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

Water Quality Report 2024

Nacimiento Water Project System Number 4010080



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



Your 2024 Water Quality Report

The County of San Luis Obispo 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. *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). Nearly half of the watershed area, 104,480 acres, lies in Monterey County. The other half, 103,580 acres, lies in San Luis Obispo County.

The Nacimiento Water Project serves seven agencies with raw water from Nacimiento Reservoir – City of El Paso de Robles, Templeton Community Services District, Atascadero Mutual Water Company, SMR Mutual Water Company, City of San Luis Obispo, and both County Service Area 10A and Bella Vista Mobile Home Park in the Cayucos area, under a water exchange agreement with the City of San Luis Obispo for Whale Rock Reservoir water.

A watershed sanitary survey was initially conducted in 2011. Updates were conducted in 2015 and 2020. The survey identifies potential contaminating activities in the watershed and assesses 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.



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.

Copies of the surveys can be found at the County of San Luis Obispo Department of Public Works website at: <u>https://www.slocounty.ca.gov/Departments/Public-Works/Forms-Documents/Water-Resources/Watershed-Sanitary-Surveys.aspx</u>

Additional information

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that 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 of contaminants does not necessarily indicate that 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).



Water Quality

The following tables are a snapshot of water quality constituents that were detected in 2024 unless otherwise noted. Data in this table is from the collection of the Nacimiento Reservoir Inlet – Raw Water. The presence of these substances in water does not necessarily indicate that the water poses a health risk. The Maximum Contaminant Level and Violation status are for treated Drinking Water and are used here to aid in treatment decisions of the raw water from the Nacimiento Water Project. The State allows us to monitor some constituents less than once yearly 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 County of San Luis Obispo Department of Public Works Water Quality Laboratory at (805) 781-5111.

Microbiological Contaminants	Range of Detections	Average	MCL	PHG (MCLG)	Typical Source of Bacteria
Total Coliform (MPN/100 mL)	48 - 4000	660	TT	(1)	Naturally present in the environment
E. <i>coli</i> (MPN/100 mL)	< 1 - 2	< 1	TT	(0)	Human and animal fecal waste

Radioactivity	Sample Date	Range of Detections	Average	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha Particle Activity (pCi/L)	2019	2.22 - 2.65	2.44	15	(0)	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2019	1.00	1.00	50	(0)	Decay of natural and man-made deposits

REGULATED CONTAMINANTS WITH PRIMARY DRINKING WATER STANDARDS						
Constituent (Units)	Range of Detections	Average	MCL	PHG (MCLG)	Typical Source of Contaminant	
Aluminum (mg/L)	0.026 - 0.120	0.059	1	0.6	Erosion of natural deposits	
Barium (mg/L)	0.033 - 0.038	0.034	1	2	Erosion of natural deposits	
Chromium, hexavalent (µg/L)	0.031	0.031	10	0.02	Erosion of natural deposits	
Fluoride (mg/L)	< 0.10 - 0.14	< 0.10	2.0	1	Erosion of natural deposits	
Lead (µg/L)	< 0.50 - 0.6	< 0.50	AL = 15	0.2	Erosion of natural deposits	
Nickel (µg/L)	< 10 - 19.9	< 10	100	12	Erosion of natural deposits	
Total Organic Carbon (mg/L)	2.7 – 5.8	3.3	TT	NA	Various natural and manmade sources	



The Maximum Contaminant Level and Violation status are for treated Drinking Water and are used here to aid in treatment decisions of the raw water from the Nacimiento Water Project.

