



# Clackamas River Water Providers

## Pesticide Reduction Program FINAL REPORT: FY2019-2020

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# Pesticide Reduction Program

## 1) Pesticide Pledge

In 2015 CRBC implemented a household pesticide reduction outreach plan for lower Clackamas tributary landowners. In 2019-20 CRBC focused on providing information and pesticide reduction to urban residents living in the Rock Creek area of Happy Valley, and the greater Damascus area along with citizens living in the Cities of Happy Valley, Boring, Sandy and Estacada through online advertising, tabling events and classes.

The Parting with Pesticides Pledge Program is designed to educate residents about the wise use of pesticides and to empower them to use alternatives to pesticides. Participants then have the opportunity to display a basin-specific yard sign that acts as a reminder of the steps they are taking to promote and enhance watershed health. This sign also acts as a conversation starter with neighbors and opens the door for neighbor-to-neighbor education on watershed health.

CRBC distributes “Pesticide Wise” or “Pesticide Free” metal yard signs to residents who take the Pesticide Pledge and meet the criteria for participating. **In the 2019-2020 funding year, CRBC distributed an additional 15 signs, bringing the total to 67 households that have signed on to the Pledge Program.**

### Pesticide Pledge Deliverables (\*attached)

- Pesticide Pledge materials distributed at 6 separate classes taught by CRBC
- The Pledge was included in the CRBC Summer 2019 and Winter 2020 newsletters\*
- Pesticide Pledge Pledge posts/ads on Facebook reached 2,950 accounts\*
- Parting with Pesticides fact sheets are available at garden centers in the watershed, the Oregon State University Extension Service, and Soil and Water Conservation

## **2) Clackamas Technical Working Group**

The Clackamas Technical Working Group (CTWG) coordinates efforts of local agencies dedicated to improving water quality in the Clackamas Basin who share sampling data, identify trends, and discuss current stewardship activities and future actions to protect and restore water quality.

### **Clackamas Technical Working Group Deliverables**

- CRBC convened 4 CTWG meetings and disseminated information to the public to promote water quality protection activities.

## **3) Educational Fact Sheets and Brochure**

CRBC updated the Fact Sheets (Be Pesticide Wise, Alternatives to Pesticides, Pesticides in Your Yard, and Reading Pesticide Labels) and designed 4 new Fact Sheets (Nursery Grower Tips, Pesticide Application, Integrated Pest Management, and Tree Grower Tips). Fact Sheets have been distributed at community tabling events, through direct mail and at garden centers.

### **Educational Fact Sheets & Brochure Deliverables** (\*attached)

- 1000 Fact Sheets\* printed, ready to be distributed - over 1500 Fact Sheets distributed from 2016-2020
- Methods of dispersal included direct mailing to Shade Our Streams landowners, distribution through garden center displays and community tabling events
- 150 Pesticide Pledge Brochures\* printed, ready to be distributed - over 800 pledge applications mailed to property owners, 2016-2020
- Fact Sheets were also shared with partnering agencies and at partnership meetings, including Water Environment Services and the Happy Valley Library

# Attachment 1

## CRBC Newsletter



The Clackamas

## CURRENT NEWS

CLACKAMAS RIVER BASIN COUNCIL NEWSLETTER

### Summer 2019

- 1 - Be Pesticide Wise  
Down the River Clean Up
- 2 - Living with Wildlife  
Summer Interns
- 3 - Headwaters of the Clackamas  
Sieben Creek Confluence
- 4 - Get Involved

### Thank You River Heros!

This summer a number of citizen volunteers have taken the initiative to float the Clackamas River and pick up trash and debris.

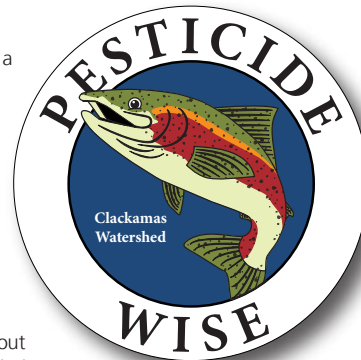
You are amazing and we are grateful for your efforts.

### Be Pesticide Wise

If you live in the Clackamas Watershed, you can take a pledge to earn a free Pesticide Wise or Pesticide Free sign to display in your yard.

The Clackamas River Basin Council has partnered with the Clackamas River Water Providers to offer free educational fact sheets and outreach to raise awareness of the dangers of inappropriately applied pesticides in our environment and especially in our drinking water.

The program encourages residents to learn about how best to use pesticides, how to read the label on pesticide containers and what alternatives there are to using chemical pesticides.



Get your FREE Yard Sign!

<http://www.clackamasriver.org/pesticidepledge>

Want to help get the word out? You can volunteer with CRBC and attend farmer's markets and other targeted events where we can connect area residents with our Paring with Pesticides program. To volunteer, contact [pat@clackamasriver.org](mailto:pat@clackamasriver.org).

