

HOW TO SPOT & REPORT POLLUTION

Your guide to ensure water stays clean in your neighborhood, town, and local waterways.





Deschutes Estuary Restoration Team

Legend

Current Deschutes Estuary Restoration Team Jurisdiction



1:300,000

0 8 Miles

0 8 Kilometers

NOTES:

Map Date: 11/7/2021

Data: WGS84

Projection & Coordinate System: UTM Zone 10 N

Service Layer Credits: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Document File Path: C:\Users\Raenali\Documents\Waterkeeper\Mapfiles\Ut_A\F\DeschutesEstuaryRestoration.mxd

Above: the land and waterways in which DERT monitors water pollution sources and incidents as determined by the Waterkeeper Alliance. DERT is an affiliate of the Puget Soundkeeper Alliance.

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+emergency numbers

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This project was graciously funded by Puget Soundkeeper Alliance through a grant from the Rose Foundation for Communities and The Environment and Waste Action Project





Dear volunteer,

Thank you for taking initiative to keep pollution out of your local waters — and the whole Salish Sea.

Not exactly sure what pollution looks like? No problem! We are here to help you learn how to recognize and report it anywhere. A drop of gasoline, a plastic bag, a pile of exposed dirt, or even a few soap bubbles may not seem particularly harmful, but these pollutants can find their way to our creeks, rivers, and oceans and accumulate over time. Most contaminants found in the oceans originated on land. Now, endangered resident orcas and several salmon species are so overloaded with toxic chemicals they are struggling to survive.

Finding pollution can be strategic or accidental; it just takes an observant and curious person to recognize and detect pollution. You might spot pollution while you're out walking your dog, or you may choose to actively search out pollution by visiting known construction sites or strategic shorelines. Searching for pollution after a storm event can be particularly fruitful. You may spot pollution in a car, on foot, or even by boat.

Regardless of your mission or mode of transportation, there are a **few things to consider**.

- **Your personal safety is more important than pollution.** Consider working with a partner and don't touch anything that could be hazardous. Avoid hostile situations.
- Waterways are public property, but shorelines including beaches may be private. **Don't trespass on private property.**
- Understand your role to observe, document, and report. It's not worth it to be confrontational.

Sincerely,

Deschutes Estuary Restoration Team and Waterkeeper Alliance

In Case of Emergency



Who to contact if the pollution appears serious:

For oil spills:

(800) 242 - 8802 (National Response Center)

(800) OILS - 911 (WA Emergency Management)

For other pollutants:

(360) 407 - 6300 (Ecology Southwest Regional office Pierce to Clark, Olympia, Peninsula)

Any Safety Issues: 9-1-1

Call the Deschutes Estuary Restoration Team Pollution Hotline:

(360) 890-5571

Paige Anderson, DERT Executive Director, and Jae Harris-Townsend, DERT Outreach Coordinator, monitor the Hotline M-F during regular business hours. Please feel free to leave a voicemail or text message.

You can also email Paige at Anderson@deschutesestuary.org and Jae at Harris-Townsend@deschutesestuary.org

Report an incident online to Ecology:

<https://ecology.wa.gov/Footer/Report-an-environmental-issue/Report-a-spill>

Other Hotlines and agencies:

Statewide

Marine Mammal Stranding: (800) 853 - 1964

Derelict Fishing Debris: (800) 477 - 6224

Derelict Boats: (360) 789 - 7656

U.S. Coast Guard: (206) 217 - 6200

Thurston County

Olympia Spills Hotline: (360) 753 - 8333

Tumwater Spills: (360) 754 - 4150

Lacey Spills Response Hotline: (360) 491 - 5644

Department of Health: (360) 867 - 2500

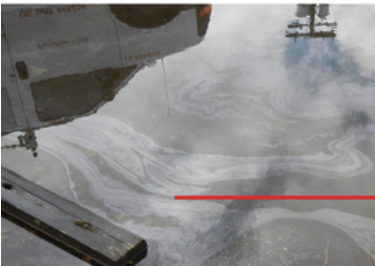
POLLUTION ON LAND



The pollutants that originate on land can be easily washed into our creeks, streams, and the ocean after rain events. Keeping our land clean and free of pollutants is the best way to keep our stormwater clean. **Storm drains discharge directly into Puget Sound, and some of them even flow into salmon-bearing streams like the Deschutes River.**

In neighborhoods & urban areas, watch for...