REGULATED CONTAMINANTS WITH SECONDARY DRINKING WATER STANDARDS							
Constituent (Units)	Range of Detections	Average	SMCL	Typical Source of Contaminant			
Aluminum (µg/L)	26.2 -120	59	200	Erosion of natural deposits			
Chloride (mg/L)	< 5 - 7	< 5	500	Runoff/leaching from natural deposits			
Color, Apparent (CU)	10	10	15	Naturally occurring organic materials			
Color, True (CU)	8	8	15	Naturally occurring organic materials			
Iron (µg/L)	90 - 259	150	300	Leaching from natural deposits			
Manganese (µg/L)	8.2 - <mark>125</mark>	38	50	Leaching from natural deposits			
Odor - Threshold (TON)	1.0 - <mark>30</mark>	4.4	3	Naturally occurring organic materials			
Specific Conductance (µS/cm)	260 - 280	270	1600	Substances that form ions when in water			
Sulfate (mg/L)	29 - 34	30	500	Runoff/leaching from natural deposits			
Total Dissolved Solids (mg/L)	140 - 180	162	1000	Runoff/leaching from natural deposits			
Turbidity (NTU)	1.9 – 4.7	2.8	5	Soil runoff			
UNREGULATED CONTAMINANTS							
Alkalinity as CaCO3 (mg/L)	86 - 102	93	Unregulated	Runoff/leaching from natural deposits			
Calcium (mg/L)	27.9 - 30	28.9	Unregulated	Runoff/leaching from natural deposits			
Hardness as CaCO3 (mg/L)	120 - 131	126	Unregulated	Generally found in ground and surface water			
Magnesium (mg/L)	12 – 13.9	12.8	Unregulated	Runoff/leaching from natural deposits			
рН	7.26 - 8.40	7.72	Unregulated	Runoff/leaching from natural deposits			
Potassium (mg/L)	1.1 – 1.3	1.2	Unregulated	Runoff/leaching from natural deposits			
Sodium (mg/L)	7.28 – 9.54	8.66	Unregulated	Runoff/leaching from natural deposits			
CONTAMINANTS WITH NOTIFICATION LEVELS							
Constituent (Units)	Range of Detections	Average	Notification Level	Health Effects			
Boron (mg/L)	< 0.050 - 0.0346	< 0.050	1	Exposures resulted in decreased fetal weight (developmental effects) in newborn rats.			
Manganese (µg/L)	8.2 - 125	38	500	Exposures resulted in neurological effects in people.			

Some additional constituents monitored in 2024, but not detected above State reporting limits: 1,2,3-Trichloropropane, antimony, arsenic, beryllium, cadmium, chromium, cyanide, copper, mercury, MBAS, nitrate, nitrite, perchlorate, PFAS, selenium, silver, thallium, volatile organic chemicals, and zinc. Some additional constituents monitored in 2020, but not detected above State reporting limits: atrazine and simazine. Some additional constituents monitored in 2019, but not detected above State reporting limits: asbestos.



KEY terms and abbreviations

AL – Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

CU – Color Units.

MBAS - Methylene Blue Active Substances; anionic surfactants such as foaming agents and detergents.

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.

µg/L - Micrograms per Liter.

MPN/100 mL – Most Probable Number per 100 milliliters

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

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.

USEPA – United States Environmental Protection Agency



Drinking Water and Health Risks

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. These people should seek advice about drinking water from their healthcare 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 (1-800-426-4791).

Lead Health Risks in Drinking Water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The County of San Luis Obispo is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the County of San Luis Obispo Public Health. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Hexavalent Chromium

On October 2024, the Hexavalent Chromium Maximum Contaminant Level (MCL), 10 ug/L, went into effect. Initial hexavalent chromium monitoring began on all active groundwater and surface water sources.

Cross Connection

What is a Cross-Connection?

A cross-connection is any actual or potential connection between a potable (drinking) water supply and a non-potable source that could allow contaminants to enter the drinking water system. Common household hazards include garden hoses submerged in pools, irrigation systems, and improperly installed plumbing fixtures.



Why is This a Concern?

If a cross-connection occurs and backflow happens (when water flows backward into the drinking water system), contaminants such as pesticides, fertilizers, or bacteria can enter the water supply. This can pose significant health risks.

Common Residential Cross-Connection Risks:

- **Garden Hoses:** Leaving a hose submerged in a pool, bucket, or connected to a chemical sprayer without a backflow preventer.
- **Irrigation Systems:** A lack of proper backflow prevention can allow pesticides, fertilizers, and other lawn treatments to enter the drinking water supply.
- **Boilers and Water Heaters:** Without backflow prevention, pressure changes can allow boiler chemicals to flow into household plumbing.
- Water Softeners and Treatment Systems: Some systems can create cross-connections if not properly installed.