### The 17th Down the River Clean Up is Sunday, September 8

The Clackamas River Basin Council, in partnership with We Love Clean Rivers, will host the 17th Annual Down the River Clean Up on Oregon's Clackamas River, Sunday, September 8th, 2019. You can volunteer to participate on-land or on-water.

Registration is now open! When you register, you will choose one of these five parks for your volunteer role - Milo McIver State Park, Barton County Park, Carver Park, Riverside Park or Clackamette Park. The morning of the cleanup, go directly to the park you registered at to check-in. Register at [www.welovecleanrivers.org](http://www.welovecleanrivers.org)

If you register as a boater/floater, diver or garbage scow volunteer, make sure to arrange YOUR OWN TAKE-OUT SHUTTLE VEHICLE. Life vests are required for all volunteers on-water. We recommend carpooling as parking is limited. Parking is free at each of the parks for volunteers. Parking passes will be distributed via email the week prior to the event, so register early.

On the day of the event, please eat a hearty breakfast, bring lots of snacks, and a water bottle! We also recommend bringing GLOVES, sunscreen, sunglasses, a light rain jacket, a warm layer, hat, fast-drying/wicking clothes, adequate river shoes, a dry bag and a first aid kit.

An amazing BBQ will be provided for FREE for all volunteers after the cleanup.

See you there!





# Attachment 1

## CRBC Newsletter

### Create a Ladybug Haven

Ladybugs are one of the most well known beneficial insects used in Integrated Pest Management (IPM) programs to control aphids and other pests. Here are some tips to attract and keep these helpful insects in your garden, tree farm or wood lot.

#### Make sure you have a food supply:

Ladybugs eat sapsucking insects like aphids, whiteflies and mites. If these insects are not present, or if you continually spray to eliminate them, ladybugs will find nothing to eat and move away. If ladybugs find a food source, they make short order of these pests and naturally keep their numbers at a tolerable level.



If you release ladybugs that you purchase, do so at night so they have time to explore for food and settle into your property before daylight encourages flight.

*Photos courtesy of Needpix.com, Jack Wolf*

#### Don't use pesticides:

When you spray pesticides, you wipe out the prime food source for your ladybugs and you may kill off the ladybugs themselves. Organic pesticides may be labeled as being safe to use around beneficial adult insects, but ladybug larvae can be damaged by insecticidal soaps, horticultural oils and other types of organic pesticides.



If you live in the Clackamas Watershed, you can take a pledge to earn a free Pesticide Wise or Pesticide Free sign to display in your yard.

Learn how to best use pesticides, how to read the label on pesticide containers and what alternatives there are to using chemical pesticides.

Find out more and get your FREE Yard Sign!  
<http://www.clackamasriver.org/pesticidepledge>

#### Ladybugs have a sweet tooth:

Ladybugs need more than the protein found in the insects they eat, they also need a source of carbohydrates. Carbohydrates are found in the sugars in plant nectar. Ladybugs will feed on the tiny flowers of the carrot and aster families. You can provide this food source by planting native plants like wild carrot, yarrow and lupin, as well as dill, Zizia, cilantro, fennel, daisies, yarrow, black-eyed Susans and sunflowers.

#### Support a complex food web:

Ladybugs and other beneficial insects are attracted to landscapes with a variety of different plant species present. Interplant your garden or tree lot with flowering herbs and perennials. The more diversity of native plants, plant structure, flower shape, flower color and bloom time you have, the better.

#### Provide winter habitat:

Ladybugs spend the winter outdoors. To encourage a good population of native ladybugs, leave perennials, grasses and other plants stand through the winter, instead of cutting them down in the fall. Many species of ladybugs overwinter in the hollow stems or in the debris that collects at their base. Ladybugs take shelter under fallen leaves for the winter. If needed, do cleanup in the spring, instead of in the fall.



Ladybugs will gather to mate and hibernate during winter months. By leaving leaf litter on the ground, you can provide shelter for these beneficial insects, and improve soil conditions at the same time.

*Photo courtesy of Scott Linford*

# Attachment 2

## Facebook Posts

**Clackamas River Basin Council**  
January 7 · 🌐

Brighten up your dreary winter nights by getting inspired to do beautiful things for yourself, your garden and your environment this coming Monday.

Join CRBC's Suzi Cloutier for a free, fun and information filled night while you learn how to have a beautiful and healthy garden that attracts birds and pollinators, requires no pesticides, no extra watering and will leave you AND wildlife saying hip hip hooray!



**Gardening For Wildlife**  
Monday,  
January 13,  
6:30 pm

MON, JAN 13  
**Gardening for Wildlife**  
Sandy Public Library Friends · Sandy

★ Interested

📅 Gardening

**Clackamas River Basin Council**  
August 21, 2019 · 🌐

Show your support with this FREE yard sign!  
If you live in the Clackamas Watershed, you can take a pledge to earn a free Pesticide Wise or Pesticide Free sign to display in your yard. Help keep pesticides out of our river. Take the pledge Now!  
<http://www.clackamasriver.org/pesticidepledge>



**Clackamas River Basin Council**  
Public Service

Send Message

**Clackamas River Basin Council**  
September 6, 2019 · 🌐

Protect our River - Take the Pesticide Pledge!

