



## **City of Norco 2009 Consumer Confidence Report For Calendar Year 2008**

### **Message from the Director**

We are pleased to provide you with this in-depth report on your water quality and supply. Included in this report are details about your drinking water quality, where it comes from and how it compares to State standards. The City of Norco water customers enjoy high-quality water that meets or exceeds all state and federal standards. This past year, we provided 3.3 billion gallons of drinking water to Norco residents and businesses. We are committed to providing our residents a high quality drinking water. This brochure provides a snapshot of last year's water quality.

In order to ensure that we continue to provide high-quality drinking water, this past year we purchased 346.0 million gallons of treated RO (reverse osmosis) water from the Chino Desalter Authority and 1.7 billion gallons of RO water from the Arlington Desalter Facility. This accounts for more than 62 percent of the City's annual water demands.

### **What is the City of Norco Water Department?**

The City of Norco Department of Public Works is responsible for the operation, maintenance, production and distribution of water to residents located within our City limits. Under the direction of the Public Works Director, the water supply system is monitored constantly to ensure that a sufficient volume of safe drinking water is always available to meet the needs of the community. The City chlorinates (disinfects) all well water and operates an iron and manganese removal plant. The City of Norco produces 38 percent of its water from 5 deep wells, 4 within the Temescal Basin and 1 lying north of the Santa Ana River within the Chino Basin. Treated water is also purchased from the Arlington Desalter, Chino Desalter Authority and Western Municipal Water District.

The personnel that operate, monitor, and maintain the City's water system from the source to your water meter are all certified by the State of California in the safe and proper methods and procedures required to safeguard the system from contamination. The City of Norco does not maintain its own water analysis laboratory. Water analysis work is performed by an independent state-certified laboratory, and test results are sent to the City as well as the State Department of Public Health.

### **Bottom Line – Your Water Meets or Exceeds All EPA and State Drinking Water Standards**

Last year, as in years past, your drinking water met or exceeded all EPA and State of California Public Health standards. The City of Norco water system vigilantly safeguards its water supplies and once again we are proud to report that our system did not violate a maximum contaminant level or any other water quality standard in 2008. Last year, we conducted more than 2,000 tests for over 80 contaminants. An assessment of the City of Norco drinking water sources was completed in December 2001 to evaluate which activities may cause potential contamination to our water supply. The report included the following sources; animal feeding operations, agricultural drainage, grazing, high-density septic systems, and sewer collection systems. A copy of the complete assessment summary is available at the City.

### **The City of Norco Has Detected Arsenic in our Drinking Water**

Through periodic routine monitoring the City discovered it had exceeded the USEPA maximum contaminant level (MCL) of 0.010 mg/l for arsenic. The City is required to notify all consumers when water quality violations occur. In January 2007, the arsenic MCL was reduced from 50 mg/l to 10mg/l. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer. The City has discontinued production from the sources exceeding the new MCL's and will be installing a treatment system to remove arsenic in mid-2009.