How Can You Prevent Contamination?

- **Install Backflow Prevention Devices:** Use hose bib vacuum breakers on outdoor spigots and ensure proper backflow preventers are installed on irrigation and plumbing systems.
- Keep Hoses Out of Contaminants: Never leave hoses submerged in pools, buckets, or sinks.
- **Properly Maintain Plumbing Systems:** Ensure check valves, air gaps, and other protective measures are in place.
- **Hire a Licensed Plumber for Installations:** Professional installation of plumbing fixtures ensures compliance with safety regulations.

Your Role in Protecting Our Water Supply

Everyone plays a role in maintaining safe drinking water. Be aware of potential cross-connections in your home and take preventive measures to protect your family and community. For more information, contact your local water utility or visit <u>https://www.slocounty.ca.gov/departments/health-agency/public-health/environmental-health-services/cross-connection-control-program</u>

Lead and Copper Rule Revision (LCRR)

The Lead and Copper Rule Revisions (LCRR) enhanced the original Lead and Copper Rule (LCR) to provide stronger protection against lead exposure, particularly for children and communities. The key objectives of the LCRR include:

- Enhancing protections for children in schools and childcare facilities.
- Reducing lead contamination in the nation's drinking water.
- Empowering communities by providing clear and accessible information.

Lead Service Line Inventory Requirement

The LCRR mandates that water systems conduct a comprehensive record review to identify service line materials. This inventory helps ensure accurate documentation and assessment of potential lead exposure risks.



Sources for Service Line Inventory

Water systems must utilize the following sources to determine the material composition of service lines:

- **Construction and Plumbing Records**: Includes permits, codes, and other documentation that specify materials used in service line connections.
- Water System Records: Encompasses distribution system maps, drawings, historical service connection data, meter installation records, capital improvement plans, and standard operating procedures.
- **Inspections and Field Records**: Documentation from past inspections that indicate service line material composition.
- **State-Approved Resources**: Any additional methods or resources provided or required by the State to assess service line materials.

Initial Lead Inventory Completion

As of October 2024, all water systems have completed their initial lead service line inventories. Nacimiento Water Project has no lead in the water system.

Operations

Nacimiento Water Project has been assigned three California State Water Resources Control Board (SWRCB) certified operators. Our operators are knowledgeable professionals who have many years of experience. They are dedicated to maintaining an excellent water system and providing you with the best quality water possible.

Operators conduct weekly inspections of the intake pump station, tanks, and distribution system. In addition, the SWRCB routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

Water Quality Division

The Department of Public Works Water Quality Division provides laboratory and technical support services for most County operated water and wastewater systems. The Division operates two labs certified by the State of California's Environmental Laboratory Accreditation Program (ELAP). To remain certified by the State, the labs must annually demonstrate capability by analyzing unknown values for each constituent. In addition to analytical work, the Water Quality Division also provides sampling, compliance reporting, watershed monitoring, and technical support services for Public Works systems.

Community Participation

The County of San Luis Obispo Board of Supervisors meets two to three times a month. All meetings are held in the Board Chambers located in the new County Government Center, 1055 Monterey Street, San Luis Obispo. The Board holds budget hearings during June. Interested people should check the Board's agendas for specific dates. Agendas for all Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the Board of Supervisors internet website at https://www.slocounty.ca.gov/Departments/Administrative-Office/Board-of-Supervisors-Agenda.aspx.



Regular Nacimiento Commission meetings are held quarterly on the fourth Thursday of selected months at 4:00 p.m. at the Chambers of the Templeton CSD or another agreed-upon location.

Meeting logistics are subject to change. Please contact County Public Works at 805-781-5252 or <u>https://www.slocounty.ca.gov/departments/public-works/committees-programs/nacimiento-project-commission</u> for confirmation of date, location, and time.

Contact Information

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

County of San Luis Obispo Department of Public Works

https://www.slocounty.ca.gov/departments/public-works

County of San Luis Obispo Water Quality Laboratory

805-781-5111

PW.labreports@co.slo.ca.us

https://www.slocounty.ca.gov/Departments/Public-Works/Our-Divisions/Water-Quality-Lab

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