**PARTING WITH PESTICIDES**  
**Take the Pledge!**  
[www.clackamasriver.org/pesticidepledge](http://www.clackamasriver.org/pesticidepledge)

**We'll send you a FREE yard sign!**  
Clackamas River Watershed Residents Only!





**Clackamas River Basin Council**  
Public Service

Send Message

**797** People Reached  
**46** Engagements

Boost Again

**Clackamas River Basin Council**  
September 9, 2019 · 🌐

Take the Pesticide Pledge to become pesticide wise or pesticide free, and get your Free yard sign. For Clackamas River Watershed residents only. <http://www.clackamasriver.org/pesticidepledge>

**PROTECT OUR RIVER**



**FREE YARD SIGN FOR CLACKAMAS WATERSHED RESIDENTS**

**Clackamas River Basin Council**  
Public Service

Send Message

**1,998** People Reached  
**110** Engagements

Boost Again



# Attachment 3

## Pesticide Reduction Fact Sheets

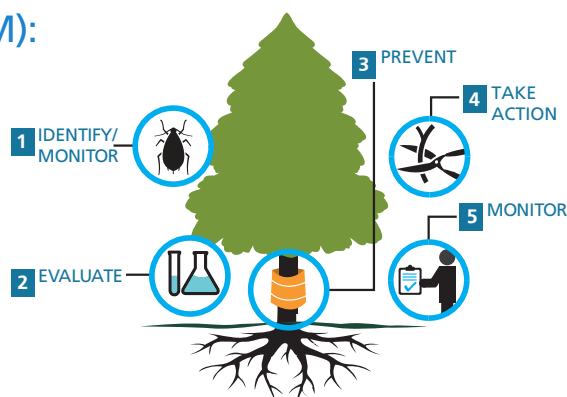
### Protect our River Nursery Grower Tips

Clackamas is among the top three nursery growing counties in Oregon. Many nurseries are located within the Clackamas River Watershed, a drinking water source for over 360,000 Oregonians and a spawning and rearing area for threatened and endangered salmon species.

#### Integrated Pest Management (IPM):

Programs and information are available for nursery growers who want to minimize environmental impacts by practicing integrated pest management. Oregon State University offers many resources.

IPM is not a single pest control method but a series of pest management evaluations, decisions and controls. IPM plans describe potential pests and define the critical threshold for the pest to be classified as a problem. Early detection of pest problems often results in pest control before damage is severe.



#### Pest scouting and diagnosis:



##### Scout

Use a standardised sampling plan



##### Diagnose

Use clinics or online identification tools



##### Record

Build a history of pest emergence and treatment

Scouting for and identifying insects, weeds and diseases is critical in preventing or managing infestations in nurseries. Insects may pose a threat only during certain stages of their development. Weather and growing degree days can provide information on when pests might harm plants.

Permanent records of scouting and monitoring will allow growers to begin building patterns of pest behavior at the nursery that could be used to prevent or reduce pest populations in the future.

#### Hedgerows and buffers:

One of the best ways to keep pesticides out of waterways is to leave a vegetative buffer strip along the stream. Buffers protect waterways from drifting pesticide spray and trap sediments, pesticides and pollutants carried by runoff. Buffers also minimize stream bank erosion by holding soil in place. For technical assistance with erosion control or prevention, contact the Clackamas Soil and Water Conservation District at [www.conservationsdistrict.org](http://www.conservationsdistrict.org).



# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Pesticide Application

Some pesticides are highly regulated in Oregon. If you are applying pesticides, be aware of licensing requirements.

#### Do I need an applicators license?

##### When licensing is not needed:

- When applying pesticides, other than Restricted Use Pesticides (RUPs), to property owned by you or your employer
- Applications of general use pesticides by public employees with non-powered equipment, except on school properties
- Advising others on general use pesticides
- Applying pesticides as a part of landscape maintenance under specific conditions

##### When licensing is needed:

- Buying, applying, or supervising the use of Restricted Use Pesticides (RUPs) (*Restricted Use Pesticides are not available to the general public*)
- Advising others on the use of RUPs
- Applying pesticides to someone else's property (*private or public land*)
- Applying pesticides as a public employee using machine-powered equipment and/or applying RUPs
- Applying pesticides on school properties



#### What are Restricted Use Pesticides?

Certain pesticides have been identified to have the potential to cause adverse effects to the environment and injury to applicators or bystanders. The "Restricted Use" classification restricts a product to use by a certified applicator or someone under the certified applicator's direct supervision.

