2020 Pismo Beach Water System
Consumer Confidence Report

Pismo Beach Water Division (805)773-7054 www.pismobeach.org

Delivering Excellence

The City of Pismo Beach Water System met all Federal and State standards for drinking water during 2020.

Your 2020 Water Quality Report

The City of Pismo Beach is pleased to present this annual report describing the quality of your drinking water. Included are details about where your water comes from, what it contains, and how it compares to State standards. We sincerely hope this report gives you the information you seek and have a right to know.

WATER CONSERVATION REMINDER

AVOID WASTEFUL USE: www.ThinkH20now.com

How Much Water Do We Use?

In 2020, the residents and visitors of Pismo Beach used approximately 1777 acre feet or 579 million gallons of water.

The 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 can pick up substances resulting from the presence of animals or human activity.

Where the Residents and Consumers of Pismo Beach get their water?

Surface Water

Lopez Lake – The City is entitled to receive 892 acre feet per year, approximately 291 million gallons of water.

State Water

The City is entitled to receive 1240 acre feet per year, approximately 456 million gallons of water.

Groundwater

Santa Maria Ground Water Basin – The City is entitled to extract 700 acre feet per year, approximately 228 million gallons of water.

Contaminants that may potentially be present in untreated source water, surface water and well 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, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which occur naturally or from oil and gas production and mining activities.

EN ESPANOL

Este informe contiene informacion muy importante sobre la calidad del agua que usted consume. Por favor de traducirlo, o hable con alguien que lo entiende bien.

2020 Water Quality Data for Lopez Treatment Plant / State Water Project

Contaminants with a Primary Drinking Water Standard		
Table 1 - Treatment of surface water sources, combined filter Effluent Turbidity		
Turbidity Performance Standard - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system. Turbidity of combined filter effluent water must: 1. Lopez 0.15 & CCWA 0.3, less than or equal to in 95% of measurements in a month 2. Not exceed 1.0 NTU for more than eight consecutive hours	Treatment Technique for Lopez Project Alternative Filtration	Treatment Technique for Central Coast Water Authority (State Water) Conventional Treatment
Lowest monthly percentage of samples that met Turbidity Performance Standard 1	100%	100%
Turbidity (NTU) measurement during the year	0.023-0.649	003-0.1
The number of violations of any surface water treatment requirement	0	0

