ALAMEDA COUNTY WATER DISTRICT

Este reporte contiene información muy importante de su salud y el agua que toma. Tradúzcalo por favor ó hable con alguien que lo entienda bien.

Este relatório contém informações importantes sobre sua água potável. Por favor traduza-o ou fale com alguém que entenda o que está escrito.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Dieser Report enthält wichtige Informationen Åber Ihr Trinkwasser. übersetzen Sie ihn bitte oder sprechen Sie mit jemand, das ihn versteht.

Ce rapport contient de l'information importante concernant votre eau potable. Veuillez le traduire, ou parlez-en avec quelqu'un qui le comprend.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Chi tiết này thật quan trọng.
Xin nhờ người dịch cho quý vị.

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद करायें ।

このレポートはあなたの飲料水に関する重要な情報が含まれています。
翻訳するか、レポートの内容を理解できる方に説明してもらってください。

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را بزبان انگلیسی بخوانید لطفا از کسی که میتواند یاری بگیرید تا مطالب را برای شما به فارسی ترجمه کند.

"هذا التقرير يحتوي على معلوماً ت مهمّة تتعلق بمياه الشفة (أو الشرب).
ترجم التقرير , أو تكلم مع شخص يستطيع أن يفهم التقرير."

ਇਸ ਰਿਪੋਰਟ ਵਿਚ ਤੁਹਾਡੇ ਪੀਣ ਵਾਲੇ ਪਾਣੀ ਵਾਰੇ ਬਹੁਤ ਜਰੂਰੀ ਸੂਚਨਾ ਹੈ। ਇਸ ਨੂੰ ਪੜ੍ਹੋ ਜਾਂ ਜੋ ਸਜਨ ਇਸ ਨੂੰ ਸਮਝ ਸਕਦੇ ਹਨ, ਉਸ ਕੋਲੋਂ ਸਮਝੋ।

ACWD
ALAMEDA COUNTY WATER DISTRICT
43885 South Grimmer Blvd.
Fremont, CA 94538

2009 WATER QUALITY REPORT

Dear ACWD Customer:

This report summarizes the results of the approximately 60,000 analyses conducted on your drinking water during 2009. I'm pleased to report that your water consistently met or surpassed all federal and state drinking water standards for public health and safety over the course of the year. To learn more about the quality of your drinking water, turn to the following pages:

Walt Wadlow
General Manager

A Message from the USEPA and the California Department of Public Health

A NOTE ABOUT DRINKING WATER

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. These contaminants enter water as it travels over the surface of the land or through the ground, dissolving substances that are naturally present in the environment or picking up substances resulting from the presence of animals or human activity. The presence of contaminants does not necessarily indicate that water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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 (CDPH) 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. CDPH regulations are in many cases more stringent than federal ones. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791).

A NOTE TO THE IMMUNO-COMPROMISED

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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

Comprehensive Water Quality Monitoring

ACWD works diligently to ensure that your water complies with all state and federal drinking water standards. This is a comprehensive effort that includes monitoring and testing for many types of contaminants that may be present in source water (i.e., water before treatment), including:

- Microbials, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganics, 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 chemicals, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, or that may 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.

Water treatment plant operators and laboratory analysts test your water for more than 180 substances to help ensure your health and safety.

Highly trained analysts and water treatment operators in our state-certified laboratory and satellite laboratories are committed to conducting these tests under a stringent Quality Assurance/Quality Control (QA/QC) program. Through written procedures, work instructions, and detailed record maintenance, the QA/QC program ensures the quality of the analytical data produced by the laboratory. ACWD staff collect samples daily from the water sources, treatment facilities, and distribution system to ensure the high quality of the water you drink.

Drinking Water Source Assessment

Drinking Water Source Assessments are conducted to determine how vulnerable drinking water sources are to contamination. Assessments have been completed for all of ACWD's water sources.

