



PUGET SOUNDKEEPER® ALLIANCE

Citizen Soundkeeper Training Handbook



**We're on the water every week...
...stopping pollution every day.**





PUGET SOUNDKEEPER® ALLIANCE

Federal Law - Clean Water Act

“Section 101: Declaration of Goals and Policy

(a) The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters. (1) It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985.”

“Section 505: Citizen Suits

(a) ...any citizen may commence a civil action on his own behalf ... against any person...who is alleged to be in violation of an effluent standards or limitation....”

State Law - Water Pollution Control Act

RCW 90.48.080 Discharge of polluting matter in water prohibited.

“It shall be unlawful for any person to throw, drain, run or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters.”

National Pollution Discharge Elimination System (NPDES)

The Clean Water Act (CWA) and the Washington Water Pollution Control Act effectively make all water pollution discharges illegal, unless a permit is issued for this purpose. Under the National Pollution Discharge Elimination System (NPDES), permits are issued and revised to regulate and monitor discharges to the water. Permits are generally issued for five years and often become more restrictive as pollution prevention technology improves. In Washington, NPDES permits are issued by WA Department of Ecology.

These permits can be issued as General Permits that regulate all facilities of a certain type (i.e. boatyards) or as Individual Permits that are unique to a particular facility. Often, the facility is granted a “mixing zone” and compliance is determined at the outside edge of this area. In some cases however, effluent limites are not required and water-quality compliance is determined by implementing a stormwater pollution prevention plan

and/or mandatory best management practices (BMPs) that are stipulated in the permit language. Violations of these permits are violations of the CWA and are punishable by fines up to \$32,500 per day per occurrence and responsibility to clean up or mitigate the environmental damage. PSA has been successful in appealing these permits to insure that they include adequate protections for water quality. PSA also uses the citizen lawsuit provision of the Clean Water Act to successfully enforce these permits when a history of documented violations occurs. Ecology also has the ability to enforce the permits through warnings, fines and Notices of Violation. Both PSA and Ecology provide technical assistance and outreach to help facilities understand permit requirements and compliance.

What Does it Mean to be a Citizen Soundkeeper?

Incidents of pollution are happening all the time around Puget Sound and many go unreported. As a Citizen Soundkeeper we need your help to detect and document these sources of illegal pollution. Whether you are biking, walking, boating or kayaking, we need your help to monitor our shorelines!

If you witness an illegal or suspicious discharge, please take notes about the time, precise location, weather conditions, and include information on the size, color and/or odor of the discharge or spill. Digital photos are the very best tool for documenting these events. Please use the Spill Reporting Numbers at back of this book to contact the appropriate agency or use the PSA Pollution Hotline at 1(800) 42-PUGET. Please note, our hotline is not monitored evenings or weekends, so if the discharge constitutes an emergency after hours, please call the emergency numbers listed.

Also included is a sample Patrol Log form. Please fill this out when you complete a patrol and forward it to us. It helps us to know where and when we have people on patrol, even if nothing is found. You can mail the form, use the fax number provided or email the information along with any attached photos. If you make a report directly, please also let us know, so we can follow up with the agencies and report back to you about the progress of any investigation into the pollution incident.

By using the Pollution Detection Checklist in this handbook, your call can make a difference!

Pollution Detection Checklist

Marinas

Marinas have docks to moor vessels, with minor repair work allowed under State rules. No more than 25% of the above water portion of a vessel can be worked on per year. Nothing should be discharged into the water. It is illegal for divers to clean the hulls of boats in the water if any of the paint is removed during the cleaning or if the paint contains heavy metals or biocides to discourage marine growth. Unlike boatyards and shipyards, marinas are not regulated under a NPDES permit. PSA works closely with many marinas in Puget Sound on pollution prevention and distributes Boater's Guides and oil absorbents to help boaters understand these issues. Minor incidents are often best reported to the harbormaster or marina manager, however oil sheens and chemical spills should be reported *immediately* to state and federal authorities.

What to look for:

- Soap or cleaners in the water
- Sanitary waste (toilet paper or floaters)
- Fuel or oil sheens
- Paint sheens
- Wax sheens
- Paint chips sanding dust
- Fuel from fuel dock operations

Boatyards

Boatyards do repair and maintenance work on small boats mostly under 65 feet. They may have a lift, but do not have dry docks. Boatyards are regulated under a general NPDES Permit. Best Management Practices, rather than numeric effluent limits, control pollution discharges, which are typically from toxic bottom paint containing copper and zinc. PSA is working to get numeric effluent limits on zinc and copper.