Table 2 - Microbiological Contaminants			**Delivered (Lopez and State Water)**		**CCWA PPWTP**		**Lopez WTP**		
Contaminant (reporting units)	**MCL**	**PHG(MCLG) or (MRDLG)**	**Range**	**Average**	**Range**	**Average**	**Range**	**Average**	**Potential Source of Contamination**
Total Coliform Bacteria (MPN/100mL)	>5.0% of monthly samples are positive	0	-----	ND	0	0.00%	0	ND	Naturally present in the environment
Heterotrophic plate count (CFU/mL)	TT = adequate disinfection < 500	----	ND-3	ND	0-11	1	ND-2	ND	Naturally present in the environment
Table 3 - Inorganic Contaminants									
Aluminum (ppm)	1 (b)	0.6	ND-0.031	ND	ND-0.091	0.058	ND	ND	Erosion of natural deposits; residue from some surface water treatment presses
Arsenic (ppb)	10	0.004	3.3-5.7	4.0	ND	ND	3.9-5.9	4.6	Erosion of natural deposits, runoff from orchards; glass and electronic production
Fluoride (ppm)	2.0	1.0	----	0.28	ND	ND	----	0.310	Erosion of natural deposits
Barium(ppm)	1	2	----	0.03	ND	ND	----	0.028	Discharge of oil drilling
Table 4 - Radioactive Contaminants									
Gross Alpha Particle Activity (pCi/L)	15	0	0.028-3.15	1.25	ND	ND	1.42-1.59	1.51	Decay of natural and man-made deposits
Table 5 - Disinfectant Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors									
			Delivered (Lopez and State Water)		**CCWA PPWTP**		**Lopez WTP**		
Contaminant (reporting units)	**MCL**	**PHG(MCLG) or (MRDLG)**	**Range**	**Average**	**Range**	**Average**	**Range**	**Average**	**Potential Source of Contamination**
Chlorite (ppm)	1	0.05	0.38-0.61	0.54	----	----	0.52-0.84	0.633	By-product of drinking water disinfection
Chlorate (ppb)	RAL = 800	----	270-400	320	----	----	-----	-----	By-product of drinking water disinfection
Chlorine Dioxide (ppb)	MRDL = 800 as Cl02	800	ND-110	ND	----	----	ND-190	70	Drinking water disinfectant added for treatment
Table 6 - Regulated Contaminants with Secondary MCL's									
Chloride (ppm)	500	----	----	37	0-124	73	----	16	Runoff/leaching from natural deposits
Color (CU)	15	----	----	2	ND	ND	----	7	Naturally occurring organic materials
Copper (ppm)	1.0	----	----	0.1	ND	ND	----	0.022	Erosion of natural deposits
Corrosivity (LI)	Noncorrosive	----	----	----	12	12	----	----	Balance of hydrogen, carbon and oxygen in water
Geosmin (ppm)	NA	NA	----	----	ND-3.9	0.6	----	----	An organic compound mainly produced by bacterial growth in surface water
Odor - Threshold (TON)	3	----	ND-4	1.5	2-8	5	1.0-4.0	3	Naturally occurring organic materials
Specific Conductance (uS/cm)	1600	----	----	790	337-621	503	----	780	Runoff/leaching from natural deposits
Sulfate (mg/L)	500	----	----	120	63	63	----	130	Runoff/leaching from natural deposits
Turbidity (NTU)	5 units	----	0.05-0.60(a)	0.10(a)	ND-0.16	0.06	0.06-0.013	0.08	Soil Runoff
Total Dissolved Solids (ppm)	1000	----	490-520	500	280	280	500-570	530	Runoff/leaching from natural deposits
Table 7 - Contaminants with no MCL's									
Alkalinity as CaCO3 (ppm)	NA	NA	228-229	228	46-86	68	258-284	270	Runoff/leaching from natural deposits; seawater influence
Calcium (ppm)	NA	NA	76-93	82	20	20	86-93	90	Runoff/leaching from natural deposits; seawater influence
Hardness as CaCO3	NA	NA	330-410	360	64-126	97	370-410	390	Generally found in ground and surface water
Magnesium (ppm)	NA	NA	33-43	37	12	12	37-43	40	Runoff/leaching from natural deposits; seawater influence
pH	NA	NA	8.00-8.18	8.09	7.5-8.85	8.4	8.12-8.44	8.27	Runoff/leaching from natural deposits; seawater influence
Potassium (ppm)	NA	NA	----	----	2.8	2.8	----	----	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)	NA	NA	----	34	56	56	----	28	Runoff/leaching from natural deposits; seawater influence
Total Organic Carbon (f) (TOC) (ppm)	TT	NA	----	----	1.4-2.6	2	----	----	Various natural and man-made sources

2020 WATER QUALITY DATA FOR PISMO BEACH

Table #1 DISTRIBUTION SYSTEM WATER SAMPLING RESULTS SHOWING DETECTION OF COLIFORM BACTERIA

Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Contaminant
Total Coliform Bacteria	0	0	More than 1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform Bacteria of E. Coli	0	0	A routine sample and a repeat sample are total Coliform positive, and one is also fecal Coliform or E. Coli	0	Human and animal fecal waste

Table #2 - 2020 HOME SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Contaminants (CCR UNITS)	No. of Samples	90th Percentile Level Detected	--No. of Sites Exceeding RAL	RAL	PHG	Typical Source of Contaminant
Lead (ppb)	22	ND	0	15	0.2	Internal corrosion of household plumbing system; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	22	0.238	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table #3 - 2017 LEAD SAMPLING RESULTS FOR SCHOOLS K-12 (2 SCHOOLS TESTED)

Contaminants (CCR UNITS)	No. of Samples	90th Percentile Level Detected	--No. of Sites Exceeding RAL	RAL	PHG	Typical Source of Contaminant
Lead (ppb)	10	3.5	0	15	0.2	Internal corrosion of household plumbing system; discharges from industrial manufacturers; erosion of natural deposits