The San Francisco Public Utilities Commission (SFPUC), which administers the Hetch Hetchy system, completed its assessment in 2000. It was found that SFPUC watersheds are vulnerable to contaminants associated with wildlife and, to a limited extent, human recreational activity. Historically, the levels of contaminants have been very low in the watersheds.

The South Bay Aqueduct (SBA) source assessment was completed in 2002. This source is most vulnerable to agricultural drainage, wastewater treatment plant discharges, urban runoff, recreational activity, and cattle grazing. In addition, seawater intrusion contributes salt and bromide to the water supply.

ACWD's assessment of local groundwater sources was also completed in 2002. These sources are most vulnerable to existing and historic gas stations, known contaminant plumes, confirmed leaking underground storage tanks, dry cleaners, metal plating/finishing/fabricating, and sewer collection. Since 1987, ACWD has worked diligently with the Cities of Fremont, Newark, and Union City, and with the California Regional Water Quality Control Board, San Francisco Bay Region, to oversee the investigation and cleanup of any such contamination to protect groundwater sources.

Drinking Water Source Assessments have been completed for all of ACWD's water sources, including the SFPUC's Calaveras Reservoir.

Although ACWD water sources are vulnerable to potentially contaminating activities, our treatment and blending facilities purify your tap water to the strict standards set by federal and state regulatory agencies. Complete assessments may be reviewed at ACWD headquarters located at 43885 South Grimmer Boulevard in Fremont. To have a summary of the assessments sent to you, please call Laura Hidas, Water Supply Supervisor at (510) 668-6516.

2009 Water Quality Information

The chemists, technicians, and water treatment operators in ACWD's state certified laboratory and satellite laboratories performed approximately 60,000 chemical and bacteriological analyses on your water during 2009. The results revealed that very few of the more than 180 substances we tested for were found in your water. In all cases, your water was in compliance with federal and state standards for public health and safety. There are two types of standards ACWD is required to meet:

Primary Drinking Water Standards set limits for substances in water that may be harmful to humans if consumed in excess. They include MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards deal with aesthetic qualities such as taste and odor which relate to consumer acceptance rather than health factors.

A summary of key results for 2009 is presented in the following charts. Technical terms and abbreviations used in the charts are explained below.

Definitions

Maximum Contaminant Level (MCL): 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 or technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

Notification Level (NL): CDPH health-based advisory levels used to provide information to public water systems and others about unregulated contaminants in drinking water. Unregulated contaminant monitoring helps the EPA and the CDPH to determine where certain contaminants occur and whether the contaminants need to be regulated.

Public Health Goal (PHG): 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.

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

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

Abbreviations

mg/L: Milligrams per liter (which is equal to parts per million).

µg/L: Micrograms per liter (which is equal to parts per billion).

ppm: Parts per million (which is equal to milligrams per liter).

ppb: Parts per billion (which is equal to micrograms per liter).

pCi/L: Picocuries per liter (a measure of radioactivity).

µmhos/cm: Micromhos/centimeter.

NTU: Nephelometric turbidity units.

ND: The substance could not be found at the minimum amount that can be detected.

NA: Not Applicable.

