANT COVER TO PROTECT SOIL & WATER



**Hold on to your precious soil.** Water flowing over bare fields can carry loose soil particles along with nutrients and pesticides to surface water. Use cover crops, inter-row plantings, field borders and streamside vegetation to hold soil in place and to filter runoff water before it reaches streams and ditches that feed the Clackamas River, our drinking water source. Healthy streamside areas also help keep water cool, increase infiltration, and protect stream banks from erosion protecting property values.

- Schedule a visit with Clackamas Soil and Water Conservation District to design a cover strategy
- Participate in Clackamas River Basin Council's Shade Our Streams Program

## IMPROVE SOIL HEALTH

**Protect Water Quality.** Healthy soil needs less irrigation, has better water infiltration, better water holding capacity, and requires little or no fertilizer. To improve your soil health, try these tips:

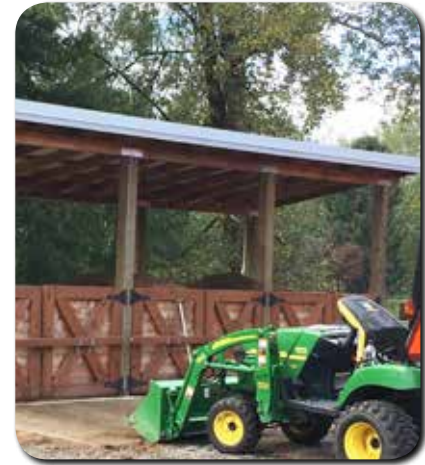
- ✓ Avoid disturbing the soil – try conservation tillage to reduce breaking soil aggregates and harming soil microbes
- ✓ Avoid having a monoculture - try companion planting, mixed species cover cropping, and crop rotation
- ✓ Keep plants growing throughout the year – living roots keep your soil microbes functioning all year to kick-start your growing season in the spring
- ✓ Keep plant cover on the soil – protect the soil from rain, suppress weed growth, conserve moisture, and reduce summer soil temperatures
- Talk to the Clackamas Soil and Water Conservation District about assessing the health of your soil and making a plan to improve soil health.

## MANURE MANAGEMENT

**If you have animals then you have manure!** Good management of animal waste will help keep your livestock healthy and make your chores easier to complete. Consider manure composting, this process reduces volume, stabilizes nutrients, and produces a great soil amendment. Or field spread manure when the rainy season ends. Keep stored manure covered so nutrients and bacteria do not leach out and end up in the stream or groundwater.

If you pasture animals, keep them out of streams and rivers. Install fencing and provide an alternative water source for them. Keeping animals and their waste out of the Clackamas River and its tributaries protects our drinking water supply.

- Contact the Clackamas Soil and Water Conservation District for help developing a plan to manage manure.
- Manure spreader and harrow are available for rent from Clackamas Soil and the Water Conservation District.



## BE SEPTIC SMART

**Regularly pumping and inspection of septic tanks** can prevent surface and groundwater contamination. For most septic systems, experts recommend professional tank inspection every three years, and pumping every three to five years. Never pour cooking oil or grease, oil-based paints, solvents, or large volumes of toxic cleaners down the drain. Even latex paint waste should be minimized. Septic systems are not designed to remove toxic contaminants. Participate in annual workshops and the assistance programs listed below. Keep your system running well and protect water quality.

- Clackamas River Water Providers Septic System Financial Assistance Programs - Inspection Rebates, and Repair Cost Share Program
- Clackamas Soil and Water Conservation District Low Interest Loan Program for failing septic systems
- Dispose of your old or unused drugs in one of Clackamas County's Drug Take Back Boxes

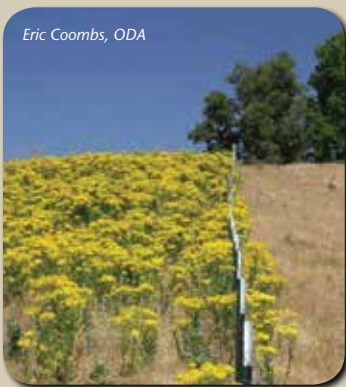
# INTEGRATED PEST MANAGEMENT (IPM)

**Beneficial Insects.** IPM is a stepwise approach to pest management that combines accurate knowledge of the pest and level of potential harm with multiple tactics to prevent, reduce, or eliminate pests. Under IPM, actions are taken to control pests only when their numbers are likely to exceed acceptable levels. Any action taken is designed to target the troublesome pest and limit the impact on other organisms and the environment. One practice, biological control, uses beneficial insects to control pests. When populations of pests increase, check for populations of beneficial insects. If enough are found, then the use of pesticide may not be required.

- Check with Clackamas Soil and Water Conservation District to learn more about 'Beetle Banks' and other IPM practices.



## INVASIVE SPECIES



**Invasive weeds are non-native plants** that spread rapidly and can harm the social, economic, and ecological resources of our community. They not only degrade the quality of our land, but also convert that land into new sources of biological pollution. By controlling invasive weeds, we eliminate the current infestation and prevent the establishment of additional infestations. A recent study found an estimated annual loss of almost \$83.5 million in personal income to Oregon's economy from 25 selected weed species. These costs are estimated to balloon to \$1.8 billion if invasive weeds are left untreated. You can report priority invasives by going to [www.oregoninvasiveshotline.org](http://www.oregoninvasiveshotline.org).

- Contact the Clackamas SWCD WeedWise program for assistance in identification and control of invasive weeds
- Learn about Clackamas River Invasive Species Partnership (CRISP) at: [weedwise.conservationsdistrict.org/CRISP](http://weedwise.conservationsdistrict.org/CRISP)

## WHERE TO LEARN MORE...

**Please check these links to help you become more informed:**

- Clackamas River Basin Council's Shade our Streams Program: <http://clackamasriver.org/resources-for-landowners/ghj>
- Learn how groundwater is contaminated and what you and your community can do to help protect this vital resource: <http://wellwater.engr.oregonstate.edu/wells> or [www.oregon.gov/deq/WQ/Pages/Groundwater/GWProtection.aspx](http://www.oregon.gov/deq/WQ/Pages/Groundwater/GWProtection.aspx)
- Find local resources on the advantages of and actions toward building soil health in Oregon: [www.nrcs.usda.gov/wps/portal/nrcs/main/or/soils/health/](http://www.nrcs.usda.gov/wps/portal/nrcs/main/or/soils/health/)
- Learn about Conservation Tillage: <http://people.oregonstate.edu/~muirp/constill.htm>
- Learn more about integrated pest management and conservation bio-control: [www.ipmnet.org/IPM\\_in\\_USA.htm#2](http://www.ipmnet.org/IPM_in_USA.htm#2), [www.xerces.org/conservationbiocontrol](http://www.xerces.org/conservationbiocontrol), and <http://www.clackamasproviders.org/images/stories/ipmsheet.pdf>
- Find out more about septic system care: <http://wellwater.engr.oregonstate.edu/septic-systems-0> and DEQ's Clean Water Loan Program: <http://www.deq.state.or.us/wq/OnSite/docs/092816OnsiteLoanProgramPR.pdf>

