

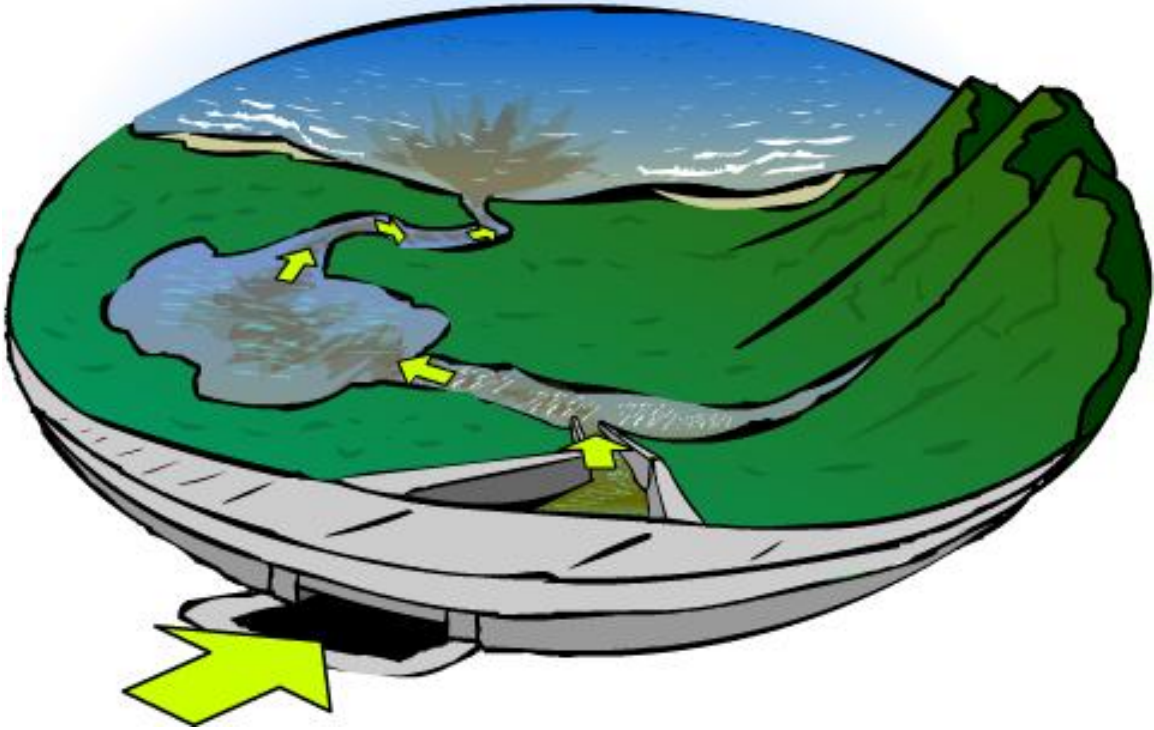
## FREQUENTLY ASKED QUESTIONS...

1. What is the [difference](#) between a stormdrain, and a sanitary sewer?
2. What is a [watershed](#)?
3. What is [non-point](#) source pollution?
4. Did Pleasanton ban charity [carwashes](#)?
5. How do my [gardening](#) practices effect the watershed?
6. Where can I get rid of old paint, pesticides, batteries, fluorescent lamps, and other potentially [dangerous](#) materials I have in my garage.
7. Can I drain my [pool](#) to the street.
8. Are there [Pollutants](#) that are of concern in the waterways?
9. What is the Alameda Countywide Clean Water Program (the [ACCWP](#))
10. What can I do to help [reduce](#) Non-Point pollution.
11. Why is there [still](#) a pollution problem

# Sanitary Sewer or Storm Drain

...A sewer system and a storm drain system are not the same?