What to look for:

- Pressure wash wastewater must not flow directly into the water. (If a discharge occurs, water color would be similar to the boat's bottom paint).
- Oil sheens, soap, detergents, paint slicks, or colors in water.

- Tarps must cover the boat and area being painted, sanded, or scraped. Nothing should enter the water or be dispersed into the air. Dustless sanders (vacuum attachment) are required when sanding soft bottom paint.
- Paint & debris on asphalt can contaminate stormwater runoff.
- Paint and solvents must be mixed in berm or covered area.
- Storm drains on site.
- As with marinas, a maximum of 25% of a boat's surface area can be worked on while a boat rests in the water (no work on the sides of a boat hull is permitted).

Shipyards

Shipyards do repair and maintenance work on large vessels over 65 feet. Some shipyards build or dismantle ships. Ships are repaired either in the water, on dry docks or a marine railway. Copper, zinc and oil and grease are the common pollutants of concern. Each shipyard has its own NPDES permit with removal of paint and debris required prior to submerging dry docks. All dry docks and industrial parts of shipyards are required to collect and pre-treat stormwater and then send it to a sewage treatment plant. PSA reviews shipyard permits and has sued several for non-compliance.

What to look for:

- When a dry dock is submerged with a finished ship, there should be no visible sheen of oil or grease, nor any water discoloration.
- Dry docks should not accumulate fluids or piles sandblast grit and no water should be running off them.
- If the ship is being sandblasted to remove paint or being spray painted the dry dock or vessel should be tarped. There should be nothing visible in the air or water.
- Unlike boatyards, hand painting ships while in the water is often allowed, but nothing should enter the water.



Ships and Boats

Vessels on the water do not have pollution discharge permits from the Department of Ecology, although the Federal EPA is exploring this concept. Pollutants include paint, solvents, oil or grease, fuel, sewage, detergents and ballast water. PSA does considerable outreach to recreational boaters to educate them about cleaning boat practices.



What to look for:

- Painting, scraping or repair activities resulting in pollution
- Oily discharges from bilges
- Trails of toilet paper or muddy looking discharges from holding tanks
- Discharge of bilge or ballast water that looks discolored
- Fish processing waste

Industrial and Municipal Pipes

Industrial and municipal discharges include stormwater, combined sewer overflow (CSO), sewage treatment discharge and manufacturing process waste water. Some of these pipes are visible from the water or shore but many discharge points are submerged in shallow or deep water. Pollutants vary considerably, but can include heavy metals, fecal coliform, chlorine, suspended solids, pH, biological oxygen demand and many more. These discharges are regulated by NPDES permits. PSA has appealed Stormwater Permits to insure protection of water quality and litigates against NPDES permit violators who repeatedly fail to meet discharge limits. Larger facilities generally have pipes in deep water not exposed at high tide.

What to look for:

- Note any color changes in the water or odors
- Note airborne particles landing in the water
- Observe any excess debris



Construction Sites

The common pollutants discharged from these sites are turbidity and debris. Nothing should be running off of the site when it is raining. These activities are controlled by the Construction Stormwater General Permit for one acre or greater. PSA appeals these permits when they fail to protect water quality.

What to look for:

- Silt fences, hay bails, plastic coverings, mulching or matting, seeding or straw wattles should be in place and functional
- Stormdrains should be protected by inserts/other methods
- Entrance to the site should be stabilized with rock or gravel
- Vehicles leaving site should not track soil



Restaurants

Any food service on the waterfront or near stormdrains. Discharges of soapy water or grease are common pollutants.

What to look for:

- Check for flow into stormdrains from dumpsters, oil drums or buckets
- Observe any plumbing that may be leaking
- Check for direct dumping of food products
- Look for wet, sticky or smelly residue

Car Washes

Most commercial car washing businesses collect and treat wastewater, however professional auto detailing and dealerships should not be discharging to stormdrains. In addition, charity car washes, though financially beneficial to the charities involved, pollute Puget Sound and nearby waters. Soap, oil and grease, and heavy metals are discharged into stormdrains and go directly into our waterways without any treatment. This can be particularly damaging to small creeks which may contain populations of salmon or trout. PSA uses its pollution hotline to identify and educate charities and business owners about where and how to hold car washes. Also we work with the Puget Sound Car Wash Association and Brown Bear Car Wash doing charity outreach to promote their car wash programs and other programs to protect water quality.

