



Presented by
CITY OF GROVER BEACH
PUBLIC WORKS DEPARTMENT

Annual
WATER QUALITY REPORT
Water Testing Performed in 2018



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

About This Report

We at the City of Grover Beach Public Works Department are pleased to present our annual Water Quality Report for 2018, also known as the Consumer Confidence Report. As required by the U.S. Environmental Protection Agency and the California State Water Resources Control Board Division of Drinking Water, this annual report provides customers a snapshot of last year's water quality.

The City of Grover Beach's annual Water Quality Report Includes details about where your water comes from, what it contains, and how it compares to State and Federal water quality standards. In 2018, as in years past, your tap water complied with all federal drinking water health standards.

Public Participation

City Council meetings are held on the first and third Mondays of each month at 6:00 p.m. at City Hall, 154 South 8th Street. A public comment period is held at the beginning of each meeting.

Special Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. The USEPA/CDC recommends that people with any of these concerns should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Our Water Supply

Why is there anything in my water?

Last year, the City of Grover Beach Public Works Department conducted more than 1,600 tests for over 80 drinking water contaminants. Only 41 contaminants/constituents were detected, trace amounts of nitrate was detected in one well at levels higher than the standards allow. Water from this well blends with other sources, to assure our water meets the State and Federal requirement for nitrate. No water exceeding the nitrate standard (45 ppm MCL) entered the City drinking water system.

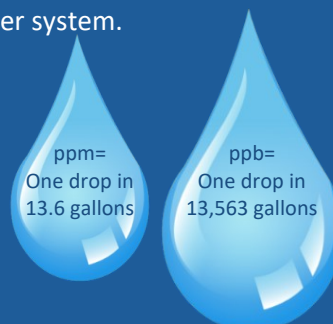


Grover Beach and other local cities who receive water from Lopez Lake, uses chloramines for disinfection to insure that our water is free of potentially harmful bacteria. Chloramine is a state and federally approved alternative for water disinfection. Chloramine is a combination of chlorine and ammonia that minimize disinfection by-product formation. Another benefit of chloramine is improved taste of the water as compared with chlorine alone. Chloramine is used by Grover Beach and many other water utilities nationally. Chloramine has the same effect as chlorine for typical water uses with the exception that chloramine must be removed from water used in kidney dialysis and fish tanks or aquariums. Treatments to remove chloramine are different than treatments for removing chlorine. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life. You may also contact the Public Works Department at (805) 473-4530 for more information about chloramine.

The City reduces the corrosivity of the water by adding sodium hydroxide and orthophosphate before it enters the distribution system. Corrosive water can cause leaching of copper or lead from plumbing and fixtures. Our most recent sampling of 30 residences in June 2018 indicates all copper and lead levels were below their required limits.

Typical sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2018. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.



Where does my water come from?

Grover Beach receives water from three sources. In 2018, the City received 806 acre-feet from Lopez Lake, 192 acre-feet from the deep Careaga formation well, and 230 acre-feet from the shallow Paso Robles formation wells. Each of these sources has unique characteristics.

Lopez Lake, located about ten miles east of Arroyo Grande, is a surface water source treated by filtration and disinfected with chloramine before being delivered to Grover Beach. The water from Lopez Lake is blended with treated water from the Central Coast Water Authority (CCWA). The CCWA obtains water from northern California near Mount Shasta and from the Sacramento River Delta area.

The City pumps groundwater from four wells located in the City park at South 16th Street and Mentone Avenue. Three of the wells draw water from the shallow Paso Robles formation and meet all water quality standards *except* occasionally nitrate concentration. After treatment at the City's Nitrate Removal Plant, or blending with other sources, this water complies with the nitrate standards for drinking water. One well draws water from the deeper Careaga formation. This water meets all State and Federal standards and is disinfected before it enters the City's water system.



Contaminants that may be present in source water include:

◆ **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

◆ **Inorganic Contaminants**, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

◆ **Pesticides and Herbicides**, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

◆ **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

◆ **Radioactive Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection

Agency (USEPA) and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Public Health Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate: Nitrate in drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals such as pregnant women and those with certain enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from a health care provider.