## Storm Drains

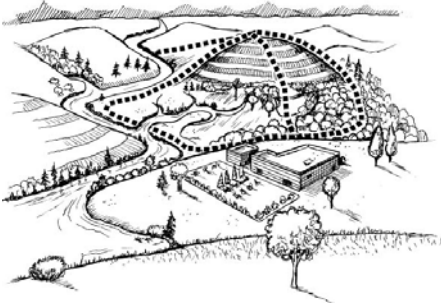


These two systems are completely different. The water that goes down a sink or toilet in your home or business flows to a wastewater treatment plant where it is treated and filtered. Water that flows down driveways and streets and into a gutter goes into a storm drain, which flows directly to a lake, river or the ocean. This water may pick up pollutants along the way, which are never treated.

## Sanitary Sewer



# What's a Watershed?



Videos (AVI Movie Format)

▶ [What is a Watershed](#)

▶ [Everyone Impacts a Watershed](#)

▶ [Potential Sources of Pollution](#)

## The simple definition

It's the area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake or groundwater.

## You're sitting in a watershed now

Homes, farms, ranches, forests, small towns, big cities and more can make up watersheds. Some cross county, state, and even international borders. Watersheds come in all shapes and sizes. Some are millions of square miles, others are just a few acres. Just as creeks drain into rivers, watersheds are nearly always part of a larger watershed.

Let's start basic:

## What is a watershed?

A watershed is an area of land that drains into a lake or river. As rainwater and melting snow run downhill, they carry sediment and other materials into our streams, lakes, wetlands and groundwater.

## Why is your watershed important?

We all live in a watershed. Watersheds are the places we call home, where we work and where we play. Everyone relies on water and other natural resources to exist. What you and others do on the land impacts the quality and quantity of water and our other natural resources.

Healthy watersheds are vital for a healthy environment and economy. Our watersheds provide water for drinking, irrigation and industry. Many people also enjoy lakes and streams for their beauty and for boating, fishing and swimming. Wildlife also require healthy watersheds for food and shelter.

Managing the water and other natural resources is an effective and efficient way to sustain the local economy and environmental health.

Scientists and leaders now recognize the best way to protect the vital natural resources is to understand and manage them on a watershed basis. Everything that is done in a watershed affects the watershed's system.

## **What is Nonpoint Source (NPS) Pollution?**

### **Questions and Answers**

**(taken from EPA's Polluted brochure EPA-841-F-94-005, 1994)**

#### **Q: What is nonpoint source pollution?**

A: Nonpoint source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. These pollutants include:

- Excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas;
- Oil, grease, and toxic chemicals from urban runoff and energy production;
- Sediment from improperly managed construction sites, crop and forest lands, and eroding streambanks;
- Salt from irrigation practices and acid drainage from abandoned mines;
- Bacteria and nutrients from livestock, pet wastes, and faulty septic systems;

Atmospheric deposition and hydromodification are also sources of nonpoint source pollution.

#### **Q: What are the effects of these pollutants on our waters?**

A: States report that nonpoint source pollution is the leading remaining cause of water quality problems. The effects of nonpoint source pollutants on specific waters vary and may not always be fully assessed. However, we know that these pollutants have harmful effects on drinking water supplies, recreation, fisheries, and wildlife.

#### **Q: What causes nonpoint source pollution?**

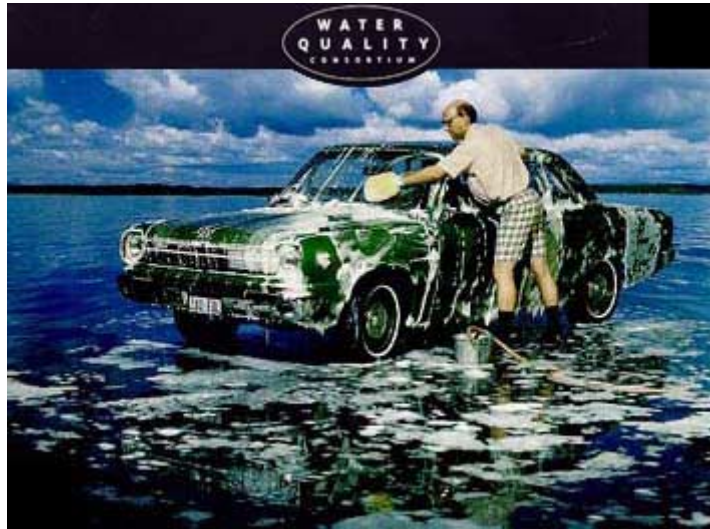
A: We all play a part. Nonpoint source pollution results from a wide variety of human activities on the land. Each of us can contribute to the problem without even realizing it.

