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 ألتقرير يحتوي على معلوماً ت مهمّة تتعلق بمياه ألشفة (أو ألشرب).
ترجم ألتقرير , أو تكلم مع شخص يستطيع أن يفهم ألتقرير."

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

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2008 Water Quality Report

Dear ACWD Customer:

This report summarizes the results of the approximately 60,000 analyses conducted on your drinking water during 2008. 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:

Paul Piraino
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 meets or surpasses 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.

Highly trained analysts in our state-certified laboratory 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. Analysts collect samples daily from the water sources, treatment facilities, and distribution system to ensure the high quality of the water you drink.

Water samples collected at water quality sampling stations located throughout the Tri-City area are analyzed by ACWD's state certified laboratory chemists and technicians.

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.

Drinking Water Source Assessments have been completed for all of ACWD's water sources, including our local groundwater supply.

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 (510) 668-6516.

2008 Water Quality Information

The chemists and technicians in ACWD's state certified laboratory performed approximately 60,000 chemical and bacteriological analyses on your water during 2008. 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 2008 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 level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

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)	0.13 - 0.13	0.13	ND - 0.80	0.20	0.15 - 0.24	0.21	ND - 0.23	0.10	Erosion of natural deposits
Fluoride (treated water) (2)	ppm	2	(1)	Average = 0.9 (Range 0.8 - 1.2)								Water additive that promotes strong teeth
Bromate	ppb	10	0	Highest RAA(3) = 5.77 (Range of individual detections: ND - 7.68)								Disinfection by-product
Disinfectant Residual (as Cl_2) (4)	ppm	[4]	[4]	Annual Average(5) = 2.14 (Range of individual detections: ND - 2.9)								Disinfectant residual
5 Haloacetic Acids (HAA5) (6)	ppb	60	NA	Highest RAA(7) = 14 (Range of individual detections: ND - 31)								Disinfection by-product
Nitrate (as NO_3)	ppm	45	(45)	ND - 7.2	2.4	ND - 2.0	ND	ND - 6.3	3.3	ND		Runoff from fertilizer use, erosion of natural deposits
Nitrate + Nitrite (as Nitrogen N)	ppm	10	(10)	ND - 0.94	ND	ND - 0.45	ND	ND - 1.4	0.7	ND		Runoff from fertilizer use, erosion of natural deposits
Total Trihalomethanes (TTHMs) (8)	ppb	80	NA	Highest RAA (7) = 23 (Range of individual detections: ND - 76)								Disinfection by-product
Turbidity (9)	NTU	TT = 0.3 (10)	NA	0.01 - 0.30	0.04	NA	NA	Not subject to the turbidity monitoring requirement				Soil runoff
		TT = 5.0 (11)	NA	NA	NA	0.06 - 0.30	0.15					

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 - 1.3	1.0	73	0	Corrosion of household plumbing systems
Lead (14)	ppb	15	(2)	0.4 - 70.1	9.8	73	4	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	49 - 125	89	3 - 12	6	52 - 79	62	88 - 110	101	Runoff/leaching from natural deposits; seawater influence
Specific Conductance	µmhos / cm	1600	348 - 674	529	47 - 219	95	504 - 706	564	422 - 451	433	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	20 - 65	39	1.9 - 40	12	37 - 59	48	4.8 - 14	7.2	Naturally occurring minerals
Total Dissolved Solids	ppm	1000	201 - 387	300	36 - 177	80	275 - 401	330	202 - 240	217	Naturally occurring minerals and metals

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	56 - 110	82	17 - 109	41	136 - 185	156	33 - 53	39	Naturally occurring minerals
Calcium	ppm	NA	14.7 - 24.7	17.8	3.1 - 24.9	8.7	32.3 - 56.1	40.7	10.4 - 22.8	14.2	Naturally occurring mineral
Hardness	ppm as $CaCO_3$	NA	74 - 130	103	14 - 116	41	158 - 228	185	46 - 80	55	Naturally occurring minerals
Magnesium	ppm	NA	8.9 - 16.0	12.5	0.4 - 10.3	3.1	14.9 - 20.3	17.3	3.6 - 7.4	4.7	Naturally occurring mineral
pH	units	NA	8.1 - 8.8	8.4	8.8 - 10.0	9.3	7.9 - 8.1	8.0	8.8 - 9.4	9.2	Naturally occurring minerals
Potassium	ppm	NA	2.2 - 4.6	3.1	0.3 - 1.5	0.6	1.5 - 2.2	1.7	1.1 - 1.2	1.2	Naturally occurring mineral
Sodium	ppm	NA	38 - 93	65	4 - 27	10	46 - 55	51	51 - 64	61	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 2008 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. Per the Stage 2 Disinfection Byproducts Rule, the range provided includes results from the Initial Distribution System Evaluation (IDSE) conducted in 2008.