Table #4 - GROUND WATER SAMPLING TEST RESULTS FOR DETECTION OF CONTAMINANTS

PRIMARY DRINKING WATER STANDARDS			WELL #5	WELL #23	
PRIMARY CONTAMINANT	MCL	MCLG PHG	RANGE	RANGE	POTENTIAL CONTAMINANTION SOURCE
Arsenic (ppb)	10	0.004	4	3	Erosion of natural deposits
Chromium (total) (ppb)	50	100 ug/l	10	10	Erosion of natural deposits
Nitrate (as N) (ppm)	10	10	0.4	0.4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (as N) (ppm)	1	1	0.4	0.4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Fluoride (ppm)	2	1	0.10	0.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
MTBE (ug/l)	13	13	3.00	3	gasoline additive methyl tertiary butyl ether
Gross Alpha Particle Activity (pCi/l)	15	NA	5.18	3.67	Erosion of natural deposits
Uranium (pCi/l)	20	0.43	3.77	4.38	Erosion of natural deposits
SECONDARY DRINKING WATER STANDARDS			**WELL #5**	**WELL #23**	
SECONDARY CONTAMINANT	MCL		RANGE	RANGE	POTENTIAL CONTAMINANTION SOURCE
Chloride (ppm)	500		125	45	Runoff; leaching from natural deposits; seawater
Iron (ppb)	300		110	100	Natural or industrial
Manganese (ppb)	50		30	20	Natural or industrial
Sulfate (as SO4) (ppm)	500		170	167	Runoff; leaching from natural from natural deposits; industrial
Total Dissolved Solids (ppm)	1000		900	650	Soil runoff; leaching from natural deposits
Zinc (ppb)	5000		50	50	Improper waste disposal
WITHOUT A DRINKING WATER STANDARDS			**WELL #5**	**WELL #23**	
CONTAMINANT	MCL		RANGE	RANGE	POTENTIAL CONTAMINANTION SOURCE
Total Alkalinity as CaCO3 (ppm)	NA		430	390	Runoff; leaching from natural deposits; seawater
Calcium (ppm)	NA		125	103	Runoff; leaching from natural deposits; seawater
Sodium (ppm)	NA		56	50	Runoff; leaching from natural deposits; seawater
Magnesium (ppm)	NA		55	47	Runoff; leaching from natural deposits; seawater
ADDITIONAL ANALYSIS			**WELL #5**	**WELL #23**	
Aggressive Index	NA		12.3	12.7	NA
Specific Conductance (micromhos)	MCL=1600		1320	1090	Substances that form ions when in water; seawater influence
Total Hardness (ppm) (as CaCO3)	NA		538	450	Generally found in ground and surface water
pH (units)	NA		7.3(g)	7.8	NA
Turbidity (NTU)*****	MCL=5		0.9(g)	0.5	Soil runoff; leaching from natural deposits
***** Turbidity is a measure of the cloudiness of the water. The City monitors this because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.					
DISTRIBUTION SYSTEM					
DISINFECTANT RESIDUAL AND BY-PRODUCTS		MCL	MRDL	RANGE	
Total Trihalomethanes (ppb)		80	NA	25-32	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)		60	NA	24-30	By-product of drinking water chlorination
Chlorine Residual		4.0	4.0	0.10-2.80	Disinfectant

Table #5 - WELL SAMPLING RESULTS SHOWING DETECTION OF UNREGULATED CHEMICALS

UNREGULATED CHEMICALS	Avg. Level Detected	Range of Detections Low-High	MCL	RAL	Typical Source of Contaminants
Boron (ppm)	0.2	ND-.21	NS	100	Naturally-occurring; element found in soil and water in the form of boric acid and sodium tetraborate
Vanadium (ppb)	3	N/A	NS	50	Naturally-occurring; has been found in association with hazardous waste sites

FOR THE WEB BROWSERS: www.pismobeach.org www.thinkh2onow.com

USEPA/CDC Provides guidelines on appropriate means to the risk of infection by Cryptosporidium and other microbial contaminants, for information call - Safe Drinking Water Hotline (1-800-426-4791).
This hotline operates from 9 a.m. to 5 p.m. EST, Monday through Friday.
For more information contact:

- The Office of Ground Water and Drinking at EPA
- www.water.epa.gov/drink/index.cfm
- American Water Works Association http://www.awwa.org
- County Board of Supervisors http://slocounty.ca.gov/bos.html

You can provide input regarding water quality decisions in your area.