**Q What, can I do to help.**

A: We can all work together to reduce and prevent nonpoint source pollution. Some activities are federal responsibilities, such as ensuring that federal lands are properly managed to reduce soil erosion. Some are state responsibilities, for example, developing legislation to govern mining and logging, and to protect groundwater. Others are best handled locally, such as by zoning or erosion control ordinances. And each individual can play an important role by practicing conservation and by changing certain everyday habits.

## **Car Washing and Charity Car Washes**

The City of Pleasanton has not banned charity car washes, however according to our National Pollution Discharge Elimination System permit, fleet or mass car washing, or commercial vehicular waste water may not enter the storm drainage system. Do to the volume of cars that Charity car washes may process, they fall into this category.



### **What's the problem with car washing?**

There's no problem with washing your car. It's just how and where you do it. Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt and oil, brake dust washed from your car, flows into nearby storm drains which run directly into lakes, rivers or marine waters. The phosphates from the soap can cause excess algae to grow. Algae looks bad, smells bad, and harm water quality. As algae decay, the process uses up oxygen in the water that fish need.



FIND

GREEN BUILDING

BAY-FRIENDLY

STOPWASTE

HOME

WHO WE ARE

RESIDENTS

BUSINESS &amp; INDUSTRY

SCHOOLS

LOCAL GOVERNMENTS

How and Where to  
Recycle

Household Hazardous  
Waste

- ▶ Oakland HHW Facility
- ▶ Hayward HHW Facility
- ▶ Livermore HHW Facility
- ▶ What you can/can't drop off
- ▶ Small Business Disposal Services
- ▶ Alternatives to Hazardous Household Products
- ▶ What's New: Sharps Disposal
- ▶ Batteries and Fluorescent Lamps
- ▶ Contact HHW

▶ Food Scrap Recycling

▶ Multifamily Recycling

▶ Bay-Friendly Gardening

▶ Recycle Used Oil

▶ Green Building

**Residents » Household Hazardous Waste**

Printer Friendly

## Household Hazardous Waste



### *Dispose of Household Hazardous Waste Safely, Conveniently -- and Free!*

Check your house, garage, and yard for common household products (such as cleaners, paints, car products, and pesticides) that may be hazardous to your children, your pets or the environment.



Words such as danger, warning, caution, poisonous, and flammable on the labels can mean a product is toxic. Label the toxic products you find as a reminder to use them up and dispose of them safely. Do not put such materials in garbage cans or storm drains.

**Call toll-free: (800) 606-6606**

[Download our schedule as a PDF file.](#)

Drop-off Locations:

[Oakland](#)

[Hayward](#)

[Livermore](#)

[What you can/can't drop off](#)

[Batteries and Fluorescent Lamps](#)

[Small Business Disposal Services](#)

[Sharps Disposal](#)

[Alternatives to Hazardous Household Products](#)

[Contact HHW](#)



# Maintaining Swimming Pools, Spas, and Fountains

Swimming pools provide beauty to your back yard, provides hours of enjoyment as well as adding value to your home. However the choices you make in maintaining your pool could lead to toxic environmental consequences



## Disposing of pool, spa, and fountain water

- It is preferred to dispose of pool, spa, and fountain water to the sanitary sewer system, but may be discharged to the storm drainage system only if **all the following conditions are met:**
  1. The water has been dechlorinated. (don't add chemicals until no residual remains)
  2. The water is within ambient temperature. ( turn heater off)
  3. No copper based algae control products have been used to maintain the water.

If drained to the storm drainage system preference is to drain across your landscape (lawn area) before it enters the street. If it is safe for your lawn it should be safe for the creeks.

## Disposing of filter rinse water

- If you have a cartridge type filter these should be cleaned in a wash sink if available, if a sink is not available the filter should be cleaned on a landscaped area where the water will not run into the street.