(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 taken 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 2006. The next sampling round is scheduled for Summer 2009.

The Glass Test:

An Easy Way to Determine the Source of Unusual Odors in your Drinking Water

Occasionally, your drinking water may have an unexpected odor, taste, or appearance. These aesthetic characteristics typically do not pose a public health threat. The first step in solving any water quality problem is to identify the source; whether the odors are coming from your household plumbing or the main water supply. To determine the source of unusual odors, ACWD suggests the following:

- Ask others in your neighborhood if they have a similar problem. If they do not, the source of the problem is most likely your household plumbing.
- Turn on the water at one of the cold water faucets where the problem occurs. If the problem goes away after running the water for a few minutes, the problem is probably somewhere in your household plumbing system.

If the odor is evident in all of the taps and in the shower, the problem may be from your water supply. If the odor is most evident at one or two faucets, particularly the bathroom or kitchen faucets, ACWD recommends doing "The Glass Test" to pinpoint the source of the problem.

Conducting the Glass Test

Run the cold water tap for 20 to 30 seconds.

Get a clean glass. Fill and rinse twice with cold tap water.

Fill the glass and turn off the faucet.

Step away from the sink. (This eliminates the possibility of mistaking odors from your drain for odors in your water.)

Smell the water in the glass and characterize the odor, if any.

Solution: If the odor is not evident in the glass, but is noticeable when the water is running and you are standing at the sink, then the odor is most likely coming from the drain. This problem can easily be solved by filling the sink with hot water, adding a few ounces of chlorine bleach, and allowing the hot chlorinated water to flush and disinfect the drain. It is also good practice to periodically remove and clean the sink stopper. The garbage disposal in the kitchen sink can be cleaned in a similar manner.

If the odor is medicinal in smell, it is most likely the chloramine that ACWD uses to disinfect the water to ensure that it is safe to drink.

If, after going through this simple diagnostic test, the results are still inconclusive, contact ACWD and ask if it has received calls from residents within your area with similar complaints.

The glass test may help you diagnose the following odor problems:

PROBLEM	SOURCE	SOLUTION
Sulfur, rotten egg, sewage, or foul odor	Bacteria growing in your sink drain.	Conduct the glass test with cold water. If the water in the glass has no odor, then the odor is coming from the drain (see "Solution" above).
	Bacteria or sulfides coming from the water heater.	Conduct the glass test on the hot water. If it has an odor, there are two probable causes: 1) Bacteria may be residing in the water heater. Disinfecting the water heater may eliminate this odor. Instructions on how to do this can be found at www.acwd.org under Water Quality FAQs. 2) The water heater anode may need to be replaced. If experienced, inspect the anode yourself. Otherwise, call a plumber.
Moldy, musty, earthy, grassy, or fishy odor	If there is an odor in the glass, it may be caused by an algae bloom in source reservoirs.	Typically a short-lived event. Contact ACWD for more information.

Remember that off-flavors in ice can result from other foods stored in the freezer. You may need to replace the in-line filter in the refrigerator if you are experiencing off-flavors and odors in your ice.