- Trash and illegal debris piles on land or on beaches.
- Dumping grass or other yard waste on public property or right of ways.
- Dog poop — Not just any time, but if you notice a pattern in a particular area, document and report.
- People feeding geese and ducks — again, not just any time, but if you notice a pattern in a particular area, document and report.
- Leaky cars — oil and grease.
- Fertilizers — should only be applied when plants are growing and it's not raining. Consider using organic fertilizers, or none at all!



Treated wood creates oil sheen





Storm Drains

Nothing but water should be entering a storm drain! Especially after rainfall, watch for...

- Clogged storm drains — Unclog yourself if safe to do so! Report if unsafe or if there's a pattern of clogging in a particular area.
- Wastewater entering storm drains or waterbodies from car washing, pressure washing, cleaning, paint chipping, hazardous materials, or over-watering.
- Over-application of fertilizers.
- Failing septic systems.
- Erosion of dirt into storm drain or water body



TIP:

Clear debris from storm drain if safe to do so, or call the closest municipal public works department

POLLUTION ON LAND



Don't wash cars where soap goes down storm drains!



TIP:

When possible, opt for a commercial carwash

Restaurants

Restaurants on the waterfront or near storm drains can be a pollutant source.

What to watch for...

- Greasy discharges from dumpsters, oil drums, or buckets.
- Potential plumbing leaks.
- Direct dumping of food waste or other products.
- Wet, sticky, or smelly residue or debris



**Discharge from dumpster
flowing into storm drain**



Agricultural sites

Fecal coliform bacteria from warm-blooded animals (mostly livestock) and nutrients (from manure and fertilizers) are the two biggest pollutants of concern in agricultural areas.

They enter the water directly or during rain events. These can cause fish kills. Watch for...

- Animals in or very near water.
- Draining or leaking of manure ponds.
- Manure spreading during winter months and when it's rainy or stormy.
- Over-application of fertilizers.
- Excess sediment in ditches



POLLUTION ON LAND



Construction Sites

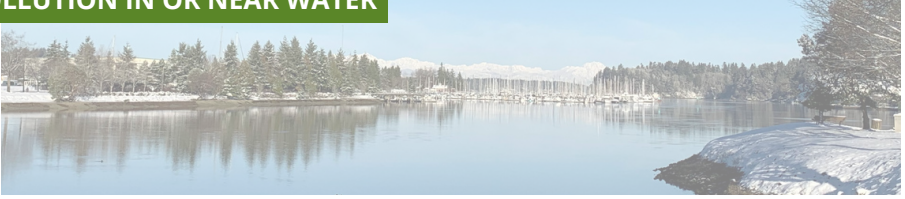
Construction sites can result in the discharge of turbid (muddy) water from digging and exposing earth to rain- water, as well as releasing petroleum products and excess nutrients. **What to watch for near work and construction sites...**

- The lack of sediment control mechanisms that should be in place and functioning such as - silt fences, hay bales, plastic covering, mulching, matting, or seeding.
- Storm drains that are unprotected from runoff.
- Entrance and exit sites that aren't stabilized with rock or gravel.
- Vehicles leaving the site that are tracking soil or debris.
- Armoring and dredging.
- Oil sheens.



Sufficient sediment control

POLLUTION IN OR NEAR WATER



Railroad Activity

Trains travel up and down the waterfront and over other rivers and streams multiple times a day and are dangerously close to critical habitat.

Watch for any type of debris coming from the tracks and/or the trains themselves:

- Oily machinery
- Excess dust
- Sheens from treated wood.
- Coal pieces.



Industrial Activity

The Seattle, Bremerton, Tacoma and many other larger city waterfronts holds a variety of industries that have the potential to contribute pollution. Watch for...

- Any non-clear discharge going down a drain.
- Oil sheens.
- Sediment or dust.