#### Protect yourself and the environment:

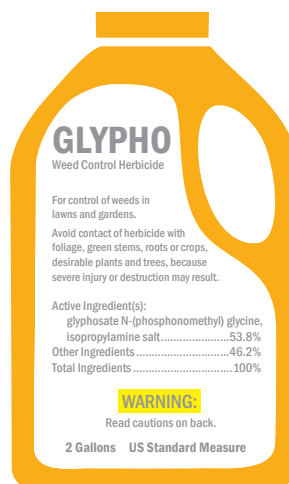
Applicators should be trained before they apply any chemicals and use personal protective equipment while making applications with Restricted Use Pesticides, as specified on the label; even during warm weather.

Always read the labels before using pesticides. Make sure you know how, when and where to use a particular product. Labels point out risks, how to prevent problems and requirements for use. Following the instructions is required by state and federal law..

The **Directions for Use** include specific information on how much pesticide should be mixed and applied, and where it may be used.

Information on how the product can affect the environment is listed under **Environmental Hazards**.

Labels provide key information on product use.



Product Name

Intended Use

Ingredients

Signal Word

Directions for Use

Precautions

First Aid

Environmental Hazards

Safety & Storage



# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Integrated Pest Management

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM can be used in agriculture, at home, in the garden or in the workplace.

#### How do IPM programs work?

IPM is not a single pest control method but a series of pest management evaluations, decisions and controls. In practicing IPM, growers, homeowners and businesses use these five steps to minimize pest damage.

##### 1. Identify and Monitor Pests

Not all insects, weeds, and other living organisms require control. Know which pests are present that can cause damage.

##### 2. Evaluate the Situation

Determine if pests are at a level to create problems and identify options to prevent or control them.

##### 3. Prevent Pest Damage

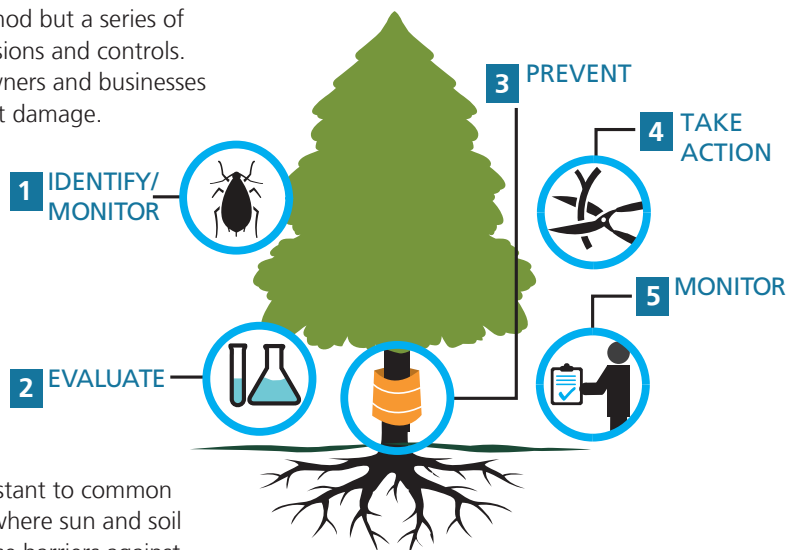
Native plants are adapted to be resistant to common pests. Be sure to plant in locations where sun and soil types are appropriate. Plant early, use barriers against climbing pests and rotate crops.

##### 4. Use Effective and Less Risky Controls

Mechanical controls such as hoeing or weeding may minimize risk to the environment. Targeted hormones, such as pheromones disrupt pest mating, and targeted spraying of pesticides limits risks and cost.

##### 5. Monitor for Impact

Further monitoring is needed to see if controls are working. If additional pest control methods are needed, use a targeted and least risky approach. Broadcast spraying of non-specific pesticides should be evaluated carefully for specific sites and pests.



#### Why use IPM?



Misuse of pesticides can be toxic to humans, pets and wildlife.



Misuse of pesticides can cause die offs of beneficial insects like pollinators.



Overuse of pesticides can cause species to evolve via natural selection to survive.

Pesticides can contaminate the environment including air, ground and surface water.

Many natural enemies of pests are killed by pesticides, and pests can become resistant to pesticides, increasing control costs, crop losses or other pest damage.

Integrated Pest Management reduces hazards by reducing overall pesticide use.

# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Tree Grower Tips

Oregon is the largest Christmas tree producer in the nation, and much of the Christmas tree industry is concentrated along the Clackamas River watershed, a drinking water source for over 360,000 Oregonians and a wild salmon stronghold.

#### Pesticide Use on Tree Farms:

Many tree growers apply herbicides, like Roundup, to control weeds. They apply insecticides, such as Lorsban, to kill damage causing aphids. Growers also use fungicides to control diseases. The Oregon Department of Environmental Quality has found many toxic pesticides at levels exceeding EPA benchmarks in the Clackamas watershed. At least two of these – chlorpyrifos and chlorothalonil – are used by growers.

