



*Drought Tolerant Demonstration Garden: Aromas Water District Office: 388 Blohm Ave.*

# ***Annual Water Quality Report***

## **2013**

Prepared in 2014

***Este informe contiene información muy importante sobre su agua potable.  
Tradúzcalo, hable con alguien que lo entienda bien, o llame a nuestra  
oficina: 831-726-3155***

This report gives you information on the Aromas Water District water quality monitoring done during the year 2013. It includes details about where your water comes from, what it contains, and how it compares to State Standards. We take pride in providing you with a safe and dependable supply of drinking water. We are pleased to report that our water meets all primary and secondary drinking water standards. We test our water quality for many constituents as required by State and Federal Regulations. This report shows the results of our testing for the period of January 1 - December 31, 2013.

### **Contacting Your Aromas Water District**

388 Blohm Avenue Phone: (831) 726-3155 Fax: (831) 726-3951

Mail: PO Box 388 Aromas, 95004 or email [admin@aromaswaterdistrict.org](mailto:admin@aromaswaterdistrict.org)

Public participation is encouraged at our regularly scheduled Board meetings held the fourth Tuesday of every month, at 7:00 p.m. at the District Office. General Manager, Vicki Morris can be reached at the office phone or email listed above. Office hours are Monday, Wednesday, and Friday 9:00am to 5:00pm. In case of an after-hours emergency, we have a 24-hour Answering Service available by following the directions in our voice message. More information is available on our website. It contains Board agendas and minutes, water quality information, conservation tips and much more: [www.aromaswaterdistrict.org](http://www.aromaswaterdistrict.org)

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### **General Manager’s Corner:**

We are proud to present to you our Annual Water Quality Report. Our water quality testing results are all within recommended levels, meeting all State and Federal standards.

Water Conservation is our motto, more this year, than ever before. We received only about 50% of our seasonal average rainfall. Our District is not in a crisis yet, but a prolonged drought could have potentially severe consequences for our precious water supply. We have asked all our customers to voluntarily conserve. Our customers as a whole are doing a great job of conserving water; please read the great tips and advice later in this newsletter.

The AWD was recently awarded the District Transparency Certificate of Excellence, recognizing our outstanding efforts to promote transparency and good governance. Out of 2,300 Special Districts in the State of California, AWD is among only 52 who have received this award. The Directors and staff believe strongly in these principals of open government and are proud to be an award recipient. Please see website at [aromaswaterdistrict.org](http://aromaswaterdistrict.org) for more information about your District.

The Board of Directors worked diligently this year to develop long term strategic plans, part of which included a financial reserve policy to protect and provide financial security long into the future. Our water facilities and infrastructure continue to age, some of our facilities are over fifty years old; planned replacement is part of this long term strategic plan. The District contracted with professional municipal financial consultants to analyze the appropriateness and viability of the current water rates. A recommendation has been made to the Board to increase the rates. You will be receiving a mailer about the recommended rates. The last water rate increase was in 2010. Water is still one of our best values; the average cost is two cents per gallon.

In cooperation with Monterey County and the California Department of Public Health, we are helping our neighbors of the Oakridge and Via del Sol areas who have asked to be served by Aromas Water, due to their problematic water quantity and quality issues. Those residents will be responsible for all costs to bring water to their homes; in September 2013, they voted, with an 86% approval to finance and build the needed pipeline. This infrastructure construction will begin later this year, 2014. This may add up to forty-seven new water customers by 2015.

We are continuing to upgrade our software to enable you to view your water account information on-line; you may now make payments remotely, view your past usage and billing information on-line. We welcome your visit to our office and staff, view our historical Aromas photo collection and stroll out back to the exhibition garden of drought tolerant plants. See what grows well, here in Aromas, with very little water. You are always welcome to attend the monthly Board meeting, 4<sup>th</sup> Tuesday at 7p.m. We are here and pleased to serve you.

**Vicki Morris**

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### **2013 WATER SOURCES USED:**

Your water comes from 3 ground water wells from within the Pajaro basin named and located as follows:

- ◆ **San Juan Well** - located south of San Juan Road - provided 56% of total water production in 2013.
- ◆ **Carpenteria Well** - located east of Carpenteria Road - provided 44% of total water production in 2013.
- ◆ **Pleasant Acres Well** - located north of San Juan Road - provided less than 1% of total water production in 2013.

Note: For those samples which the district is allowed to monitor less often than once a year, the most recent testing has been used.

