

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

County Service Area 16 - Shandon

System Number 4010028

2014



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

YOUR 2014 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 información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.*

SHANDON NEWS



THE COUNTY OF SAN LUIS OBISPO PUBLIC WORKS DEPARTMENT RECEIVES PRESTIGIOUS APWA ACCREDITATION

The County of San Luis Obispo Public Works and Transportation Department has received Accreditation from the American Public Works Association (APWA). It is only the 96th Agency nationwide and 4th California County to achieve this rare honor.

APWA accreditation is an objective evaluation of an agency and how they conduct their work. It is a means of formally verifying and recognizing public works agencies for compliance with recommended practices. Initial accreditation covers a four year period and the department will be reviewed every four years for re-accreditation to demonstrate continuing compliance.

STATE WATER

A project to connect Shandon's water system to the State Water system is underway and is scheduled to be constructed in fiscal year 2015/16. This will improve water supply reliability for the community and benefit the groundwater basin overall.

This project will involve a change in disinfectant from chlorine to chloramines in your water. More information on this switch of disinfectants will follow in the coming months. Staff will continue to monitor the status of the Shandon Community Plan and any infrastructure improvements included within it.



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On January 17, 2014, the Governor declared a drought emergency for all of California. On July 15, 2014, the State Water Resources Control Board approved an emergency regulation to ensure water agencies, their customers, and state residents increase water conservation in urban settings or face possible fines or other enforcement. On April 1, 2015, Governor Jerry Brown ordered mandatory water reductions for the first time in California's history. This comes after a four-year drought and a winter of record-low snowfalls.

Saving water is an easy way to stretch our water supply. Please conserve and help protect our vital water source.

RESTRICTIONS ON WATER USE:

- ❖ WATER OUTDOORS ONLY ON MONDAYS AND THURSDAYS
- ❖ NO WATERING OF OUTDOOR LANDSCAPES THAT CAUSE RUNOFF
- ❖ NO USE OF HOSES WITHOUT SHUT-OFF NOZZLES
- ❖ NO USE OF WATER IN A FOUNTAIN OR DECORATIVE WATER FEATURE, UNLESS THE WATER IS RECIRCULATED
- ❖ NO WASHING OF DRIVEWAYS AND SIDEWALKS
- ❖ NO IRRIGATION OUTDOORS DURING AND WITHIN 48 HOURS FOLLOWING MEASUREABLE RAINFALL

Local agencies can fine those who violate the individual prohibitions up to \$500 a day. Thank you for your help during this drought emergency. For more information, contact (805) 781-4466 or visit www.swrcb.ca.gov or www.slocountywater.org.

Water Statistics (January to December)

Year	Total Production, million gallons	Average Daily Demand, gallons (all uses)	Estimated gallons per customer per day (residential)
2013	49.5	135,500	64
2014	41.8	115,000	65

Thank you for doing your part to conserve water!

YOUR WATER SUPPLY

Your water comes from two groundwater wells, located in Shandon, which tap into the Paso Robles Groundwater Basin. Your water is normally very clean and is simply disinfected with chlorine to help minimize the potential for viral and bacterial contamination.

Source water assessments were completed for both wells in 2002. The wells were considered to be most vulnerable to the following activities: grazing, utility stations-maintenance areas, historic gas stations, and high density septic systems. Other than low levels of nitrate, no contaminants associated with these activities have been detected in the water. A copy of the assessment is available from the State Water Resources Control Board at (805) 566-1326 or from the County of San Luis Obispo Department of Public Works at (805) 781-5111.

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 from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that 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 application, 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. State Board regulations 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).

CSA 16 SHANDON

WATER QUALITY

Last year, your tap water met all USEPA and State drinking water health standards. The following tables are a snapshot of water quality and drinking water 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)	Where sampled	When sampled	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Violation?	Potential Source of Contamination
<i>Microbiological</i>								
Total Coliform Bacteria (Present or Absent)	Distribution	2014	> 1 positive sample per month	(0)	-----	ND	No	Naturally present in the environment
Heterotrophic Bacteria (CFU/mL)	Distribution	2014	TT = < 500	N/A	ND—79	5	No	Naturally present in the environment
<i>Inorganic</i>								
Arsenic (ppb)	Wells	2014	10	0.004	2.2—2.4	2.3	No	Erosion of natural deposits
Barium (ppm)	Wells	2014	1	2	0.120—0.140	0.130	No	Erosion of natural deposits
Nitrate as NO ₃ (ppm)	Wells	2014	45	45	11.8 – 25.8	17.3	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<i>Radioactivity</i>								
Gross Alpha Particle Activity (pCi/L)	Wells	2012	15	N/A	4.04—5.07	3.04	No	Erosion of natural deposits
Uranium (pCi/L)	Wells	2012	20	N/A	2.69—3.48	3.09	No	Erosion of natural deposits
<i>Disinfectant Residuals and Disinfection Byproducts</i>								
Chlorine (ppm)	Distribution	2014	[4.0 as Cl ₂]	[4 as Cl ₂]	0.96—1.54	1.31	No	Drinking water disinfectant added for treatment.