Pesticides can cause health risks:



#### Herbicides

Atrazine  
Weed Killer Spray



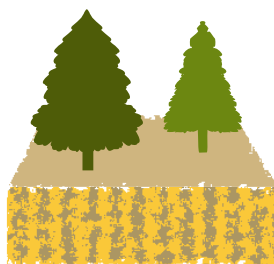
#### Insecticides

Chlorpyrifos  
Sprays & Granules



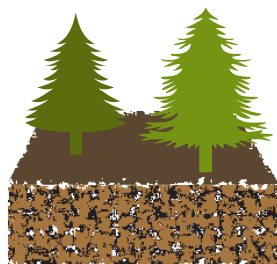
#### Fungicides

Chlorothalonil  
Mold & Mildew Spray



#### Pine Trees

Sandy or sandy loam soil  
Porous, drains quickly



#### Fir and Spruce Trees

Fine-texture loams and clay loam  
Holds more water

#### Prevention and Monitoring:

To minimize use of pesticides, plant tree species well-suited for your specific site conditions, especially soil type and drainage. Contact Oregon State University's Natural Resource Conservation Service Field Office or Clackamas Soil and Water Conservation District to find out what soil type you have and which trees might be most appropriate. Once planted, check your trees often for pests and disease. Catching an infestation early enables you to contain the problem quickly, keeping damage to a minimum.

#### Hedgerows and Buffers:

One of the best ways to keep pesticides out of waterways is to leave a vegetative buffer strip along the stream. Buffers help protect waterways from drifting pesticide spray and trap sediments, pesticides and pollutants carried by runoff. Buffers also minimize stream bank erosion by holding soil in place. For technical assistance with erosion control or prevention, contact the Clackamas Soil and Water Conservation District.



# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Be Pesticide Wise

Homeowners and gardeners often use pesticides and fertilizers on lawns and garden beds. These chemicals can pollute local streams and waterways.

#### Help prevent pollution:

- Choose to use the least toxic product possible
- Buy only what you need
- Keep fertilizers and pesticides in their original containers
- Read and follow instructions for use

Handle products carefully:

- To avoid dangerous reactions, never mix products
- Securely seal all containers
- Use a leak-proof container, not a plastic bag, to secure a leaking product container



#### Dispose of extra chemicals:

- Use up stored products before purchasing more
- Give unused products to other responsible gardeners to use
- Unwanted or banned chemicals can be taken to Metro's hazardous waste facilities at:

Metro South Transfer Station –  
2001 Washington Street, Oregon City

#### Dispose of empty containers and bags:

- Triple-rinse plastic, glass or foil lined containers. Use the rinse water as regular strength pesticide, following label instructions
- Wrap empty containers in newspaper and dispose of in garbage
- Fertilizer packaging without "weed" or "weed killer" on product can be disposed of in garbage without rinsing and wrapping

#### Recycling Resources:

Metro Recycling – 503.234.3000  
[www.oregonmetro.gov/tools-living/garbage-and-recycling](http://www.oregonmetro.gov/tools-living/garbage-and-recycling)  
Outside the Metro tri-county area – 1.800.732.9253

#### Parting with Pesticides

is a joint program funded by  
Clackamas River Water  
Providers with outreach and  
programming through  
Clackamas River Basin Council.



Images: © iStock Photo, 123rf, The Noun Project and VectorStock Media



# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Be Pesticide Wise

#### What's hazardous at home?

Common products used in our homes and yards can harm people, pets, fish, wildlife and the health of our waterways. They contain potentially dangerous chemicals that when used or disposed of improperly, can pose significant hazards to human health and the environment.

Common hazardous products include:



Fertilizers, pesticides,  
herbicides and poisons



Paints and stains



Solvents and  
thinners



Aerosol spray  
products



Fuels, automotive  
fluids and antifreeze



Household cleaners  
and disinfectants

#### Check the label

These products will contain "signal words" on their labels such as:

- Caution = low toxicity
- Warning = moderate toxicity
- Danger - high toxicity

These products can be corrosive, flammable, toxic, poisonous, combustible, or explosive.

Reading labels before purchasing and using a product is essential!



#### Protect our drinking water:

Pesticides are now found regularly in the Clackamas River water, a drinking water source for over 350,000 people in Clackamas and Washington Counties.

To keep our water safe, no hazardous materials should ever be poured or dumped down the sink, into the toilet, on the ground, down a sewer or street drain.