### **TERMS USED IN THIS REPORT:**

**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 (USEPA).

**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.

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

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

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

**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.

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

**NA:** Not Applicable in this situation.

**ND:** Not detectable at testing limit.

**Micromhos** Measure of electric conductance.

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** part per billion or micrograms per liter (ug/L)

**pCi/L:(picocuries per liter):** A measure of radioactivity.



The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs, ponds, 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, 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 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 byproducts 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 California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.*

The following tables list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for certain contaminants less than once per year because the concentrations of them are not expected to vary significantly from year to year. Therefore, some of the data is more than one year old, but representative of the water quality. **Our system had no violations in 2013.**

**TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants	Highest No. of detections in 2013	No. of months in violation	MCL (Highest Level Allowed)	MCLG (Ideal Goal)	Typical Source of Bacteria
Total Coliform Bacteria (Total Coliform Rule)	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (Total Coliform Rule)	(In 2013) 0	0	A routine sample & repeat sample detect total coliform & either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 - RESULTS OF CONSUMER TAP SAMPLING TO SHOW DETECTION OF LEAD OR COPPER**

Lead and Copper Most recently tested in 2009	Number of sites sampled	90 <sup>th</sup> percentile level detected	Number of Sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppb)	10	166	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**TABLE 3 - SAMPLING RESULTS WITH ADDITIONAL WATER QUALITY INFORMATION**

Chemical or Constituent (and reporting units)	Latest Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	7/18/12	82	68-106	NA	NA	Generally found in ground and surface water
Hardness (ppm)	7/18/12	123	111-156	NA	NA	Generally found in ground and surface water
pH (laboratory units)	7/18/12	7.8	7.8-7.9	NA	NA	Inherent characteristic of water
Calcium (ppm)	7/18/12	30	28-34	NA	NA	Erosion of natural deposits
Magnesium (ppm)	7/18/12	11	10-21	NA	NA	Erosion of natural deposits

**TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Latest Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Arsenic (ppb)	7/18/12	2	2	10	.004 (NA)	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	7/18/12	137	117-137	1000	2000 (NA)	Discharges of oil drilling wastes & from metal refineries; erosion of natural deposits

**TABLE 4 (CONTINUED) - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Fluoride (ppm)	7/18/12	0.19	0.13-0.23	2.0	1 (NA)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. (AWD does not add Fluoride.)
Nitrate (ppm)	7/10/13	ND	ND	45 (as nitrate)	45 (as NO <sub>3</sub> )	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Iron (ppb)	10/11/13	35	ND-86	300	NA	Leaching from natural deposits; industrial wastes
Manganese (ppb)	10/11/13	17	ND-41	50	NA	Leaching from natural deposits
Turbidity (units)	7/18/12	0.80	0.05-1.4	5.00	NA	Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants
Total Dissolved Solids [TDS] (ppm)	7/18/12	342	310-368	1000	NA	Runoff/leaching from natural deposits
Specific Conductance (micromhos)	8/18/12	663	583-673	900	NA	Substances that form ions when in water; seawater influence
Chloride (ppm)	7/18/12	74	47-87	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	7/18/12	6.25	1-13	500	NA	Runoff/leaching from natural deposits' industrial wastes

**TABLE 6 - DISINFECTION BY-PRODUCTS : DISTRIBUTION SYSTEM RESULTS**

TTHMs (ppb) [total trihalomethanes]	7/19/13	13	ND-13	80	NA	By-product of drinking water disinfection.
HAA5 (ppb) [Haloacetic Acids]	7/19/13	ND	ND	60	NA	By-product of drinking water disinfection.
Chlorine (ppm)	Daily	1.11 Running Annual Average	0.61-1.38	MRDL  4.0	NA	Drinking Water disinfectant added for treatment

### Source Water Assessment

Assessments of the drinking water sources for the District were completed in 2002 and 2012. A source water assessment lists possible contaminating activities that might affect the quality of your water sources. The assessment also identifies the susceptibility of the District's drinking water wells to identified contamination threats.

A study of the aquifer feeding the Pleasant Acres Well identifies residential septic systems, other animal operations, and agricultural irrigation as the greatest threat to the District's drinking water. A study of the aquifer feeding the Carpenteria Well identifies residential septic systems as the greatest threat to the District's drinking water. The San Juan Well is in the same aquifer and in close proximity to the Pleasant Acres Well and, therefore, has the same threats.

Copies of the Executive Summary for each assessment are available free-of-charge at the District office. The full reports are available upon request or can be viewed at the District's office located at 388 Blohm Ave., Aromas. For information about these Source Water Assessments, or your water quality in general, please contact the District at (831) 726-3155 or visit our web site at [www.aromaswaterdistrict.org](http://www.aromaswaterdistrict.org).