Source Water Assessments

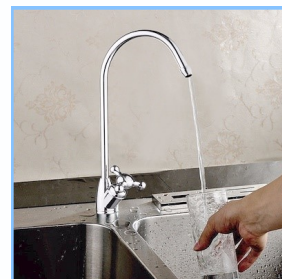
Drinking water source assessments were completed for the City's groundwater wells in March 2001. Except for nitrate, no contaminants have been detected above the allowed limit. The wells, however, are considered most vulnerable to the following activities (for which no associated contaminants have been detected): Sewer collection systems, historical waste dumps, photo processing/printing and home manufacturing. Copies of the assessments are available for review at Grover Beach City Hall, 154 South 8th Street.

Water Quality Analysis

Drinking water supplied to customers of Grover Beach undergoes careful analysis on a regular basis to guarantee compliance with all State and Federal water quality standards. A summary of current test results is provided in the following tables based upon data available as of December 2018. These tables show Primary and Secondary Standards, which the City's drinking water must meet. We hope this information will be helpful to you.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Grover Beach is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.



Water Quality Tables

Tables 1 through 7 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old. Lopez / CCWA results represent a blend of these two sources that is delivered to customers of the Lopez distribution system. Some contaminants detected in source water samples were not detected in the delivered water samples reported on these tables. These results are reported in the 2018 Water Quality Data for the Lopez Project available at the Grover Beach City Hall.

Contaminant (units)	MCL, MRDL, TT or RAL	PHG (MCLG) [MRDLG]	Lopez / CCWA Delivered (c)		Ground Water (GW)		Typical Source of Contaminant
			Range	Average	Range	Average	
Table 1 - Detection of Microbiological Contaminants							
Total Coliform Bacteria (GW) (b)	1 positive monthly sample	(0)	----	ND	ND	ND	Naturally present in the environment
Total Coliform Bacteria (Lopez)	<5% positive		----	ND			Naturally present in the environment
Turbidity (NTU) (b)	TT = 1 NTU	----	N/A	N/A	0.10 - 1.5	0.22	Surface Water Runoff
HPC (CFU/mL) (b)	TT (<500)	(0)	ND-2200	22	ND - 10	0.20	Naturally present in the environment
Table 2 - Detection of Contaminants with a <u>Primary</u> Drinking Water Standard							
Aluminum (ppb)	1000	600	ND-0.055	0.02	ND		Erosion of natural deposits; treatment process residue
Arsenic (ppb)	10	0	2.0-5.3	3.8	ND		Runoff from orchards; natural deposits
Barium (ppm)	1	2	----	0.027	ND-0.0542		Oil drilling, metal refineries, erosion of natural deposits
Fluoride (ppm)	2	1	----	0.306	.12-2	0.1625	Erosion of natural deposits
Nitrate as N (ppm) (b)	10	10			3.9-8.4	7.325	Runoff / leaching from fertilizers, septic tanks, sewage; erosion of natural deposits
Gross Alpha Activity (pCi/L)	15	(0)	0.025-3.15 (2013)	1.25 (2013)	----	----	Decay of natural and man-made deposits
Table 3 - Detection of Contaminants with a <u>Secondary</u> Drinking Water Standard							
Aluminum (ppb)	1000	600	ND-55	20	ND	ND	Erosion of natural deposits; treatment process residue
Chloride (ppm)	500	n/a	----	38	32-42	38.75	Runoff/leaching from natural deposits; seawater
Color (CU) (b)	15	n/a		3	ND - 15	2.5	Naturally occurring organic materials
Copper (ppm)	RAL = 1.3	0.3	----	0.110	ND-6.2	6.2	Runoff/leaching from natural deposits; seawater
Corrosivity [LI] (AI)	Noncorrosive	n/a			11-13	11.5	Natural and industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Iron (ppb)	300				ND-1.9	0.175	Leaching from natural deposits; inustrial wastes
Manganese (ppm)	50		ND-0.017	ND	21-48	29.0	Leaching from natural deposits; inustrial wastes
Odor, Threshold (b)	3	n/a	1.0-4.0	2.1	ND	ND	Naturally occurring organic materials
Specific Conductance (micromhos)	1600	n/a	----	750	550-1000	687.5	Runoff/leaching from natural deposits; seawater
Sulfate (ppm)	500	n/a	----	130	93-140	108.25	Runoff/leaching from natural deposits; industrial wastes
Total Disolved Solids (ppm)	1000	n/a	----	450	350-640	432.5	Runoff/leaching from natural deposits
Distribution Turbidity (NTU) (b)	5	n/a	0.04-0.45	0.10	0.10 - 1.5	0.22	Soil and other contaminants
Table 4 - Disinfection Byproducts, Disinfectant Residuals and Disinfection Byproduct Precursors							
Total Trihalomethanes (ppb) (a,b)	LRAA = 80	n/a	25.6-106.9	54.5	18-73	34.5	By-product of drinking water chlorination
Total Haloacetic Acids (ppb) (a,b)	LRAA = 60	n/a	17.7-81.3	34.7	8.3-56	19.5	By-product of drinking water chlorination
Total Chlorine (ppm) (a) (b)	MRDL = 4.0	4.0	0.21-3.03	1.96	0.40 - 2.14	1.46	Disinfectant added for treatment
Chlorite (ppm) (b)	1000	50	0.32-0.71	0.54	----	----	By-product of drinking water chlorination
Chlorate (ppb) (b)	RAL = 800		307-1180	471	----	----	By-product of drinking water chlorination
Chlorine Dioxide (ppb) (b)	MRDL = 800	[800]	ND-380	110	----	----	Disinfectant added for treatment