**Once in the water, many pesticides cannot be detected or removed.**



#### Resources:

Clackamas County - [www.clackamas.us/recycling](http://www.clackamas.us/recycling)  
 Clackamas Soil and Water Conservation District (CSWCD) - [www.conservationsdistrict.org](http://www.conservationsdistrict.org)  
 Environmental Protection Agency (EPA) - [www.epa.gov/pesticides](http://www.epa.gov/pesticides)  
 Metro - [www.oregonmetro.gov/tools-living](http://www.oregonmetro.gov/tools-living)  
 National Pesticide Information Center at Oregon State University - <http://npic.orst.edu>  
 Oregon Department of Agriculture - [www.oregon.gov/ODA/PEST/pages/disposal.aspx](http://www.oregon.gov/ODA/PEST/pages/disposal.aspx)  
 Oregon Department of Environmental Quality (DEQ) - [www.deq.state.or.us/lq/sw/hhw/index.htm](http://www.deq.state.or.us/lq/sw/hhw/index.htm)  
 Oregon State University County Extension Office - <http://extension.oregonstate.edu>

# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Alternatives to Pesticides

**The problem with pesticides:** Pesticides are poisons. They are specifically designed to harm and they can harm more than just the “pests” for which they are targeted.

Pesticides are toxic. Exposure to pesticides can hurt pollinators and other beneficial insects and plants. Pesticides also cause a number of health effects and a range of serious illnesses and diseases in humans and pets, from respiratory problems to cancer.



Wasps & Flies



Aphids & Mites



Snails & Slugs

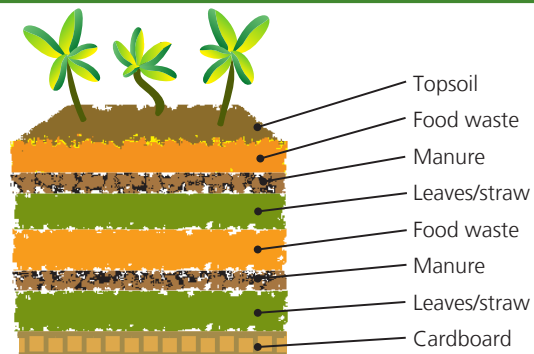
### Identify the pest:

The Oregon State University Extension office in Oregon City offers free services to help backyard gardeners and green industry professionals. With a sample of what is impacting your garden, or a damaged plant, they will help you identify the issue and recommend options for treatment.

### Layering and soil amendments:

Soil amendments improve soil health and encourage plant growth. Stronger plants resist pests and diseases. Clackamas Soil and Water Conservation District has instructions on how to collect a soil sample to send to a lab for testing.

If weeds are covering a patch of land, create a raised bed with “lasagna gardening.” Add layers of alternating green and brown materials and keep it moist as it decomposes. You will have prepared a planting bed with no digging needed.



### Attract beneficial insects:

Encourage beneficial insects in your yard to keep damaging pests in check. Plant a variety of plant species to attract insects, or purchase beneficial insects like ladybugs, lacewings and nematodes at a garden center or online to target specific problems.



### Parting with Pesticides

is a joint program funded by Clackamas River Water Providers with outreach and programming through Clackamas River Basin Council.



Images: © iStock Photo, 123rf, The Noun Project and VectorStock Media

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## Pesticide Reduction Fact Sheets

Protect our River

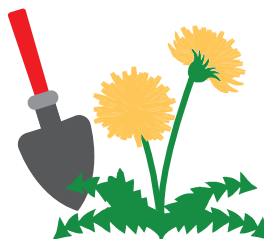
### Alternatives to Pesticides

Reclaim your yard from weeds and pests with these tried and tested natural methods. Be part of the movement to keep the Clackamas River clean for wildlife, recreation and drinking water.

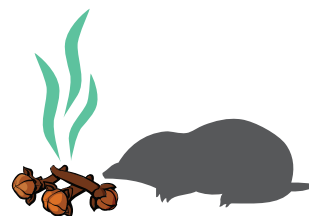
#### Take charge of your yard:

It is easier to spot and stop weeds if you are in your garden often. If you notice a few weeds, pull them by hand. It is much easier to remove one Himalayan blackberry than an entire patch.

Deter mice, gophers and moles by planting daffodils, marigolds and alliums. Act quickly if you see evidence of rodent activity before they become established. Rodents can be repelled with castor oil, peppermint oil, cayenne pepper and cloves.



Remove weeds  
by hand



Repel rodents with bitter  
tasting spices and strongly  
scented oils



Resist pests,  
don't need  
pesticides



Attract  
beneficial  
insects



Create  
habitat for  
pollinators

#### Plant natives:

Plants native to our area have evolved to resist local pests and disease. They also do not require fertilizers or pesticides. Native plants create a complex ecosystem that can reduce damaging infestations of pests and weeds. Local wildlife benefit from the variety of seeds and fruit produced by native plants and the shelter they provide. These features attract birds and beneficial insects that help keep pests in check.

#### Use boiling water:

Pour boiling water on weeds that are clustered together in smaller spaces, such as spacers in sidewalks and driveways. Be careful not to burn yourself or damage desirable plants.



#### Create a barrier:

A stiff paper collar buried an inch deep in the soil around plants will protect them from burrowing insects and grubs. Fine mesh netting over taller plants will keep insects out. Copper sheets placed around the borders of your planting area discourage snails and slugs. Copper wire or tape on tree trunks will keep snails from climbing.