- The drinking water source assessment and protection program was completed in September 2002, both are on file at the Water Division.
- The public can address concerns to the Public Works Water Division. Contact Brandon Shea at (805) 773-7054
- The City Council meets the first and third Tuesday of each month at City Hall.
- Este informe contiene informacion muy importante sobre la calidad del agua que usted consume. Por favor de traducirlo, o hable con alguien que lo entiende bien.

State and Lopez Water Footnotes:

(a) Distribution system samples. (b) Aluminum has a Secondary MCL of 0.2 ppm
(c) Compliance based on the running annual average of samples computed quarterly. (d) TOCs are taken at the treatment plant's combined filter effluent.
(e) The MRDL for chlorine is based on a running annual average of distribution system samples. (f) Increases in odor have been associated with algae blooms. During times of increased algae blooms an odor in the algae is controlled with algaecides and the odor is reduced to acceptable levels by treating water with powder activated carbon.
(g) Laboratory sample (h) Well #23 not in service for 2019

Maximum Contaminant Level (MCL)	The highest level of contaminant that is allowed in drinking water
Regulatory Action Level (RAL)	The concentration of a contaminat that, if exceeded, triggers treatement or other requirements that a water system must follow
Maximum Contaminant Level Goal (MCLG and Public Health Goal (PHG)	The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency and PHGs are set by the California Environmental Protection Agency
Maximum Residual Disinfectant Level (MRDL)	The level of a disinfectant added for water treatment that may not be exceeded at the consumer's faucet
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency
Primary Drinking Water Standards (PDWS)	MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible
Primary Drinking Water Standards (SDWS)	MCLs for contaminants to protect the taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water
Regulatory Notification Level (NL)	The concentration of a contaminant that, if exceeded, triggers treatment of other requirement which a water system must follow
Running Annual Average (RAA)	An arithmetic average of all sample is computed quarterly. The quarterly 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 used for compliance
Not Collected (NC)	A sample was not collected for this contaminant
Not Reported (NR)	Contaminant was not reported
Not Standard (NS)	Contaminant for which there is no established MCL
Not Detected (ND)	Contaminant is not detectable at testing limit
Not Analyzed (NA)	Contaminant was not analyzed
WAIVED	On September 4, 2007, the CDPH granted the TOC waiver to the Lopez WTP. The facility upgraded to Membrane Treatment
pCi/L	PICOCURIES PER LITER (A MEASURE OF RADIOACTIVITY)
ppm	PARTS PER MILLION, OR MILLIGRAMS PER LITER (MG/L)
ppb	PARTS PER BILLION, OR MICROGRAMS PER LITER (G/L)
uS/cm	MICROMHOS PER CENTIMETER (UNIT OF SPECIFIC CONDUCTANCE OF WATER)
CU	COLOR UNITS
NS	NO STANDARD
CFU/ml	COLONY FORMING UNITS PER MILLILITER
NTU	NEPHELOMETRIC TURBIDITY UNIT
TON	THRESHOLD ODOR NUMBER
USEPA	UNITED STATES ENVIORNMENTAL PROTECTION AGENCY
CDC	CENTER FOR DISEASE CONTROL HOTLINE (1-800-426-4791)
LI	LANGELIER INDEX; NONCORROSIVE = ANY POSITIVE VALUE, CORROSIVE = ANY NEGATIVE VALUE
LopezWTP	LOPEZ WATER TREATMENT PLANT
CCWA	CENTRAL COAST WATER AUTHORITY
PPWTP	POLANIO PASS WATER TREATMENT PLANT
TOC	TOTAL ORGANIC CARBON

In order to ensure that tap water is safe to drink, EPA, and the California State Water Reserouces Control Board, prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence does not necessarily indicate that water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's State Drinking Water Hotline (1-800-416-4791). Some people may be more vulnerable to contaminants in drinking water then the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant, people with HIV/AIDS or other immune system deficiencies, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers.

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 Pismo beach is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 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.