For diatomaceous earth (DE) filters, ensure that the DE is captured prior to discharge. The DE should never enter the storm drain system as it is hazardous to the beneficial waterborne insects.



•

## **What is Diatomaceous Earth?**

Is a substance made up from crushed fossils of freshwater organisms and marine life. Crushed to a fine powder and observed through a microscope, the particles resemble bits of broken glass. The microscopically sharp edges contact the insect or parasite, and pierce their protective coating, so they soon dehydrate and die. The larvae is affected in the same way.

## **What is the ACCWP?**

### **PROGRAM STRUCTURE**

The following agencies are members of the Program: the cities of Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, and Union City; the County of Alameda; the Alameda County Flood Control and Water Conservation District (District); and Zone 7 of the District. The Program was established in 1991 through a Memorandum of Agreement (MOA). The MOA established a General Program and individual programs. The General Program carries out activities in common on behalf of the member agencies. The individual programs are implemented by each member agency. As part of its individual program, each of the member agencies is responsible for complying with the NPDES permit requirements for discharges from its municipally owned storm drain system. The NPDES permit finds that enforcement actions will, wherever possible, be pursued only against the individual agency responsible for the violation. As an area wide activity, the General Program will inform any of the member agencies about potential significant permit compliance problems that it becomes aware of and will offer suggested solutions.

### **Mission**

The mission of the Alameda Countywide Clean Water Program is to help local residents, businesses and municipalities meet the stormwater quality goals of the Clean Water Act.

### **Vision**

We, the member agencies, see the Alameda Countywide Clean Water Program as an innovative, nationally recognized leader in efficient and effective stormwater management, protecting and preserving our natural water resources and the San Francisco Bay.

Strategic Objectives:

To accomplish its mission and vision, the Program has developed the following strategic objectives:

- Continue our self-directed, proactive approach fostering trust and respect from regulators and business and environmental groups;
- Produce tangible water quality improvements through expanded collaborations with other organizations;
- Communicate a clear vision of the Program's goals and objectives to the public, and to member agencies' staff, management, and elected officials; and,
- Improve communication links and working relationships among departments within member agencies and between the Program and Regional Board staff.

If you would like to see the ACCWP web click [here](#)

## Pollutants of Concern

As a result of its 1998 assessment of water bodies in the Bay Area, the Regional Board listed San Francisco Bay as impaired due to the following pollutants: diazinon, mercury, polychlorinated biphenyls (PCBs), copper, nickel, chlordane, DDT, dieldrin, and selenium. The U.S. EPA subsequently added dioxin-like compounds as one of the bay's impairing pollutants; listed several creeks in Alameda County as impaired by Diazinon.



### Pollutants of Concern:

#### Mercury

Much of the mercury that runs into the Bay is a remnant of the historic use of mercury in gold mining operations. Bacterial and chemical processes in the Bay cause Mercury concentrations to increase or "bio-accumulate" in the bodies of animals high in the food web. As a result, fish consumption advisories suggest that humans, particularly children and pregnant women, limit [consumption of fish](#) from San Francisco Bay to avoid harm to developing nervous systems.



### **Polychlorinated Biphenyls or PCBs**

PCBs were used in the past in a number of industrial and commercial applications, most importantly as coolants, lubricants, and insulators in electrical equipment. Although new uses are banned, PCBs continue to pose a serious risk due to their persistence in the environment. PCBs are listed by US EPA as a potential carcinogen, and are suspected of having negative effects on the human immune, reproductive, nervous, endocrine, and digestive systems. As with Mercury, [PCBs pose human health risks](#) because they accumulate in fish tissue.

### **Diazinon**

Diazinon is a widely used insecticide. It has been found in streams and storm drains throughout the Bay Area and California, often in concentrations toxic to aquatic life. It is also highly toxic to birds and other wildlife. Although a very small percentage of the amount that is applied finds its way into urban runoff, this is still enough to raise concerns about aquatic health.

### **Copper**

At low concentrations, copper is beneficial to aquatic life, but at higher concentrations can be extremely toxic to aquatic life; this toxicity can occur at levels that are not harmful to humans. This metal finds its way down storm drains through runoff from building materials such as roofs, and roads where copper is released from the brake pads of cars.