# Attachment 3

## Pesticide Reduction Fact Sheets



Pesticides are now regularly found in water samples collected from the Clackamas River and its tributaries. Learn how to minimize pesticide pollution and stay safe.

### What is a pesticide?

A pesticide is a substance intended for preventing, destroying, repelling or mitigating pests. Pesticides include insecticides, herbicides (like those used on weeds) and fungicides (used to control rust and mildew).

Pesticide "active ingredients" are described on the label. When pesticides break down in the environment, they may produce even more hazards. Ingredients listed as "other" can also cause harm.

Typical pesticides include:



#### Insecticides

Ant & Roach Killer  
Sprays and granules  
Insect bait



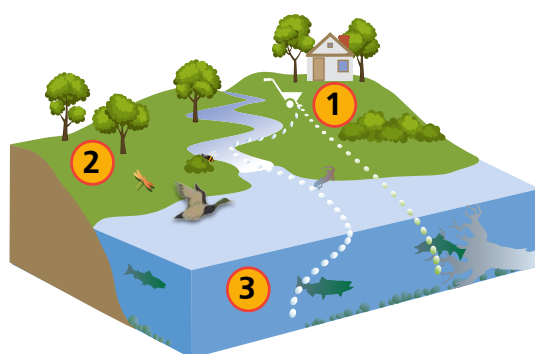
#### Herbicides

Weed & Feed  
Pre emergents  
Weed killers



#### Fungicides

Mold & Mildew Spray  
Copper Sulfate  
Lawn granules



### How pesticides can be harmful:

Pesticides can cause problems for our health and the environment even when applied according to label directions.

1. Pesticides can make their way into waterways through runoff and leaching.
2. Very small amounts of pesticides can be lethal to beneficial insects and birds.
3. Pesticides in waterways pollute drinking water and can harm fish and other marine life.

### Be pesticide wise:

Always read and follow directions on the label. Labels have important information on how, when and where to use products. The label has safe handling and first aid instructions.

The largest part of the label, **Directions for Use**, includes specific information about how much pesticide should be mixed and applied, where the pesticide may be used and how often applications may be made. **More is not better.**

Ensure that people and pets are not exposed.



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is a joint program funded by  
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programming through  
Clackamas River Basin Council.



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# Attachment 3

## Pesticide Reduction Fact Sheets

Protect our River

### Pesticides in Your Yard

**Keep your yard green and the Clackamas watershed clean:**

Consider less toxic options for yard maintenance. Here are some of the most effective alternatives to minimize pesticide use and keep pollutants out of our water.

#### Prevent weeds:

Keep weeds from getting established:

- Plant native trees and shrubs that thrive in Oregon's wet winters and hot, dry summers
- Mulch trees and shrubs to lock in moisture and prevent weeds from sprouting
- Use weed block fabric in areas not heavily planted



Plant  
native plants



Mulch  
open areas



Use weed  
block fabric



#### Pull weeds by hand:

Combine prevention with hand removal. By minimizing the opportunity for weeds to grow, you are more likely to be able to hand pull the few weeds that take root.

#### Choose pesticides wisely:

Read the label before you buy. Select products with lower toxicity, shorter persistence and lower potential to be carried in runoff or leach into groundwater.

- Avoid broad spectrum pesticides that can kill or harm many beneficial species
- Look for plant-based insecticides that use oils and extracts from plants to deter insects
- Use fragrant plants to repel insects



##### Lower toxicity pesticides

Break down quickly,  
attach to soil or are  
absorbed by plant



##### Botanical insecticides

Neem oil and  
pyrethrins are naturally  
occurring plant extracts



##### Fragrant plants

Marigolds, feverfew,  
basil, sage, chives and  
rosemary are avoided  
by many insects



Calibrate  
equipment



Do not spray or apply  
if windy or rainy

#### Equipment and weather:

Well maintained and calibrated application equipment are key to being able to apply pesticides efficiently at correct rates.

- Do not use pesticides when rain is expected to avoid runoff or leaching into groundwater
- Do not spray pesticides when windy to avoid drift from the target area