Primary Drinking Water Standards

Parameters	Units	Primary MCL or [MRDL]	(PHG) (MCLG) or [MRDLG]	Treated Surface Water (1)		Purchased San Francisco Water (1)		Blended Water (1)		Desalinated Water (1)		Major Sources
				Range	Average	Range	Average	Range	Average	Range	Average	
Fluoride (naturally occurring) (2)	ppm	2	(1)	0.11 - 0.11	0.11	ND - 0.80	0.30	0.14 - 0.26	0.21	ND - 0.21	0.09	Erosion of natural deposits
Fluoride (treated water) (2)	ppm	2	(1)	Average = 1.0 (Range 0.8 - 1.1)								Water additive that promotes strong teeth
Barium	ppm	1	(2)	ND		ND		ND - 0.1	ND	ND		Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate	ppb	10	0	Highest RAA(3) = 5.15 (Range of individual detections: ND - 7.46)								Disinfection by-product
Disinfectant Residual (as Cl_2) (4)	ppm	[4]	[4]	Annual Average(5) = 2.0 (Range of individual detections: 0.1 - 2.8)								Disinfectant residual
5 Haloacetic Acids (HAA5) (6)	ppb	60	NA	Highest RAA(7) = 15 (Range of individual detections: ND - 31)								Disinfection by-product
Nitrate (as NO_3)	ppm	45	(45)	ND - 4.4	ND	ND		ND - 3.4	2.1	ND - 3.4	2.1	Runoff from fertilizer use, erosion of natural deposits
Nitrate + Nitrite (as Nitrogen N)	ppm	10	(10)	ND - 1.0	ND	ND		ND - 0.78	0.5	ND - 0.77	0.5	Runoff from fertilizer use, erosion of natural deposits
Total Trihalomethanes (TTHMs) (8)	ppb	80	NA	Highest RAA (7) = 27 (Range of individual detections: ND - 69)								Disinfection by-product
Turbidity (9)	NTU	TT = 0.3 (10)	NA	ND - 0.64	0.04	NA	NA	Not subject to the turbidity monitoring requirement				Soil runoff
		TT = 5.0 (11)	NA	NA	NA	0.08 - 0.33	0.16					

Lead and Copper Sampling Program (12)	Units	Action Level (13)	(PHG)	Range	90th Percentile Value	Number of Samples Collected	Number of Samples above AL	Typical Sources in Drinking Water
Copper (14)	ppm	1.3	(0.17)	ND - 0.9	0.7	56	0	Corrosion of household plumbing systems
Lead (14)	ppb	15	(0.2)	ND - 22.3	5.6	56	1	Corrosion of household plumbing systems

Secondary Drinking Water Standards

Parameters	Units	Secondary MCL	Treated Surface Water		Purchased San Francisco Water		Blended Water		Desalinated Water		Major Sources
			Range	Average	Range	Average	Range	Average	Range	Average	
Chloride	ppm	500	44 - 159	104	3 - 10	5	52 - 64	57	112 - 126	120	Runoff/leaching from natural deposits; seawater influence
Manganese	ppb	50	ND - 40	ND	ND		ND		ND		Leaching from natural deposits
Specific Conductance	µmhos / cm	1600	374 - 818	584	35 - 331	134	525 - 632	578	330 - 627	475	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	18 - 72	37	0.9 - 34	12	44 - 58	50	3.7 - 22	15	Naturally occurring minerals
Total Dissolved Solids	ppm	1000	211 - 468	325	16 - 185	77	316 - 368	345	249 - 341	307	Naturally occurring minerals and metals

Unregulated Constituents(15)

Parameters	Units	Primary MCL or [MRDL]	(PHG) (MCLG) or [MRDLG]	Treated Surface Water (1)		Purchased San Francisco Water (1)		Blended Water (1)		Desalinated Water (1)		Major Sources
				Range	Average	Range	Average	Range	Average	Range	Average	
Methyl Ethyl Ketone (MEK, 2-butanone)	ppb	—	—	ND - 6.60	ND	ND - 5.56	ND	ND - 11.00	6.00	ND - 5.50	ND	Component of adhesives commonly used to join polyvinyl chloride (PVC) pipe. May temporarily be found in drinking water after water pipe repair or water well construction.