For more about these pollutants, see our [Stormwater Quality Management Plan](#) and also Visit:

- [Regional Water Quality Control Board](#)
- [Regional Monitoring Program](#)
- [EPA Water Quality Monitoring Site](#)





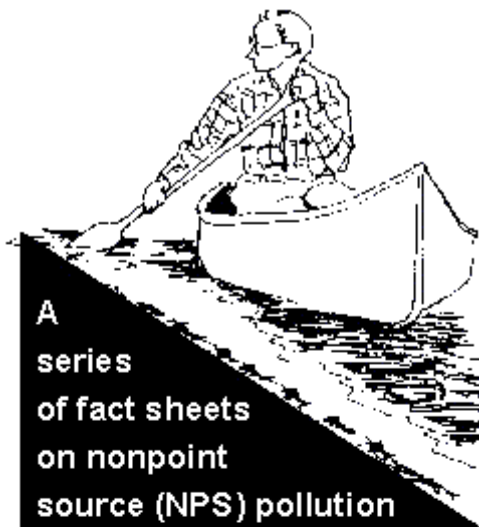
## What you can do to prevent NPS pollution

### Urban Stormwater Runoff

- Keep litter, pet wastes, leaves, and debris out of street gutters and storm drains--these outlets drain directly to streams and wetlands.
- Apply lawn and garden chemicals sparingly and according to directions.
- Dispose of used, antifreeze, paints, and other household chemicals properly, not in storm sewers or drains. Most vehicle fluids can be recycled. Check for your nearest oil
- Clean up spilled brake fluid, oil, grease, and antifreeze. Do not hose them into the street where they can eventually reach local streams and the bay.
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas.
- Have your septic system inspected and pumped, at a minimum, every 3-5 years so that it operates properly.
- Purchase household detergents and cleaners that are low in phosphorous to reduce the amount of nutrients discharged into our streams and coastal waters.
- Limit the amount of impenetrable surfaces in your landscape. Use permeable paving surfaces such as wood decks, bricks, and concrete lattice to let water soak into the ground.
- Allow thick vegetation or buffer strips to grow along waterways to slow runoff and soak up pollutants. Plant trees, shrubs, and ground cover. They will absorb up to 14 times more rainwater than a grass lawn and don't require fertilizer.
- Use natural alternatives to chemical fertilizers and pesticides. If you must use chemicals, test your soil to determine the right amount. See

also [Citizen's Guide to Pest Control and Pesticide Safety](#). (PDF format)

- Don't hose down driveways or sidewalks. Dry sweeping paved areas, along with careful trash disposal, are simple, effective pollution reducers.
- Gutters and down spouts should drain onto vegetated or gravel- filled seepage areas - not directly onto paved surfaces. Splash blocks also help reduce erosion.
- Divert runoff from pavement to grassy, planted or wooded areas of your property, so stormwater can seep slowly into the ground.
- Compost grass clippings and leaves. Never allow them to wash into roadways where they will reach storm drains.
- Get involved in the planning and zoning process in your community. That's where the decisions are made that shape the course of development and the future quality of our environment.
- Place litter, including cigarette butts, in trash receptacles. Never throw litter in streets or down storm drains.
- Properly dispose of household [hazardous wastes](#). Many common household products, (paint thinners, moth balls, drain and oven cleaners, etc.) contain toxic ingredients. When improperly used or discarded, these products are a threat to public health and the environment. Do not pour hazardous products down any drain or toilet. Do not discard with regular household trash. Learn about natural and less toxic alternatives and use them whenever possible. Contact your County Solid Waste Management Office for information regarding hazardous waste collection in your area.
- Recycle all used motor oil by taking it to a service station or local recycling center. Motor oil contains toxic chemicals that are harmful to humans and animals. Do not dump used motor oil down storm drains or on the ground.
- Animal wastes contain bacteria and viruses that contaminate shellfish and cause the closing of bathing areas. Pet owners should pick up after their pets and dispose of the wastes in the garbage or toilet.
- Wash your car on the grass so soapy water soaks into the ground. Use a hose nozzle to prevent water from running when not in use.