What to look for:

- Soapy discharge flowing into nearby stormdrains or water systems
- If you see a pollution incident, report to the hotline with the name of charity/business and the location
- For charity car washes, ask if the group has a stormdrain kit that collects water at the drain and pumps the discharge to a sewer
- If you are involved in charity activities please call us for environmentally sound options

SOUNDKEEPER VOLUNTEER GUIDELINES

1. Soundkeeper water patrol volunteers have no legal authority to intervene in any situation, require any activity to cease or to be modified.
2. Water patrol volunteers should never trespass on any posted or private property. In the event that a violation appears to be taking place on posted or private property, patrollers should contact the office. If it appears to be a serious and major violation, volunteers should attempt to obtain assistance and escort from an agency representative or a federal, state or local law enforcement official. Although Puget Sound waters are public, going ashore on private property from a boat is trespassing.
3. It is strongly recommended that water patrol volunteers work in pairs, for safety as well as to strengthen potential enforcement where corroboration of testimony could be very important.
4. If in the course of an investigation or monitoring, you meet with anger or hostility, be prepared to leave the scene and abandon the investigation immediately.
5. Do not try to be a hero. If you run across a spill of an unknown substance that you suspect may be toxic, do not sample it without first contacting an agency field representative for guidance. CAUTION: In case of a spill with a strong odor, stay upwind and do not attempt to take samples. Such substances can cause dizziness and may be dangerous.
6. In order to be scientifically credible water quality sampling requires special equipment and training.
7. Except in major incidents or after hours, do not contact enforcement agencies without first having discussed the issue with the Soundkeeper office.
8. Remember that photos or video recording are our best evidence. When possible, have your photos or videos show a vessel name and/or number, car license number, business name and address, and/or recognizable landmark.

Pollution Hotline: 1-800-42PUGET

GLOSSARY OF TERMS FOR PATROLS

BMPs (Best Management Practices)

A method, activity, maintenance procedure, or other practice for reducing the amount of pollution entering a water body.

CSO (Combined Sewer Overflow)

An outfall that discharges untreated wastewater from a combined sewer system (carrying both sanitary wastewater and stormwater) when stormwater runoff causes an overload of the sewer system.

CWA (Clean Water Act)

The federal Clean Water Act regulates water pollution and water quality. The law includes the NPDES permit program and provisions for citizen involvement.

EIS (Environmental Impact Study)

A document that describes the impacts of a development project or proposal, ways to mitigate the impacts and alternatives to the project. EISs are required by law for all projects having significant environmental impacts.

NPDES (National Pollutant Discharge Elimination System) Permit

NPDES is part of the federal Clean Water Act and requires point-source dischargers to obtain discharge permits. NPDES permits regulate pollutants, set effluent quality and quantity limits and may require implementation of selected BMPs.

SEPA (State Environmental Policy Act)

The state law requiring state agencies and local governments to consider environmental factors when making decisions on activities, such as development proposals and comprehensive plans. The law requires the documentation of environmental impacts and opportunities for public comment and review.

Ecology (Department of Ecology)

The Washington State agency responsible for administering the NPDES discharge permit program.

EPA (Environmental Protection Agency)

The EPA administers federal environmental laws. Region 10 covers Puget Sound.

NOAA (National Oceanic and Atmospheric Administration)

Federal research agency on oceanic and atmospheric sciences.

Suspended Solids

Particles that are suspended in and carried by water; includes sediments and solids in wastewater.

Erosion

Wearing away of rock or soil fragments caused by water, wind, and mechanical forces.

Effluent

The liquid flowing out of a facility or household into a water body or sewer system. e.g. the treated liquid discharge by a wastewater treatment plant is its effluent.

Discharge Pipe

A pipe from which wastewater flows to a water body.

Stormdrain

A system of pipes or ditches used to carry stormwater to streams, lakes or Puget Sound. Also refers to the end of the pipe where the stormwater is discharged.

Point Source Pollution

A source of pollutants from a specific pipe. Generally, any pipe which is regulated by NPDES is considered to be a point source.

Non-point Source Pollution

Pollution that enters water from dispersed and uncontrolled sources, i.e., stormwater runoff, farms, roads, pesticides.

Pollutant

A contaminant that adversely alters the physical, chemical, or biological properties of the environment or degrades water quality. Changes in temperature are considered a pollutant.

Toxicant

Chemical substances such as pesticides, plastics, detergents, and industrial wastes that are poisonous, carcinogenic, or otherwise directly harmful to life.

Combined Sewer System

A wastewater collection and treatment system where domestic and industrial wastewater is combined with storm runoff.



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Separated Sewer System

A wastewater collection and treatment system where domestic and industrial wastewater is separated from storm runoff; the system has independent sanitary wastewater and stormwater systems.

Boatyard

A commercial facility for the maintenance and repair of small boats. Activities may include painting, scraping, cleaning, and mechanical repairs.

Shipyard

A facility for the maintenance and repair of large ships, as above.