Oil sheen on top of water





Discharge and drainage pipes

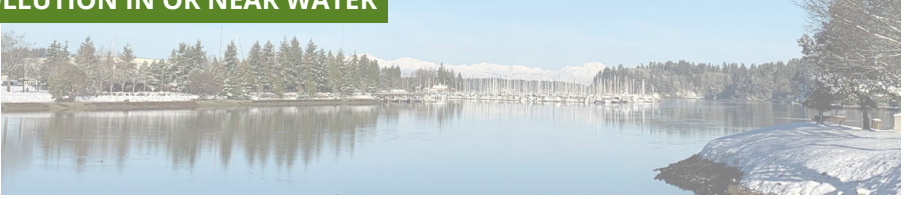
Water discharged at the end of pipes is a complex intermingling of municipal and industrial water that can include stormwater, industrial wastewater, sewer overflow, and sewage treatment water. **What to watch for coming out of a pipe...**

- Turbid (muddy) and discolored discharge from pipe.
- Very odorous discharge.
- Gushing discharge during dry weather.
- Debris accumulated on shore or in the water.
- Erosion around the pipe.
- Broken or exposed pipe.



NOTES

POLLUTION IN OR NEAR WATER



Near marinas, boatyards, shipyards, ponds, creeks, and wetlands

Nothing should be discharged into the water, including pressure washing waste, fuel, sewage, or repair waste such as paint chips and sanding dust. Copper, zinc, and oil and grease are the major pollutants of concern.

Near marinas, boatyards, shipyards, ponds, creeks, and wetlands. This is a broad category because any of these signs of pollution could be at any of these water bodies. Watch for...



- Soap or detergents.
- Sanitary solid waste and/or toilet paper.
- Fuel or oil sheens.
- Paint or wax sheens, paint chips, sanding dust.
- Fish processing waste.



TIP:

Check your boat often for signs of wear, leaks, or chipping paint.

POLLUTION IN OR NEAR WATER



Foam

Natural: Begins white but quickly turns tan, yellow, brown. It easily breaks apart if poked. It may smell earthy and have bits of dirt, plants, and insects.

Natural



TIP:

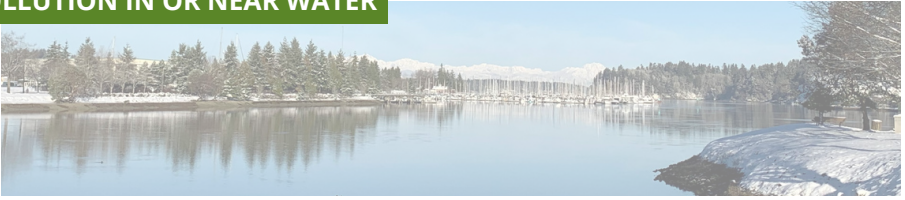
! Poke foam with a stick and see if it breaks apart. If so, it's probably natural!

Potentially polluting: Usually white, looks like bubbles. Will often see a rainbow sheen. May smell and look like soap. Tends to stick together even when poked.

Artificial



POLLUTION IN OR NEAR WATER



Algal blooms are becoming more common in the spring and summer months due to increased temperatures and nutrients in our waterways.

Blooms can be **green, yellow, brown, pink, or even red**. Many algal species produce toxins that are harmful if they come in contact with your skin or are ingested. **Pets can get seriously sick and die from drinking water or even coming into contact with water when a harmful algal bloom (or HAB) is occurring.** Even algal blooms that don't produce toxins can be deadly. When algae dies and is consumed by bacteria, the bacteria use up the oxygen in the water, creating lethal conditions for fish and other aquatic species.

Eutrophic Capitol Lake

In 1951 the Deschutes River in Olympia was dammed to create the reflecting pool and sediment reservoir we know today as Capitol Lake.

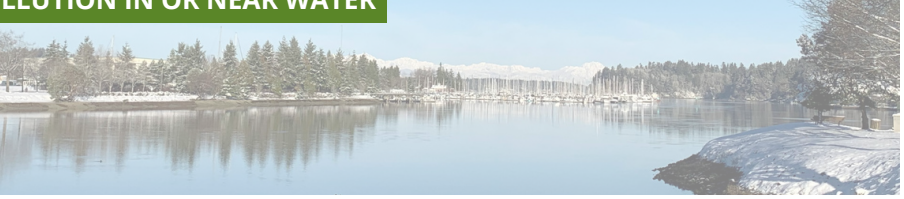
This created a myriad of environmental and public health issues, including seasonal algal blooms, and the culturally and ecologically significant Deschutes Estuary has ceased to exist since.