**A series of fact sheets on nonpoint source (NPS) pollution**

### Three Leading Sources of Water Quality Impairment

Rank	Rivers	Lakes	Estuaries
1	Agriculture	Agriculture	Urban runoff
2	Municipal point sources	Municipal point sources	Municipal point sources
3	Stream/habitat changes	Urban runoff	Agriculture

Source: Water National Quality Inventory, 1994

NPS pollution occurs when water runs over land or through the ground, picks up pollutants, and deposits them in surface waters or introduces them into groundwater.

Why is there still water that's too dirty for swimming, fishing or drinking? Why are native species of plants and animals disappearing from many rivers, lakes, and coastal waters?

The United States has made tremendous advances in the past 25 years to clean up the aquatic environment by controlling pollution from industries and sewage treatment plants. Unfortunately, we did not do enough to control pollution from diffuse, or nonpoint, sources. Today, nonpoint source (NPS) pollution remains the Nation's largest source of water quality problems. It's the main reason that approximately 40 percent of our surveyed rivers, lakes, and estuaries are not clean enough to meet basic uses such as fishing or swimming.

NPS pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters or introduces them into ground water. Imagine the path taken by a drop of rain from the time it hits the ground to when it reaches a river, ground water, or the ocean. Any pollutant it picks up on its journey can become part of the NPS problem. NPS pollution also includes adverse changes to the vegetation, shape, and flow of streams and other aquatic systems.

NPS pollution is widespread because it can occur any time activities disturb the land or water. Agriculture, forestry, grazing, septic systems, recreational boating, urban runoff, construction, physical changes to stream channels, and habitat degradation are potential sources of NPS

pollution. Careless or uninformed household management also contributes to NPS pollution problems.

The latest *National Water Quality Inventory* indicates that agriculture is the leading contributor to water quality impairments, degrading 60 percent of the impaired river miles and half of the impaired lake acreage surveyed by states, territories, and tribes. Runoff from urban areas is the largest source of water quality impairments to surveyed estuaries (areas near the coast where seawater mixes with freshwater).

The most common NPS pollutants are sediment and nutrients. These wash into water bodies from agricultural land, small and medium-sized animal feeding operations, construction sites, and other areas of disturbance. Other common NPS pollutants include pesticides, pathogens (bacteria and viruses), salts, oil, grease, toxic chemicals, and heavy metals. Beach closures, destroyed habitat, unsafe drinking water, fish kills, and many other severe environmental and human health problems result from NPS pollutants. The pollutants also ruin the beauty of healthy, clean water habitats. Each year the United States spends millions of dollars to restore and protect the areas damaged by NPS pollutants.

## **Progress**

During the last 10 years, our country has made significant headway in addressing NPS pollution. At the federal level, recent NPS control programs include the Nonpoint Source Management Program established by the 1987 Clean Water Act Amendments, and the Coastal Nonpoint Pollution Program established by the 1990 Coastal Zone Act Reauthorization Amendments. Other recent federal programs, as well as state, territorial, tribal and local programs also tackle NPS problems.

In addition, public and private groups have developed and used pollution prevention and pollution reduction initiatives and NPS pollution controls, known as management measures, to clean up our water efficiently. Water quality monitoring and environmental education activities supported by government agencies, tribes, industry, volunteer groups, and schools have provided information about NPS pollution and have helped to determine the effectiveness of management techniques.

Also, use of the watershed approach has helped communities address water quality problems caused by NPS pollution. The watershed approach looks at

not only a water body but also the entire area that drains into it. This allows communities to focus resources on a watershed's most serious environmental problems--which, in many instances, are caused by nonpoint source pollution.

Just as important, more citizens are practicing water conservation and participating in stream walks, beach cleanups, and other environmental activities sponsored by community-based organizations. By helping out in such efforts, citizens address the Nation's largest water quality problem, and ensure that even more of our rivers, lakes, and coastal waters become safe for swimming, fishing, drinking, and aquatic life.