### Aromas Water District Water Use Averages

**Total 2013 Water Usage = 116,147,944 gallons for 900 households and businesses**

**Average Single-family residence monthly usage overall: 1,209 cubic feet (9,043 gallons)**

**Average Single-family residence winter monthly usage in 2013: 770 cubic feet (5,760 gallons)**

**Average Single-family residence summer monthly usage in 2013: 1,529 cubic feet (10,931 gallons)**

**Aromas Water Usage - Customer Worksheet - Calculate Gallons Per Day**

1) Fill in your usage from monthly bill card (in cubic feet) \_\_\_\_\_

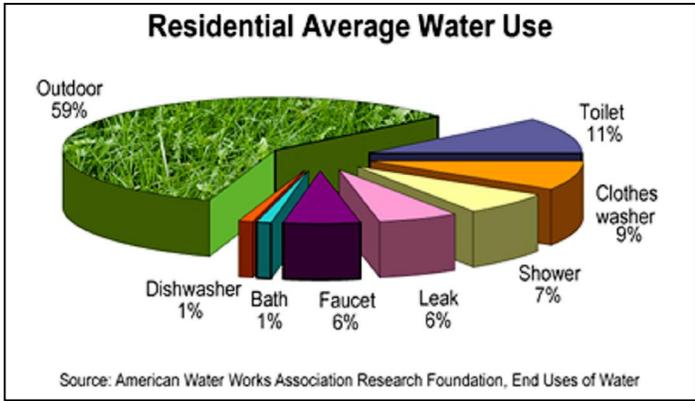
2) Multiply times 7.48 (gallons) X 7.48

3) Equals total gallons, per month, per household = \_\_\_\_\_

4) Divide by 30 days ÷ 30

5) Equals total gallons, per day, per household = \_\_\_\_\_

Take the Challenge to Save 20 Gallons Per Day !

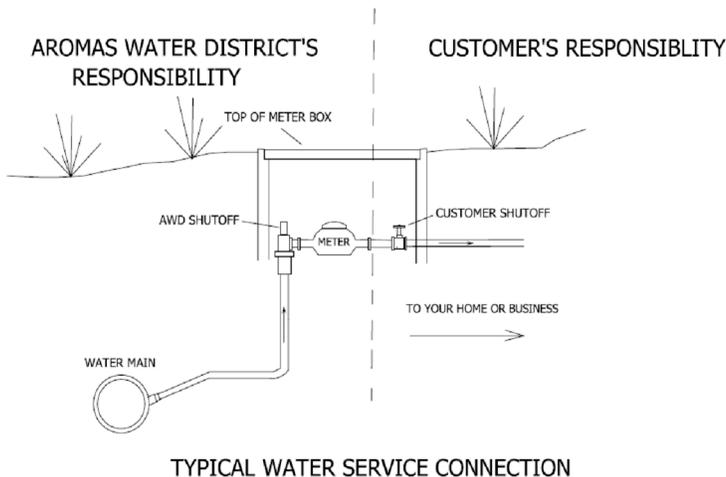


**Your Water Meter:**

Aromas Water District personnel read every meter every month. Maintenance is done by District personnel for any problems that occur on the District side of the meter (including the meter). Service personnel must have a 3-foot wide by 6-foot-high unobstructed path to access the water meter. This is a condition of service and, if necessary, access will be made by the District if "Request to Clear" notices are ignored by the customer.

The customer is responsible for all repairs necessary to their side of the meter. This includes the service line to the house, landscape pipes, pressure boosters or pressure reducers. A suitable pressure regulating valve must be installed and maintained to protect your system from high pressure, which can result in broken lines, flooding, and loss of water. AWD takes no responsibility for damage resulting from a malfunctioning or missing pressure regulating valve. It is recommended you check these items regularly to avoid leaks and expense. Please make sure that you have a shutoff valve\* near the beginning of your system for repairs and emergencies. If your system is equipped with a Pressure Booster Pump, please call the District office for additional information that will be helpful to you.

Important Information about your Water Meter



\* Note the location of the customer shutoff valve in the above diagram. The ideal location is as close to the meter as possible so that your entire system can be turned off during repairs or emergencies.