Algal bloom in Olympia's Capitol Lake

Removal of the 5th Ave dam and restoration of the estuary would improve water quality, challenge invasive species, control flooding, store carbon, and revive Olympia's ecotourism.

POLLUTION IN OR NEAR WATER



Oil sheens: Natural or not? Poke it and see!

If you poke fossil fuel sheens, the hold will quickly fill back in. Natural sheens will break apart and not re-form when poked.

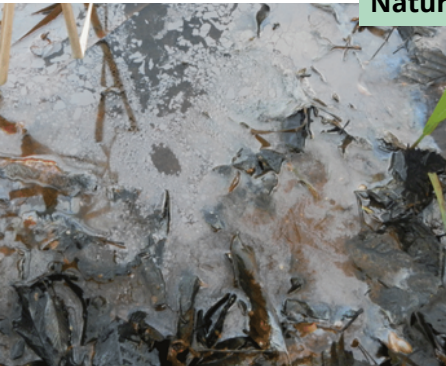
Pollution



TIP:

! Poke it with a stick! If it falls apart, it's probably natural and NOT pollution

Natural



This is a natural oil layer caused by plant matter.



Marine mammal strandings & other species

If you witness a sick, injured, stranded, or dead marine mammal or sea turtle, immediately contact the nearest marine mammal stranding network. By reporting the animal, you ensure that professional responders and scientists can take action.



Do not approach wildlife!



Marine Mammal Stranding Networks:

West Coast Marine Mammal Stranding Network
Phone: (866) 767-6114

NOAA Fisheries Enforcement Hotline
Phone: (800) 853-1964

Central Puget Sound Marine Mammal
Stranding Network
Phone: (949) 233-2822

Seal Sitters Marine Mammal Stranding Network
Phone: (206) 905-7325

Marine Science and Technology Center
(Highline College) Center Stranding Team
Phone: (206) 947-4253

Cascadia Research Collective
Phone: (360) 791-9555

Washington National Maritime Wildlife Refuges
Phone: (360) 457-8451

In addition, you can report strandings or fish and wildlife offenses to the Washington State Department of Fish and Wildlife (WDFW). Offenses include fishing or hunting out of season, illegal blocking of streams or rivers, improper use of equipment near or in water without a permit, endangered species violations and poaching, firearms violations, and illegal sale or purchase of fish or game products.

OTHER ISSUES



Sick salmon: Urban Runoff Mortality Syndrome

If you witness a sick coho salmon, file an Environmental Report Systems Tracking (ERTS) report with the Washington State Department of Ecology: <https://ecology.wa.gov/Footer/Report-an-environmental-issue/statewide-issue-reporting-form>

****And please let DERT know as well!****



Salmon sick with URMS

Polluted road runoff containing a toxic chemical from tires (6PPD-quinone) causes Urban Runoff Mortality Syndrome (URMS). By reporting sick coho, you ensure that the state documents the pollution event, putting pressure on the state to act to prevent future incidents.

Signs that a coho salmon is sick with URMS:

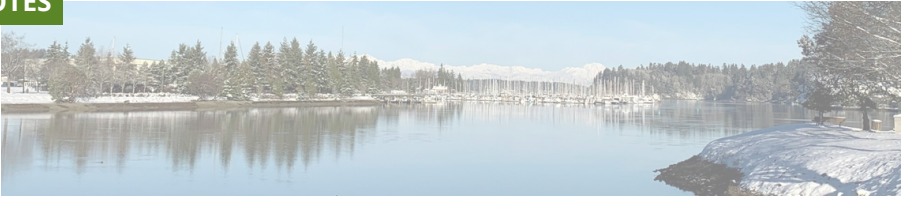
- Disorientation.
- Surface swimming.
- Gaping at the mouth.
- Dying before spawning

Tip:

If you decide to call ecology, make sure to say you want to file an "ERTS report"!

To call the Washington State Department of Ecology, see [page 3](#).

NOTES



HOST A CLEANUP

Want to host your own cleanup in the Deschutes Watershed? Borrow supplies from us! We can provide trash grabbers, gloves, hand sanitizer, sharps container, and trash bags.



You are on the front lines of preventing pollution.



Observe • Document • Report



www.deschutesestuary.org
olydert@deschutesestuary.org

Free The Deschutes