Contaminant (units)	MCL, MRDL, TT or RAL	PHG (MCLG) [MRDLG]	Lopez / CCWA Delivered (c)		Ground Water (GW)		Typical Source of Contaminant
			Range	Average	Range	Average	
Table 5 - Detection of Contaminants <u>without</u> a Drinking Water Standard							
Alkalinity as CaCO ₃ (ppm)	n/a	n/a	210-230	220	93-350	180	Runoff/leaching from natural deposits; seawater
Bicarbonate (ppm)	n/a	n/a			93-350	162.5	Runoff/leaching from natural deposits; seawater
Calcium (ppm)	n/a	n/a	78-85	80	39-100	56.2	Runoff/leaching from natural deposits; seawater
Hardness (ppm)	n/a	n/a	330-370	350	180-450	257.5	Generally found in ground and surface water
Magnesium (ppm)	n/a	n/a	33-38	35	21 - 48	29	Runoff/leaching from natural deposits; seawater
Orthophosphate (ppm) (b)	n/a	n/a			1 - 3	2.30	Added for corrosion control treatment
pH (units) (b)	6.5 - 8.5	n/a	7.84-8.32	8.03	7.4 - 8.2	7.14	Runoff/leaching from natural deposits; seawater
Potassium (ppm)	n/a	n/a			ND-2.5	2.3	Runoff/leaching from natural deposits; seawater
Sodium (ppm)	n/a	n/a	----	32	36-48	41.25	Runoff/leaching from natural deposits; seawater
Table 6 - Detection of <u>Lead and Copper</u>							
Lead and Copper (unit)	# of samples collected	AL	# of sites exceeding AL	MCLG	90th percentile level detected	Typical Source of Contaminant	
Lead (ppb) (Aug 2015)	30	15 = AL	None		ND	Internal corrosion of household water plumbing systems	
Copper (ppb) (Aug 2015)	30	1300 = AL	None		690	Internal corrosion of household water plumbing systems	
Table 7 - Primary Standards for Treatment of Surface Water Sources (Lopez Water Treatment Plant)							
Contaminant (Units)	MCL, MRDL, TT or RAL	PHG, (MCLG), or [MRDLG]	Range	Average	Violation	Potential Source of Contamination	
Filtration Pormance							
Turbidity (NTU)	TT = 1 NTU	n/a	N/A	N/A	N/A	Surface water runoff	
	TT = 95% of samples each month < 0.1 NTU	n/a	N/A	N/A	N/A	Surface water runoff	
Footnotes: (a) Compliance based on the running quarterly annual average of distribution system samples; (b) Distribution system samples.							

Definition of Terms

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. *Primary MCL's* are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. *Secondary MCL's* are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Locational Running Annual Average (LRAA): An arithmetic average of all samples is computed quarterly. This average is then averaged against the previous three quarters worth of data to provide an annual running average. The highest running average over a twelve-month period is used for compliance.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (RAL or AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

HPC: Heterotrophic Plate Count.

CFU/ml: Colony Forming Units per milliliter.

micromhos: Units of specific conductance of water.

N/A: Not applicable.

ND: Not detectable at testing limit.

NS: Not Sampled.

ppb: Parts per billion or micrograms per liter (ug/l).

ppm: Parts per million or milligrams per liter (mg/l).

pCi/L: Picocuries per liter (a measure of radiation).

NTU: Nephelometric Turbidity Unit.

CU: Color Unit.

AI: Aggressive Index.

LI: Langelier Index - are measures of corrosivity.