# Attachment 3

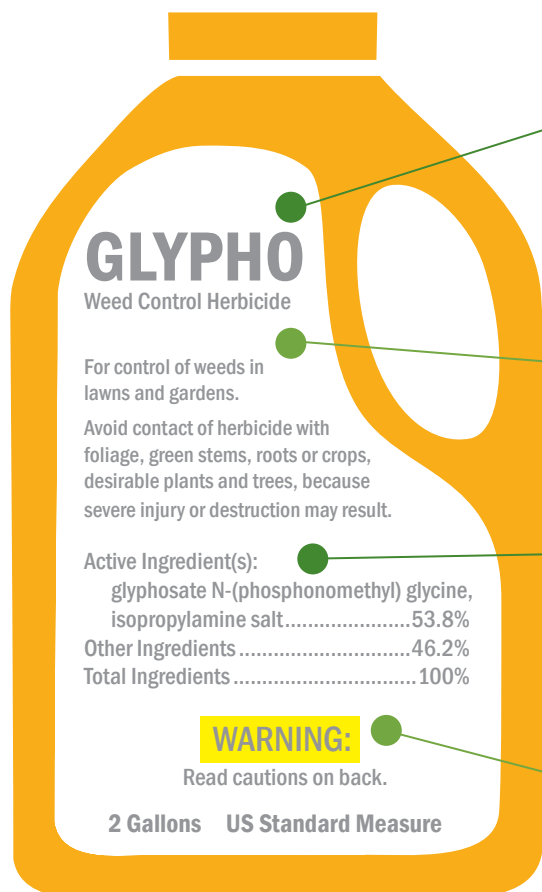
## Pesticide Reduction Fact Sheets



### Protect your family, our environment and our drinking water!

Pesticides and herbicides that you might buy at a local hardware store or online, are potentially dangerous chemicals. Read the label to learn how to use or dispose of them properly.

#### What to look For:



1

#### Product Name

Each manufacturer has a brand or trade name for each product. Be careful when choosing a product just by the brand name. Different manufacturers may use different brand names for the same pesticide or use a very similar name for an entirely different type of pesticide.

2

#### Intended Use

This part of the label provides information about what types of weeds or pests this chemical is designed to control.

3

#### Ingredients

The Active Ingredients are the specific chemicals that are effective for the intended use. Other Ingredients act as carriers for the active ingredient. The amount of the ingredient is generally listed as a percentage.

4

#### Signal Word

How toxic is the product?

**Caution** = mildly toxic

**Warning** = moderately toxic

**Danger** = highly toxic

#### Top pesticide safety tips:

- Read the entire label and follow all directions
- Only apply in locations indicated on the label
- Keep all pesticides in their original containers

#### Parting with Pesticides

is a joint program funded by  
Clackamas River Water  
Providers with outreach and  
programming through  
Clackamas River Basin Council.





# Attachment 3


## Pesticide Reduction Fact Sheets

Protect our River

### Reading Pesticide Labels

**Pesticides and fertilizers can pollute local streams and waterways.**

You can prevent these chemicals from reaching streams and rivers. Always follow the instructions on pesticide labels, and never pour them down the drain.



**5 DIRECTIONS FOR USE**  
It is a violation of Federal law to use the product in a manner inconsistent with its labeling.

**6 Precautionary Statements**  
Product can be hazardous to humans, domestic animals, wildlife and the environment.

**7 WARNING**  
**KEEP OUT OF REACH OF CHILDREN**

**First Aid**

IF SWALLOWED	<ul style="list-style-type: none"> <li>• Seek medical attention</li> <li>• Drink water, do not induce vomiting</li> </ul>
IF IN EYES	<ul style="list-style-type: none"> <li>• Flood eye with water for 15 minutes</li> <li>• Seek medical attention immediately</li> </ul>
IF ON SKIN	<ul style="list-style-type: none"> <li>• Wash affected area with water</li> </ul>
IF INHALED	<ul style="list-style-type: none"> <li>• Move to fresh air, refer to MSDS</li> </ul>

**8 Environmental Hazards**  
Product is toxic to aquatic invertebrates.

**9 Storage and Disposal**  
Store in a cool, dry place, out of reach of children. Triple rinse container before disposal.

EPA Registration No. 62719-324

**5 Directions for Use**  
The label has specific information on how and where to use the product, and how much is OK. Not following the directions is not only dangerous, but it is illegal.

**6 Precautions**  
Precautionary statements will explain how the product can be used safely, what harm it can cause, and what you can do to protect yourself and others.

**7 First Aid**  
Instructions provide information on what to do if the product gets in your eyes, mouth, lungs or on your skin.

**8 Environmental Hazards**  
Pesticide labeling will warn you not to contaminate water and alert you to any specific hazards to the environment.

**9 Storage & Disposal**  
Directions on how to safely store and dispose of pesticides are as important as how to use them. Always keep products in the original container and never pour rinse water down the drain.

#### Resources:

Clackamas County - [www.clackamas.us/recycling](http://www.clackamas.us/recycling)

Clackamas Soil and Water Conservation District (SWCD) - [www.conservationsdistrict.org](http://www.conservationsdistrict.org)

Environmental Protection Agency - [www.epa.gov/pesticides](http://www.epa.gov/pesticides)

Metro - [www.oregonmetro.gov/tools-living](http://www.oregonmetro.gov/tools-living)

National Pesticide Information Center at Oregon State University - <http://npic.orst.edu>

Oregon Department of Agriculture - [www.oregon.gov/ODA/PEST/pages/disposal.aspx](http://www.oregon.gov/ODA/PEST/pages/disposal.aspx)

Oregon State University County Extension Office - <http://extension.oregonstate.edu>

# Attachment 4

Tabling display to promote Pesticide Pledge at 2019 Down the River Cleanup (est. 350 people attending)