Other Water Quality Parameters

Parameters	Units	NL	Treated Surface Water		Purchased San Francisco Water		Blended Water		Desalinated Water		Major Sources
			Range	Average	Range	Average	Range	Average	Range	Average	
Alkalinity	ppm as $CaCO_3$	NA	46 - 126	90	14 - 118	46	149 - 184	169	36 - 104	80	Naturally occurring minerals
Calcium	ppm	NA	11 - 31	20	2.2 - 29	11	34 - 49	43	16 - 24	20	Naturally occurring mineral
Hardness(16)	ppm as $CaCO_3$	NA	68 - 166	115	10 - 124	47	164 - 204	189	56 - 104	87	Naturally occurring minerals
Magnesium	ppm	NA	8.6 - 20	14	0.2 - 10	3.4	16 - 20	19	4.2 - 9.5	7.7	Naturally occurring mineral
pH	units	NA	8.1 - 8.8	8.5	8.3 - 9.4	9.0	7.5 - 8.1	7.8	8.1 - 8.9	8.4	Naturally occurring minerals
Potassium	ppm	NA	2.1 - 4.8	3.2	0.2 - 1.8	0.7	1.4 - 2.5	1.8	1.3 - 1.5	1.4	Naturally occurring mineral
Sodium	ppm	NA	42 - 110	75	4 - 24	11	53 - 59	56	71 - 93	84	Naturally occurring mineral

(1) Refer to the "Distribution System Map" (page 6) to determine the type of water you typically receive based on your location.

(2) ACWD treats your water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in treated water are maintained within a range of 0.8 - 1.4 ppm, as required by State regulations.

(3) Compliance is based on a running annual average (RAA) of 12 monthly samples.

(4) Disinfectant residual in the distribution system consists of combined chlorine (chloramines); results are reported as Total Combined Chlorine.

(5) For disinfectant residual the annual average for 2009 is reported.

(6) Five Haloacetic Acids is the sum of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

(7) Compliance is based on a running annual average (RAA) of distribution system samples collected in 4 quarters.

(8) Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

(9) Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness. Turbidity is measured in NTUs (nephelometric turbidity units).

(10) Treatment Technique performance standard: 0.3 NTU for filtered water in 95% of the measurements for WTP2 and 0.1 NTU for filtered water in 95% of the measurement from MSJWTP taken at 15 minute intervals each month and shall not exceed 1.0 NTU at any time. The treated surface water met this standard 100% of the time.

(11) Treatment Technique performance standard: 5 NTU for unfiltered water. The purchased SFPUC water met this standard 100% of the time.

(12) In compliance with federal Lead and Copper Program requirements, samples are taken by consumers from within their homes after a 6 to 8 hour stagnation period.

(13) Compliance is based on 90th percentile values, which should be less than the action levels (AL's).

(14) Due to consistently favorable sampling results, CDPH approved reduced lead and copper monitoring frequency to once every 3 years. Results reported here were collected by ACWD in 2009. The next sampling round is scheduled for Summer 2012.

(15) Unregulated constituents are constituents that were found present in the drinking water but do not have health-based standards set under the Safe Drinking Water Act.

(16) For customers who want to know their hardness value in grains per gallon (gpg), divide the provided hardness value by 17.1

A Note about Lead from the U.S. Environmental Protection Agency

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. Alameda County 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 (800-426-4791) or at www.epa.gov/safewater/lead.

ACWD's Public Health Goals Report Available in July 2010

A Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. ACWD is required to prepare a report regarding these goals every three years. The PHG Report is intended to provide you with specific information regarding drinking water safety and the cost of further reducing contaminant levels to bring them closer to public health goals.

This year's PHG Report documents the drinking water contaminants in our water supply that were found to be above state PHGs or federal Maximum Contaminant Level Goals (MCLGs) during 2007, 2008, and 2009. PHGs and MCLGs are non-enforceable goals set by the California Environmental Protection Agency and the U.S. Environmental Protection Agency, respectively. Although these goals are not enforceable, ACWD strives to meet them in an effort to supply the highest quality water to its customers. From an economic and technological point of view, PHGs are often not practically achievable. Nevertheless, they can be useful tools for regulators when revising enforceable standards.

ACWD's 2010 PHG report will be available in July 2010. For further information, please visit www.acwd.org or contact Douglas Chun, P.E., Water Quality Manager at (510) 668-6510.

When Your Water is Discolored

Discolored water episodes are usually short-lived and present no health hazard. You can often determine the cause of and cure for these episodes by answering a few simple questions.

1. **Does the discoloration disappear after running the tap for a minute or two?**

   Yes. The cause is within the home plumbing. Go to number 2 below.