If you have questions regarding this report, please contact:
Gregory Ray, Public Works Director/City Engineer
GROVER BEACH PUBLIC WORKS DEPARTMENT
(805) 473-4530 or PublicWorks@GroverBeach.org

Conservation Rebate Programs

Stage III Water Shortage

Customers may qualify for various water conservation rebates and incentives, both locally and statewide.

One of the most popular rebates is the City's **"CASH FOR GRASS"** program. Up to 50 percent of residential water usage can be attributed to outdoor irrigation. Removing traditional grass lawns and replacing them with drought tolerant landscaping is one of the most effective ways to reduce your overall water usage.

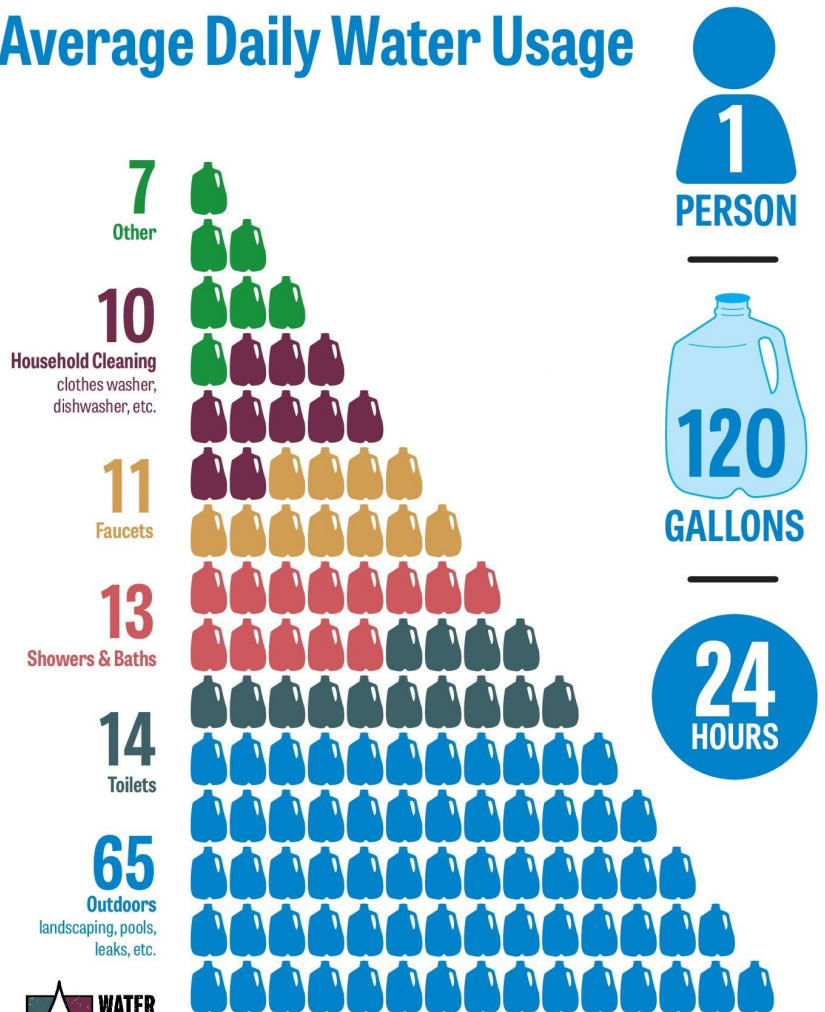
Rebates are available through the City of Grover Beach, as well as through the State of California. Visit www.groverbeach.org for more information regarding the City's Water Conservation Rebate Programs. For information regarding the State of California rebate programs, please visit www.SaveOurWaterRebates.com



Capturing rain from your roof is an easy way to conserve water and save money on your water bill. Plants and microbes prefer rainwater because it is naturally "soft" and free of chlorine and other chemicals. Collecting and re-using rainwater for lawns and gardens also minimizes the amount of water flowing into storm drains. Lastly when you allow rainwater to infiltrate into permeable surfaces like your lawn or garden, you help replenish our underground aquifer.



Average Daily Water Usage



$$\frac{\text{Gallons Used This Month}}{\text{Number of People}} \div \frac{\text{Days in the Month}}{\text{}} = \text{Gallons per Person per Day (GPD)}$$

Adapted from the Water Research Foundation's Residential End Uses of Water, Version 2 Executive Report (2016)

A Change for the better . . .



. . . Begins with YOU.

PREVENT POLLUTION. One of the best ways to prevent the flow of pollution into our beautiful ocean is to prevent water from leaving your property as you perform daily activities. By eliminating over-irrigation and sweeping instead of cleaning hard surfaces with water, you can prevent urban runoff and avoid discharging pollutants into our local waterways.