Dry Dock/Marine Railway

A facility at a boatyard or shipyard for lifting and containing vessels from the water. A dry dock is a floating structure with a dock which lowers into the water to receive and release vessels. The dock must be clean of debris and chemicals before being submerged. A marine railway consists of railroad tracks running out of the water to lift the boat from the water.

Marina

A facility for mooring boats.

Industrial Site

A facility engaging in any industrial process. May be a cement/sand and gravel plant, a cannery, creosote manufacturer, etc. Usually has associated discharge pipes to the water.

Construction Site

A site where construction or remodeling of a structure is occurring. Often associated with debris, erosion, or painting/cleaning chemicals.

Vessel

Any water-borne vehicle, such as a boat, ship, tug, or barge.

Pier

A structure protruding over the water to serve as a walkway, storage area, or extension of the shoreline. Often has a piping or plumbing running underneath.

Float

A permanent dock that floats on the surface of the water for the purpose of mooring boats.

PATROL LOG FORM		
Date of Patrol	Time of Patrol	
Patrol Area (Waterway)	Pollution Incident?(Y/N)	
First Name	Last Name	
Anonymous? (Y/N)	Phone Number	
Patrol Notes: (Route; litter observed/picked up; wildlife; observed at-risk activity)		
POLLUTION INCIDENT REPORT		
Date of Incident	Observed during patrol? (Y/N)	
Precise Location	Waterway	Time
Source	Pollutant	
Polluter	Quantity	
Incident Description		
Weather	Marine Conditions	
Reporting/Notification	Resources at Risk	

PSA Hotline: 1-800-42PUGET PSA Fax: (206) 297-0409

PSA Email: psa@pugetsoundkeeper.org



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SPILL REPORTING - 24 HOUR NUMBERS

*Be prepared to provide the following information:
reporting party, contact phone #, material, concentration, quantity,
location, company name, resource damage and clean-up status.*

Puget Soundkeeper Alliance Pollution Hotline

1-800-42PUGET

Number may not be monitored on weekends.

OIL SPILLS & ENVIRONMENTAL EMERGENCIES

National Response Center (NRC)

1-800-424-8802 (1)

Emergency Management Division (EMD)

1-800-OILS-911

U.S. Coast Guard (USCG) - Marine Pollution Reports

(206) 217-6232

Environmental Protection Agency (EPA) Emergency Line

(206) 553-1263 (1)

You are responsible, you are required by law to report any discharge of oil or hazardous substances into water of the state to the USCG and EMD. Spill of a hazardous substance also requires that the NRC be notified.

ALL SPILLS

WA Department of Ecology - Pollution Reports

Northwest (King to Whatcom Counties & Kitsap to San Juan)

(425) 649-7229

Southwest (Pierce to Thurston and Olympic Peninsula)

(360) 407-6300

OTHER IMPORTANT NUMBERS

Marine Mammal Strandings: 1-800-853-1964

Whale Sightings: 1-800-562-8832

BOATER'S INFORMATION NUMBERS

PUGET SOUNDKEEPER ALLIANCE

Boaters Guides/Clean Boating Kits (206) 297-7002

WASHINGTON SEA GRANT

Boating Information (206) 543-6600

WASHINGTON STATE PARKS AND RECREATION

Boating Programs (360) 586-6590

Clean Vessel Programs (360) 586-6599

Information Center (360) 902-8844

PUBLIC PUMPOUT LOCATIONS

(360) 902-8551

FISHING AND WILDLIFE INFORMATION

WASHINGTON DEPARTMENT OF HEALTH

Shellfish Protection (clams, oysters) (360) 236-3330

WASHINGTON DEPARTMENT OF FISH & WILDLIFE

Report Poaching and Derelect Fishing Gear
1-800-477-6224

REPORT AQUATIC INVASIVE SPECIES

Zebra Mussels, Invasive Tunicates, etc.
1-800-437-2744

RED TIDE HOT LINE

Before you dig call: 1-800-562-5632

CONSTRUCTION, COMMERCIAL & RESIDENTIAL

KING COUNTY DRAINAGE SERVICES

Oil, Garbage or Discharge from Construction Sites
(206) 296-1900

SEATTLE PUBLIC UTILITIES

Discharge to Streets - Water Pollution Complaint Line
(206) 684-7587

SNOHOMISH COUNTY WATER POLLUTION

Water Pollution Hotline (425) 388-6481

WASHINGTON DEPARTMENT OF ECOLOGY

Hazardous Waste Hotline 1-800-633-7585

PUGET SOUND CLEAN AIR AGENCY

Air Quality Complaints 1-800-552-3565

SEATTLE POLICE HARBOR PATROL

(206) 684-4071



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www.pugetsoundkeeper.org

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