   No. The cause may be within the distribution system. Go to number 3 below.

2. **What color is the water?**

a. Yellow, rusty, or brown. When water dissolves iron in old household plumbing fixtures, the water may turn yellow, rusty, or brown. This does not pose a health hazard.

   Cure: Flush the tap until the water clears.

b. Black, or contains black particles. Braided, stainless steel flex connectors often contain black rubber liners that eventually disintegrate.

   Cure: Replace the connector.

c. White, foamy, or cloudy. This condition may be caused by "entrained air," harmless, tiny air bubbles that get dissolved during treatment or distribution.

   Cure: The water will clear as the bubbles rise.

d. Blue. A slight bluish cast in the tub may be the shadow cast by incandescent light or trace amounts of copper from home plumbing. Neither presents a health hazard. However, water in a glass with a distinct blue color can indicate a serious backflow situation. Contact the Operations Department at 510-668-6500 if this is the case.

e. Green. A greenish cast may be caused by fluorescent lights, trace amounts of copper from home plumbing, or seasonal algae blooms. None pose a health hazard.

3. **If the water started clear and then became discolored, and if the water in the toilets or front faucet is discolored, the cause is probably activities taking place within the water distribution system, such as main flushing, hydrant use, or repairs. These activities can stir up sediment that has settled to the bottom of mains, but please know that dirt cannot enter mains during these activities. This discolored water poses no health threat, but to prevent staining, avoid doing laundry until the water clears.**

   Cure: Allow the water in the mains to settle down for an hour or so. Then, turn on the cold faucet in the bath tub or water the yard for a few minutes until the water clears.

If you have additional questions regarding discolored water, please call the Operations Department at 510-668-6500.