# Take the 20 gallon challenge!

Local area customers currently use approximately 70 gallons per person per day (gppd)

**HERE ARE SOME WAYS TO REDUCE YOUR USE DOWN TO 50 GALLONS A DAY**

uses (based on a 2 person household)

- 21 gallons** **Shorten your shower.**  
It's easy to upgrade your showerhead to a 1.5 gallons per minute (gpm) device. Two 7 minute showers with a 1.5 gpm showerhead uses 21 gallons.
- 12 gallons** **Make sure your toilet is water efficient.**  
Think before you flush. Don't use the toilet as a wastebasket, flush only as necessary. 9 toilet flushing with a 1.28 gallons per flush toilet uses 12 gallons.
- 14 gallons** **Turn off the water faucet.**  
Never let the water run when you're brushing your teeth or shaving. 14 minutes of running water, 1 gallon per minute, in your bathroom sink uses 14 gallons.
- 27 gallons** **Don't leave the water running while rinsing dishes.**  
18 minutes of running water, 1.5 gallons per minute, in your kitchen sink uses 27 gallons.
- 6 gallons** **Run the dishwasher only when it's full.**  
Make sure your dishwasher is an EPA Water Sense model. One dishwasher run uses between 6-10 gallons.
- 20 gallons** **Wash only full loads of clothes.**  
Make sure you have a high-efficiency EPA Water Sense clothes washer. One load of clothes washing uses 20 gallons per load.

**100** gallons per day for two people **which equals 50 gallons per person per day**

The above example is for indoor water use. To reduce water use outside here are some tips:  
 1. Take out your turf. 2. Install a graywater system. 3. Install a rain catchment system.  
 The agencies offer several rebates to help with costs! Also, check or fix any water leaks.

**SPONSORED BY:** SOQUEL CREEK WATER DISTRICT, Pajaro Valley Water Management Agency, SANTA CRUZ, CITY OF WATSONVILLE, COSTA MESA WATER DISTRICT

For tips and rebates visit [www.watersavingtips.org](http://www.watersavingtips.org)

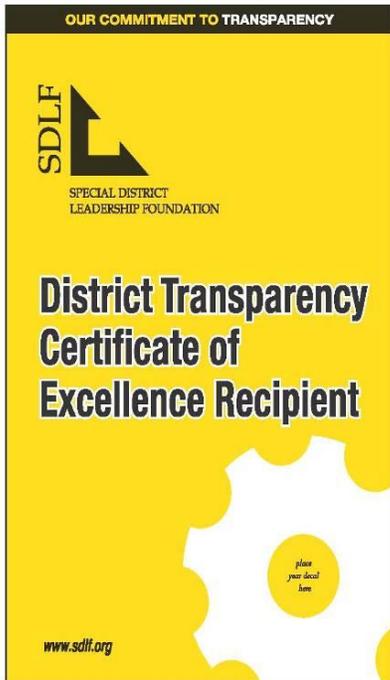
- ### Outdoor Conservation Tips
- Watering your yard only before 8 a.m. to reduce evaporation and interference from wind can save 25 gallons per day.
  - Installing a smart sprinkler controller can save 40 gallons per day.
  - If you use a broom instead of a hose to clean driveways and sidewalks, you can save 150 gallons each time.
  - Checking your sprinkler system for leaks, overspray and broken sprinkler heads can save 500 gallons a month.
  - Mulch! Save hundreds of gallons a year by using organic or inorganic mulch around plants to reduce evaporation.
  - Plant flowers/trees/bushes that require less watering. Select plants that are appropriate for your local climate conditions.
  - Use a shut-off nozzle on your hose.
  - Raise the lawn mower blade to at least three inches. A higher cut encourages grass roots to grow deeper, shades the root system and holds soil moisture better than a closely-clipped lawn.

The Aromas Water District (AWD) received the District Transparency Certificate of Excellence by the Special District Leadership Foundation (SDLF) in recognition of its outstanding efforts to promote transparency and good governance.

In order to receive the award, a special district must demonstrate the completion of eight essential governance transparency requirements, including conducting ethics training for all board members, properly conducting open and public meetings, and filing financial transactions and compensation reports to the State Controller in a timely manner.

The Aromas Water District also fulfilled fifteen website requirements, including providing readily available information to the public, such as board agendas, past minutes, current district budget, and the most recent financial audit.

Finally, the district must demonstrate outreach to its constituents that engages the public in its governance, through a special community engagement project and community transparency reviews.



## Additional General Information on Drinking Water

All 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 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). 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).

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 Aromas Water District 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 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/safewater/lead>.

**The Aromas Water District is a non-profit Multi-County Special District governed by five elected members of the AWD community, each serving a four-year term. AWD was formed in 1959 and today we serve 900 connections including areas in Monterey and San Benito Counties.**

*The mission of Aromas Water District is to provide a reliable supply of high quality water at the most cost-effective rates to customers.*



P.O. Box 388  
Aromas, CA 95004

RETURN  
SERVICE  
REQUESTED

First Class Mail  
PRESORTED  
U. S. Postage Paid  
AROMAS, CA 95004

Permit #1

***Important information about your water enclosed!***

***Este informe contiene información muy importante sobre su agua potable!***

## **2013 Water Quality Report**

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