CSA 16 SHANDON

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	Where sampled	When sampled	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	Range detected	Average detected	Violation?	Potential Source of Contamination
Chloride (mg/L)	Wells	2014	500	N/A	62.2 - 111	86.6	No	Runoff/leaching from natural deposits
Color (CU)	Distribution	2014	15	N/A	ND—2	1	No	Naturally occurring organic materials
Odor – Threshold (TON)	Distribution	2014	3	N/A	ND—2.5	1.1	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	Wells	2014	1600	N/A	580 - 840	680	No	Runoff/leaching from natural deposits
Sulfate (mg/L)	Wells	2014	500	N/A	76.1 – 98.0	87.1	No	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	Wells	2014	1000	N/A	380 – 570	470	No	Runoff/leaching from natural deposits
Turbidity (NTU)	Distribution	2014	5	N/A	0.05—0.55	0.12	No	Soil runoff
<i>Unregulated</i>								
Total Alkalinity as CaCO ₃ (mg/L)	Wells	2014	NS	N/A	99.4—114	107	No	Runoff/leaching from natural deposits; seawater influence.
Calcium (mg/L)	Wells	2014	NS	N/A	64.4 – 85.1	74.8	No	Runoff/leaching from natural deposits.
Total Hardness (mg/L)	Wells	2014	NS	N/A	187 - 244	216	No	Generally found in ground and surface water; seawater influence.
Magnesium (mg/L)	Wells	2014	NS	N/A	6.3 – 7.8	7.1	No	Runoff/leaching from natural deposits; seawater influence.
pH	Wells	2014	NS	N/A	7.51—7.69	7.60	No	Runoff/leaching from natural deposits; seawater influence.
Sodium (mg/L)	Wells	2014	NS	N/A	47 - 48	48	No	Runoff/leaching from natural deposits; seawater influence.

CSA 16 SHANDON

Lead and Copper in Customers' Homes (2014)

Constituent	Reporting units	RAL	PHG	Number of Samples Collected	90th Percentile Level Detected	Number of Sites found above the RAL	Potential Source of Contamination
Lead	ppb	15	0.2	10	ND	0	Internal corrosion of household water plumbing systems
Copper	ppb	1300	300	10	170	0	Internal corrosion of household water plumbing systems

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.

N/A – Not applicable.

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 ($\mu\text{g/L}$).

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.

$\mu\text{S/cm}$ – microsiemens per centimeter (unit of specific conductance of water).

$\mu\text{g/L}$ – Micrograms per Liter.

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 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 (1-800-426-4791).

Nitrate in drinking water at levels above 45 mg/L 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 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. The nitrate levels in the Shandon water system were in the range of **11.8 to 25.8 ppb last year** with an average of **17.3 ppb**.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water typically comes from materials and components associated with service lines and home plumbing. The County of San Luis Obispo 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. Last year, the County tested for lead levels in twelve homes potentially more vulnerable to leaching of lead from their home plumbing. Results for lead were **not detected** in the homes sampled. 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 (1-800-425-4791) or at <http://www.epa.gov/safewater/lead>.

OPERATIONS

The Shandon water system is assigned one primary operator who, like all operators who work for the County, is certified by the California State Water Resources Control Board (SWRCB). 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.

CSA 16 SHANDON

Operators conduct weekly inspections of the wells, tank, and distribution system, collect samples, and analyze some parameters in the field to ensure a safe and reliable water supply. In addition, the SWRQCB routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.

WATER QUALITY LABORATORY

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

SOURCE WATER PROTECTION TIPS FOR CONSUMERS

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.

WATER TRIVIA

- Water is the only substance found on earth naturally in three forms: solid, liquid and gas.
- At 1 drip per second, a faucet can leak 3,000 gallons per year.
- The average faucet flows at a rate of 2 gallons per minute. You can save up to four gallons of water every morning by turning off the faucet while you brush your teeth.
- Taking a bath requires up to 70 gallons of water. A five-minute shower uses only 10 to 25 gallons.
- A running toilet can waste up to 200 gallons of water per day.
- The first water pipes in the US were made from wood (bored logs that were charred with fire).
- The first municipal water filtration works opened in Paisley, Scotland in 1832

COMMUNITY PARTICIPATION

The governing body for Shandon is the San Luis Obispo County Board of Supervisors. The Board meets every Tuesday (except the 5th Tuesday in a month) at 9:00 a.m. in the new Government Center, 1055 Monterey Street, San Luis Obispo. Agendas for Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the County's website at www.slocounty.ca.gov.

The Shandon Community Advisory Council meets the first Wednesday of every month at 7:00 pm in the Clubhouse in the Crawford W. Clarke Park. You can contact the advisory council by email at shandoncouncil@yahoo.com, or at P.O. Box 92, Shandon, 93461. Advisory council recommendations are considered by the Board of Supervisors when they make decisions that affect Shandon, including the water system.

A Groundwater Advisory Committee meets monthly on the third Thursday at 2:00 pm (location varies) to discuss water issues related to the Paso Robles Groundwater Basin, which is the main source for Shandon's drinking water, and many others. The Basin is subject to the requirements of the Sustainable Groundwater Management Act of 2014, and the Committee is discussing how to best comply with the Act, including the formation of one or more Groundwater Sustainability Agencies and the development of one or more Groundwater Sustainability Plans. All interested parties are invited to attend. To receive notification for upcoming meetings, please contact SLO County Water Resources at (805) 781-5252 or visit www.pasobasin.org.

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

SLO County Water Quality Laboratory
805-781-5111
PW_SLO_WQL@co.slo.ca.us
<http://slocountywater.org/WQL/wql.html>

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