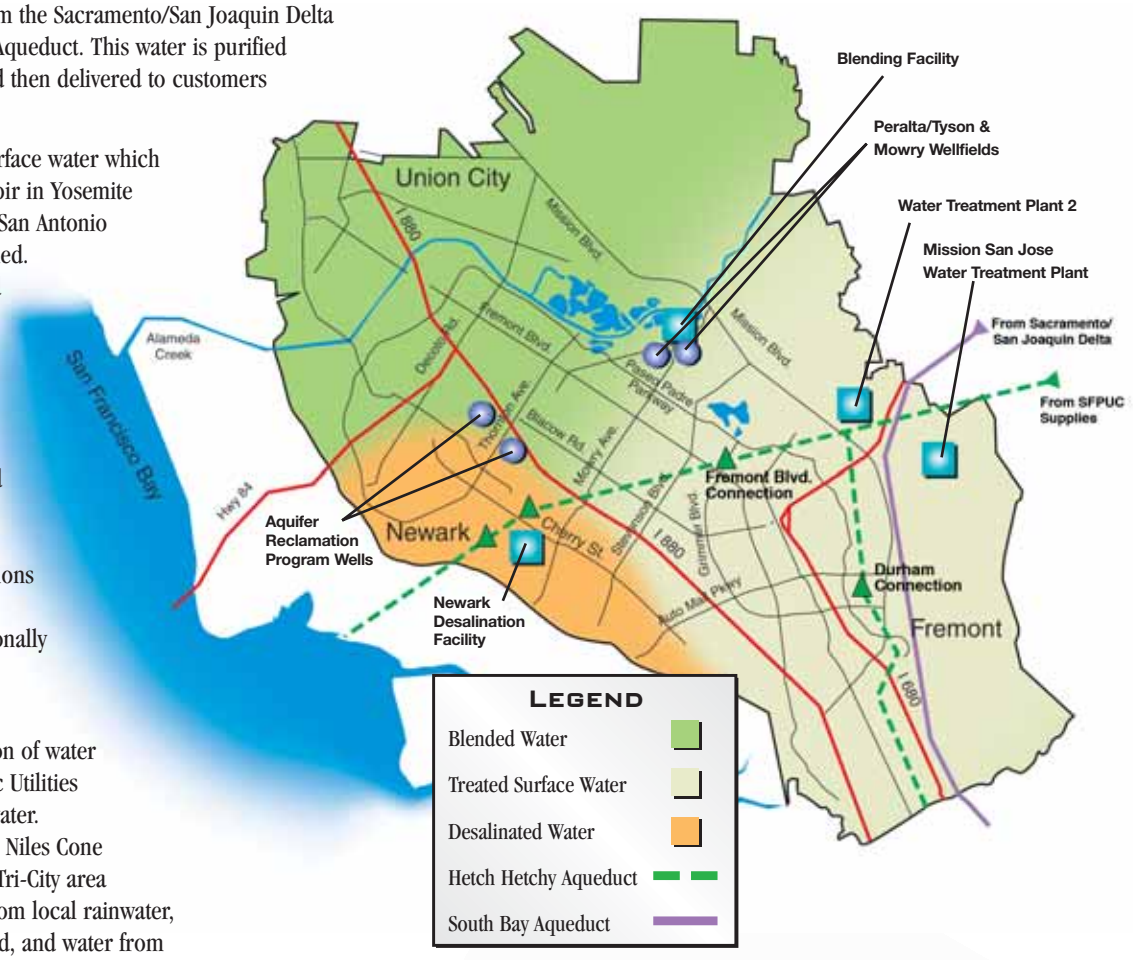
Where Our Water Comes From

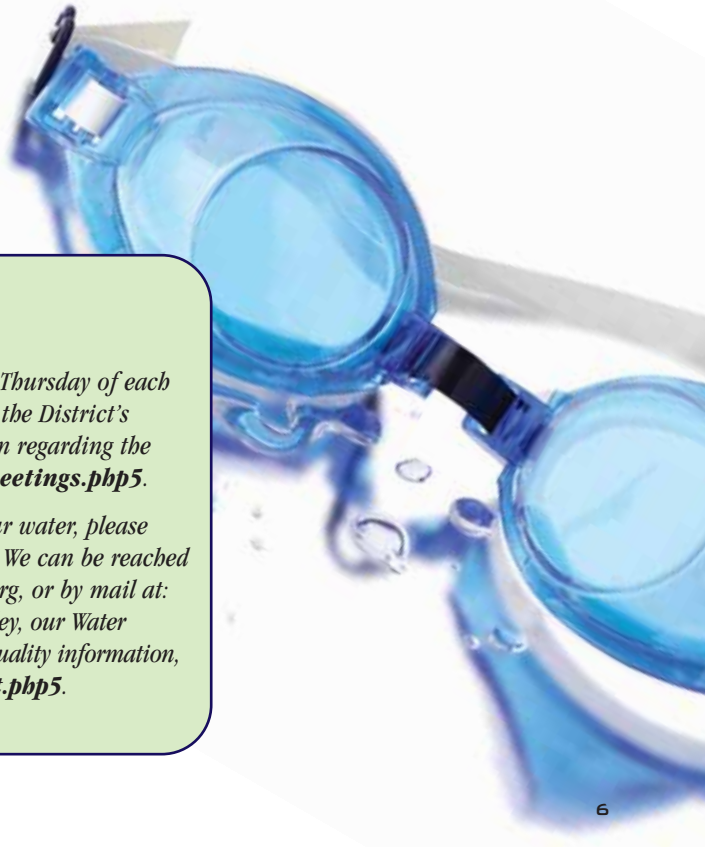
ACWD supplies water to the Tri-City area from four sources.

- **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 delivered through Hetch Hetchy Aqueduct connections in Fremont. Additional connections in Fremont and Newark are opened occasionally for emergency use and to meet peak summer water demands.
- **Blended water** consists of a combination of water purchased from the San Francisco Public Utilities Commission (SFPUC) and local groundwater. Our 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. SFPUC 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 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, our Water Quality Laboratory Supervisor, can be reached at (510) 668-6520. For current water quality information, check the ACWD Water Quality Website at: ***www.acwd.org/wq_production_report.php5****.*