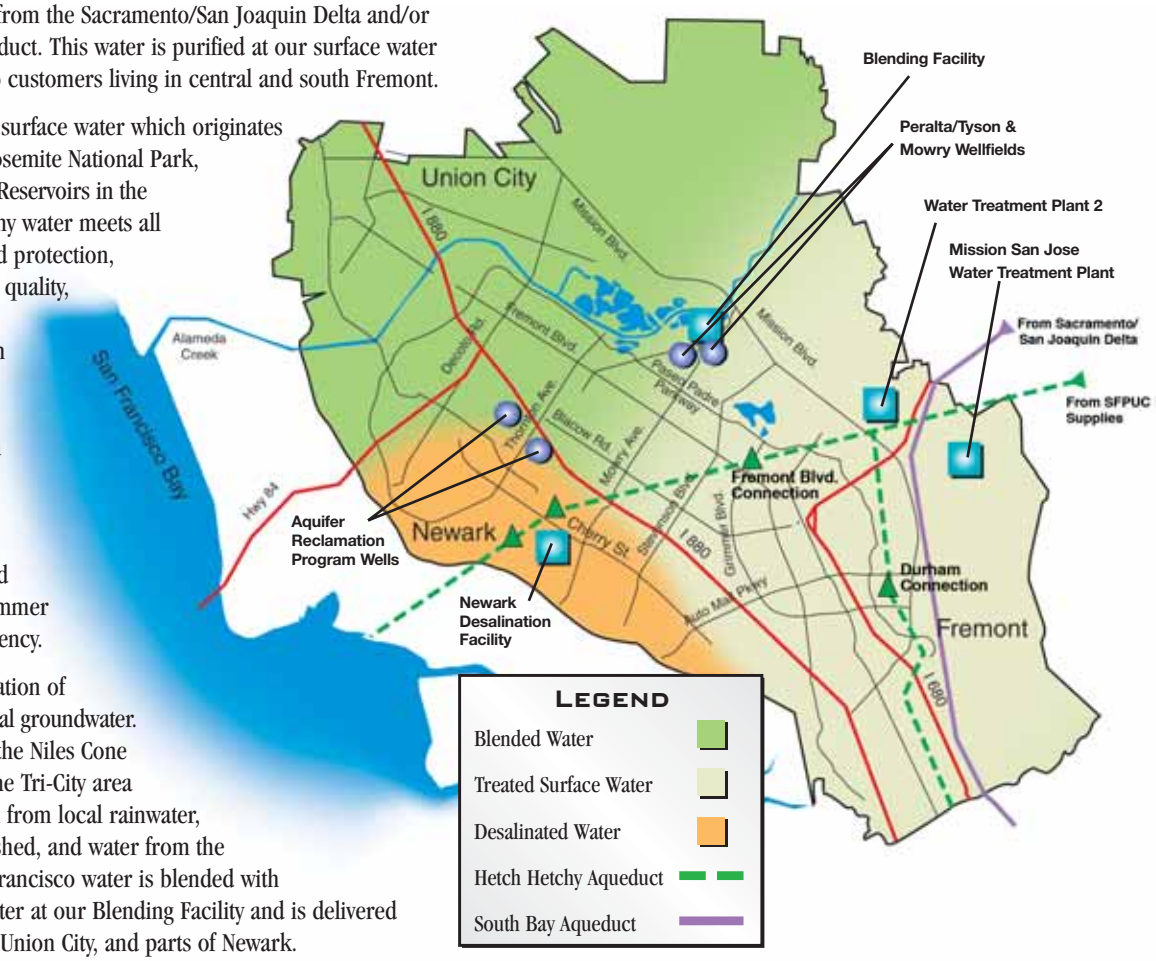
Where Our Water Comes From

ACWD supplies water to the Tri-City area from four sources.

- **Treated surface water** is imported from the Sacramento/San Joaquin Delta and/or Lake Del Valle via the South Bay Aqueduct. This water is purified at our surface water treatment plants and then delivered to customers living in central and south Fremont.
- **Purchased San Francisco water** is surface water which originates in either Hetch Hetchy Reservoir in Yosemite National Park, or locally in Calaveras or San Antonio Reservoirs in the Alameda Creek watershed. Hetch Hetchy water meets all federal and state criteria for watershed protection, disinfection treatment, bacteriological quality, and operational standards and has thus been granted a filtration exemption by the USEPA and the CDPH. Water from the local reservoirs is treated at a water treatment plant. Water from the San Francisco system is normally delivered through Hetch Hetchy Aqueduct connections in Fremont. Additional connections in Fremont and Newark may be used to meet peak summer water demands and in times of emergency.
- **Blended water** consists of a combination of purchased San Francisco water and local groundwater. The groundwater supply comes from the Niles Cone Groundwater Basin which underlies the Tri-City area and is replenished through infiltration from local rainwater, runoff from the Alameda Creek watershed, and water from the South Bay Aqueduct. Purchased San Francisco water is blended with Peralta/Tyson and Mowry Wellfield water at our Blending Facility and is delivered to customers living in north Fremont, Union City, and parts of Newark.
- **Desalted or desalinated water** is produced at the Newark Desalination Facility (NDF) from brackish (slightly salty) local groundwater. The desalinated water produced by the NDF is blended with Aquifer Reclamation Program well water to achieve a more balanced mineral content before being delivered to customers living in Newark.

Typical Distribution System Map

Your location in the Tri-City area determines the type of water you receive.



Your Views Are Welcome

Meetings of ACWD's Board of Directors typically begin at 6:00 p.m. on the second Thursday of each month and are open to the public. Meetings are held in the ACWD Board Room at the District's headquarters at 43885 South Grimmer Boulevard in Fremont. Further information regarding the Board meeting schedule can be found on our website at: ***www.acwd.org/bod_meetings.php5****.*

If you have any questions or need any more information about the quality of your water, please let us know. We would also appreciate any comments you have about this report. We can be reached by phone at (510) 668-4200, fax (510) 770-1793, on the Internet at www.acwd.org, or by mail at: Alameda County Water District, P.O. Box 5110, Fremont, CA 94537. Dr. Jeannette Kelley, Water Quality Laboratory Supervisor, can be reached at (510) 668-6520.