County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408
www.slocounty.ca.gov/PW.htm

Raw Water Quality Report

Nacimiento Water Project

System Number 4010080

2014

Public Works is a valued community partner enhancing quality of life for our fellow county residents.

NACIMIENTO WATER PROJECT

YOUR 2014 WATER QUALITY REPORT

The County of San Luis Obispo is pleased to present this annual report describing the quality of your raw water. Included are details about where your water comes from, what it contains, and how it compares to State drinking water standards. We sincerely hope this report gives you the information you seek and have a right to know. ***Este informe contiene informacíon muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.***

YOUR WATER SUPPLY

The raw water provided to your water agency comes from Nacimiento Reservoir located in northern San Luis Obispo County. The Nacimiento Reservoir watershed encompasses 208,060 acres (325 square miles). Almost exactly half of this area, 104,480 acres, lies in Monterey County. The other half, 103,580 acres, lies in San Luis Obispo County.

A watershed sanitary survey was conducted in 2014. The survey identified potential contaminating activities in the watershed and assessed their impact on the raw and treated water quality. The greatest risks to the Nacimiento Reservoir as a drinking water supply come from extensive grazing, unlimited body contact recreation, numerous domestic wastewater facilities, and the potential for a large wildland fire. Urban development and agricultural cropland are increasing and may present future risks. Variable risk levels are presented by military activities and illicit commercial crops.

Nacimiento Lake intake structure March 2015

A special contaminant of concern is mercury from abandoned mercury mines in the watershed. Although mercury currently does not present a risk to the reservoir as a drinking water supply, its presence in the environment has led to its accumulation in fish in Nacimiento Reservoir at levels that are unsafe for human consumption. Public awareness of this issue can lead to concerns about the safety of the water supply.

A copy of the watershed sanitary survey can be found at the San Luis Obispo County Public Works Department website at http://www.slocounty.ca.gov/Assets/PW/General+Water+Reports/Initial+Watershed+Sanitary+Survey.pdf or by contacting the Water Quality Laboratory at (805) 781-5111.

RAW WATER QUALITY FOR NACIMIENTO RESERVOIR

Nacimiento Water Project consists of five agencies that use raw water from Nacimiento Reservoir – City of El Paso de Robles, Templeton Community Services District, Atascadero Mutual Water Company, City of San Luis Obispo, and Cayucos County Service Area 10 (under a water exchange agreement with the City of San Luis Obispo for Whale Rock Reservoir water). The following tables are a snapshot of water quality constituents that were detected in 2014, unless otherwise noted. The presence of these substances in water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for some constituents less than once per year because the concentrations do not change frequently. Some of our data, although representative, may be more than one year old. For questions about this data, please contact the Water Quality Laboratory at (805) 781-5111.

REGULATED CONSTITUENTS WITH PRIMARY DRINKING WATER STANDARDS

Constituent (Units)	When sampled	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Violation?	Potential Source of Contamination
Long Term 2 Enhanced Surface Water Treatment Rule Monitoring							
E. coli (MPN/mL)	2014	TT	(0)	ND - 5	ND	No	Human and animal fecal waste
Cryptosporidium (Oocyst/L)	2014	TT	(0)	-----	ND	No	Human and animal fecal waste
Giardia lamblia (Oocyst/L)	2014	TT	(0)	-----	ND	No	Human and animal fecal waste
Turbidity (NTU)	2014	TT	TT	1.0 – 4.69	2.50	No	Soil runoff
Inorganic							
Aluminum (ppm)	2014	1	0.6	-----	0.024	No	Erosion of natural deposits
Barium (ppm)	2014	1	2	-----	0.047	No	Erosion of natural deposits
Chromium (ppb)	2011	50	(100)	-----	1.4	No	Erosion of natural deposits
Fluoride (ppm)	2014	2.0	1	-----	0.09	No	Erosion of natural deposits
Lead (ppb)	2014	RAL = 15	0.2	-----	0.64	No	Erosion of natural deposits; discharge from industrial manufacturers
Nickel (ppb)	2014	100	12	-----	5.2	No	Erosion of natural deposits; discharge from metal factories
Radioactivity							
Gross Alpha Particle Activity (pCi/L)	2010	15	(0)	-----	ND	No	Erosion of natural deposits
Radium 228 (pCi/L)	2010	5	0.019	ND – 0.438	0.146	No	Erosion of natural deposits

NACIMIENTO WATER PROJECT

The Utilities Division Water Quality Laboratory provides laboratory and technical support services for the beneficial management of water and wastewater for the present and future residents of San Luis Obispo County.

CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD (AESTHETICS)

Constituent	When sampled	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Violation?	Potential Source of Contamination
Aluminum (ppb)	2014	200	600	-----	24	No	Runoff/leaching from natural deposits
Chloride (mg/L)	2014	500	-----	-----	7.39	No	Runoff/leaching from natural deposits
Color (CU)	2014	15	-----	-----	5	No	Naturally occurring organic materials
Iron (ppb)	2014	300	-----	82 - 290	170	No	Runoff/leaching from natural deposits
Manganese (ppb)	2014	50	-----	6 - 45	20	No	Runoff/leaching from natural deposits
Odor – Threshold (TON)	2014	3	-----	-----	7.0	No – Raw Water	Naturally occurring organic materials
Specific Conductance (µS/cm)	2014	1600	-----	-----	340	No	Runoff/leaching from natural deposits
Sulfate (mg/L)	2014	500	-----	-----	39.4	No	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	2014	1000	-----	-----	210	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2014	5	-----	1.0 – 4.69	2.50	No	Soil runoff
Unregulated							
Total Alkalinity as $CaCO_3$ (mg/L)	2014	NS	-----	-----	125	No	Runoff/leaching from natural deposits; seawater influence.
Bromide (mg/L)	2010	NS	-----	-----	0.012	No	Runoff/leaching from natural deposits
Calcium (mg/L)	2014	NS	-----	-----	32.3	No	Runoff/leaching from natural deposits.
Total Coliform Bacteria (MPN/mL)	2014	TT	(0)	17 – 24000	3600	No	Naturally present in the environment
Total Hardness (mg/L)	2014	NS	-----	-----	152	No	Generally found in ground and surface water
Magnesium (mg/L)	2014	NS	-----	-----	17.3	No	Runoff/leaching from natural deposits; seawater influence.
pH	2014	NS	-----	7.51—7.84	7.63	No	Runoff/leaching from natural deposits; seawater influence.
Sodium (mg/L)	2014	NS	-----	-----	9.6	No	Runoff/leaching from natural deposits; seawater influence.

Some additional constituents monitored but not detected: silver, antimony, arsenic, beryllium, cadmium, perchlorate, cyanide, copper, mercury, MBAS, nitrite, nitrate, total phosphate, selenium, thallium, Title 22 volatile and synthetic organic chemicals (2010), zinc.

KEY TERMS AND ABBREVIATIONS

CFU/ml – Colony Forming Units per milliliter.

CU – Color Units.

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

MCLG – Maximum Contaminant Level Goal. 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.

mg/L – Milligrams per Liter.

MRDL – Maximum Residual Disinfectant Level. 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.

MRDLG – Maximum Residual Disinfectant Level Goal. 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.

ND – Not Detected. Contaminant is not detectable at testing limit.

NS – No Standard

NTU – Nephelometric Turbidity Unit. A measure of water clarity.

pCi/L – picocuries per liter (a measure of radioactivity).

PDWS – Primary Drinking Water Standards. MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. PDWS pertain to the following: Filtration Performance, Microbiological Contaminants, Inorganic Contaminants, Radioactive Contaminants and Disinfection Byproducts, Disinfection Residuals, and Disinfection Byproduct Precursors.

PHG – Public Health Goal. 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.

ppb – parts per billion, or micrograms per liter (µg/L).

ppm – parts per million, or milligrams per liter (mg/L).

Primary MCL – Maximum contaminant level 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.

RAL – Regulatory Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary MCLs – Maximum contaminant level for contaminants to protect the taste, odor, or appearance of the drinking water. Contaminants with secondary MCLs do not affect health at the MCL levels.

SWRCB – State Water Resources Control Board

TON – Threshold Odor Number.

TT – Treatment Technique. A required process intended to reduce the level of a contaminant in drinking water. For microbiological and turbidity contaminants, the raw water will be treated at a water treatment facility or used for groundwater recharge prior to use.

µS/cm – microsiemens per centimeter (unit of specific conductance of water).

µg/L – Micrograms per Liter.

USEPA – United States Environmental Protection Agency.

CONTACT INFORMATION

Internet

USEPA Office of Ground Water and Drinking Water
http://water.epa.gov/drink/index.cfm

California State Water Resources Control Board (SWRCB)
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml

San Luis Obispo County Public Works Department
www.slocounty.ca.gov/PW.htm

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