AROUND YOUR HOME. Sweep up trash, dirt, and debris and dispose of home construction waste in the trash. Reduce bacteria in our waterways by picking up litter from around your yard and neighborhood and carry bags to pick up after your pet.

IN YOUR YARD. Yard waste has the potential to carry hazardous landscaping chemicals like pesticides, herbicides, and fertilizers into the storm drain system. It also generates a large amount of bacteria if left to decompose in curbs, catch basins, and local waterways.

Sweep up yard waste instead of hosing it away and keep curb gutters free of leaves and grass clippings. Replace lawns with native plants to conserve water and reduce the need for landscape chemicals. Stop irrigation runoff by adjusting sprinklers and reducing watering times.

FROM YOUR CAR. Your car can be a source of automotive pollutants such as motor oil, anti-freeze, transmission fluids, and heavy metals. It is important to check your vehicle regularly for fluid leaks and keep it serviced. Use a funnel to prevent spills and keep rags and absorbents within reach. Use drip pans, drop cloths, or containers to collect fluids when making repairs or collecting leaks. Wash your car on your lawn or direct wash water to a landscaped surface to avoid releasing automotive pollution into our waterways.

What is Stormwater runoff and why is it a problem?

Stormwater runoff is rain that falls on streets, parking areas, sports fields, gravel lots, rooftops or other developed land and flows directly into waterways. The drizzling or pounding rain picks up and mixes with what's on the ground:

- ♦ Oil, grease, metals and coolants from vehicles;
- ♦ Fertilizers, pesticides and other chemicals from gardens and homes;
- ♦ Bacteria from pet wastes and failing septic systems;
- ♦ Soil from construction sites and other bare ground;
- ♦ Soaps from car or equipment washing; and
- ♦ Accidental spills, leaky storage containers, tobacco spit and whatever else ends upon the ground.

The polluted runoff then rushes into nearby gutters and storm drains and into our waterways. Stormwater runoff enters these waters without being cleaned of pollutants.

Keep Our Waters Clean - Don't Let Your Pet Pollute!

Did you know that dog and cat waste is the 3rd largest contributor of bacterial pollution in urban watersheds? Dog poop left on streets, pavements, yards, driveways or lawns does not just magically go away or fertilize the grass. Dog and cat waste carries bacteria, viruses and parasites that can be picked up by stormwater runoff and carried into our storm drains and basins. Pet waste is a cause of significant stormwater pollution and presents a serious health risk to adults, children and pets. Pet waste bacteria can spread diseases like Giardia and Salmonella.



You can make a difference by being a responsible pet owner. Please dispose of pet waste properly:

- ⇒ Keep a supply of bags with you when you walk your dog – dispose of used bags in a garbage can.
- ⇒ At home double bag dog waste or kitty litter, tie securely and place in a garbage can.
- ⇒ Please NEVER flush your pet's waste.

Many people think that when water flows into a storm drain it is treated, but the storm drain system and the sanitary sewer system are not connected. Everything that enters Grover Beach storm drains flows untreated to Meadow Creek that takes debris straight from Grover Beach streets to the Ocean. Runoff pollution contaminates our creek and ocean, harms aquatic life and increases the risk of flooding by clogging gutters and catch basins.



To Report Storm Water Pollution in Grover Beach, please call (805) 473-4530.

City of Grover Beach www.groverbeach.org

City Manager's Office City Attorney City Clerk Human Resources	(805) 475-4567	gbadmin@groverbeach.org
City Council		councilmembers@groverbeach.org
Administrative Services Department Business Tax Certificate Utility Billings (Water/Sewer)	(805) 473-4550	finance@groverbeach.org
Community Development Department Building Code Compliance Economic Development Planning	(805) 473-4520	commdev@groverbeach.org
Five Cities Fire Authority	(805) 473-5490	www.fivecitiesfireauthority.org
Parks & Recreation Department Facility Rentals Recreation Classes Special Events	(805) 473-4580	gbparks@groverbeach.org
Police Department Emergency	(805) 473-4511 911	police@groverbeach.org
Public Works Department Engineering Facility / Street Maintenance Utility Operation (Water/Sewer) Water Conservation	(805) 473-4530	publicworks@groverbeach.org



City of Grover Beach
PUBLIC WORKS DEPARTMENT
154 South 8th Street
Grover Beach, CA 93433