# 2008 CITY OF NORCO WATER QUALITY RESULT SUMMARY

## PRIMARY STANDARDS: Mandatory Health Related Standards (Results Sampled in 2008)

MEASURE	STATE	PHG	WELL WATER RANGE		NORCO WATER		W.M.W.D. MILLS	NORCO AVERAGE	Sources of Contamination
			ARLINGTON DESALTER	CHINO DESALTER	CHINO DESALTER	MILLS			
PERCENT OF PRODUCTION	UNIT	MCL	(MCLG)	RANGE	ARLINGTON DESALTER	CHINO DESALTER	MILLS	AVERAGE	Sources of Contamination
<b>MICROBIOLOGICAL</b>									
Total Coliform	Highest # of positives in one Month	No more than one (1) per Month	(0)	(1)	0	0	0	0	Naturally occurring
<b>CLARITY (NTU)</b>	NTU	5	NS	0.1 - 0.2	ND - 0.23	ND	0.05	0.1	Naturally occurring
<b>REGULATED ORGANIC</b>									
Total Trihalomethanes (TTHMs)	Ug/l	80	NS	ND - 39.3	3.6 - 5.0	0.5 - 1.40	22.0	4.81	Byproduct of disinfection treatment
Halocacetic Acids (HAA5)	Ug/l	60	NS	ND - 5.4	<5	0.5 - 5.8	3.4 - 19	0.6	Byproduct of disinfection treatment
Chlorine (CL2)	mg/L	4.0 as Cl2	4.0 as Cl2	0.51 - 0.75	0.7 - 0.9	0.5 - 0.85	0.5 - 0.8	0.59	
<b>REGULATED INORGANIC</b>									
Nitrate (NO3)	Mg/l	45	45	ND - 56	19.0 - 23.6	13.0 - 29.0	ND	13.5	Naturally occurring
Fluoride *	Mg/l	2	1	ND - 3.9	0.1 - 0.2	ND - 0.2	ND	2.3	Naturally occurring
Arsenic	Ug/l	10	0.004	ND - 13	ND	ND	ND - 2.6	0.58	Naturally occurring
<b>RADIOLOGICAL</b>									
Gross Alpha	pCi/l	15	(0)	ND - 1.4	ND - 2.53	ND	ND - 5.5	0.9	Naturally occurring
Uranium	pCi/l	20	0.43	ND - 5.1	ND - 2.23	ND - 1.5	1.5 - 2.8	1.4	Naturally occurring
<b>ADDITIONAL MONITORING</b>									
Perchlorate (PAL)	Ug/l	4	(0)	ND	ND	ND	ND	ND	Rocket fuel
Vanadium	Ug/l	NL= 50	NL= 50	ND - 7.9	3.8 - 6.5	ND	ND	0.7	Naturally occurring
Boron	Ug/l	NL= 1,000	NL= 1,000	1,900 - 4,600	ND	ND	ND	735.0	Petroleum By-product
<b>SECONDARY STANDARDS: Aesthetic Standards</b>									
	MEASURE	STATE	PHG	WELL WATER RANGE	ARLINGTON DESALTER	CHINO DESALTER	W.M.W.D. MILLS	NORCO AVERAGE	Sources of Contamination
Color Units	UNITS	15	NS	ND - 5	<3	<3	<3	<3	Naturally occurring
Odor Threshold Units	UNITS	3	NS	ND - 2.0	ND - 2.0	1.0	ND - 2.0	1.4	Naturally occurring
Chloride	Mg/l	500	NS	38 - 220	40.0	72.0	79.0	85.1	Naturally occurring
Sulfate	Mg/l	500	NS	22 - 130	39.0 - 49.0	6.1 - 15	45.0 - 79.0	49.3	Naturally occurring
Total Dissolved Solids "TDS"	Mg/l	1000	NS	280 - 760	200 - 360	200 - 420	280 - 371	359.8	Naturally occurring
pH Units	UNITS	NS	NS	7.5 - 8.6	8.3	7.0 - 8.0	8.1	8.3	Naturally occurring
Hardness as (CaCO3)	Mg/l	NS	NS	42.0 - 370.0	110 - 120	96 - 220	103.0	117.0	Naturally occurring
Sodium	Mg/l	NS	NS	29.0 - 190.0	36.0	16.0 - 33.0	63.0	72.5	Naturally occurring
Calcium	Mg/l	NS	NS	14.0 - 110.0	29.0	56.5	21.0	30.9	Naturally occurring
Potassium	Mg/l	NS	NS	ND - 4.1	0.1	1.4	2.8	0.9	Naturally occurring
Magnesium	Mg/l	NS	NS	1.2 - 20	11	3.8 - 10.0	12	9.4	Naturally occurring
Manganese	Ug/l	50	NS	ND - 500	ND	ND	ND	0.0	Naturally occurring
Iron	Ug/l	300	NS	ND - 3700	ND	ND	ND	ND	Naturally occurring
<b>LEAD AND COPPER (2007 Results)</b>									
	NUMBER OF SAMPLES COLLECTED	90TH PERCENTILE LEVEL	NUMBER OF SITES EXCEEDING AL	AL	PHG	Sources of Contamination			
Lead	30	11	2	15	2	Internal corrosion of household water plumbing systems;			
Copper	30	200	0	1,300	0.3	erosion of natural deposits			

**Other Secondary Standards that were not detected in the City of Norco water include:**  
Silver, Copper, Foaming Agents (MBAS), and Zinc

\*\*Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

## DEFINITIONS, ABBREVIATIONS AND NOTES

**PUBLIC HEALTH GOAL (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the **California Environmental Protection Agency**.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** The level of a contaminant in drinking water there is no known or expected risk to health. MCLG's are set by the **U.S. Environmental Protection Agency**.

**MAXIMUM CONTAMINANT LEVEL (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the PHG's and MCLG's as is economically and technologically feasible. Secondary MCLs are set to protect odor, taste, and appearance.

**PRIMARY DRINKING WATER STANDARD:** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

<b>Mg/l</b>	Milligrams per liter (parts per million) is equal in time to one second out of a week and a half.
<b>Ug/l</b>	Micrograms per liter (parts per billion) translates to just one second in nearly 33 years.
<b>PCi/l</b>	Pico curies per liter is a measure of radioactivity in water.
<b>NTU</b>	Nephelometric turbidity units is the measurement of suspended material.
<b>NS</b>	No Standard
<b>ND</b>	None Detected, laboratory analysis indicates that the constituent is not present.
<b>NC</b>	Not Collected
<b>NL</b>	Notification Level
<b>MRDL</b>	Maximum Residual Disinfection Level
<b>MRDLG</b>	Maximum Residual Disinfection Level Goal
<b>&lt;</b>	Less Than

**Nitrate;** levels above 45 Mg/l are a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall of agricultural activity. Large fluctuations of nitrate levels are not common in Norco; the City is consistently below the State MCL.

**Fluoride Variance;** the City of Norco has natural occurring Fluoride levels in some of their groundwater wells that exceed the State MCL of 2.0 Mg/l. In 1998, the City held public hearings and obtained a variance from compliance with the State fluoride standard. The variance establishes the City standard at 3.0 Mg/l, or three fourths of the Federal MCL of 4.0 Mg/l. To ensure compliance the City collects fluoride samples at each active well and at specific location points. The compliance point represents the blend of fluoride within our water distribution system. The City the variance level of 3.0 Mg/l during in 2008, the average for 2008 at the specified compliance point was 2.00 Mg/l, the water system average was 1.4 Mg/l. **Some people who drink water containing fluoride in excess of the Federal MCL of 4.0 Mg/l over many years may contract bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the State MCL of 2.0 Mg/l may result in mottled teeth.**

### A NOTE FROM THE EPA

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can also pickup substances resulting from the presence of animals or from human activity.

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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic tanks, agricultural livestock operations, and wildlife.
  - **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses.
  - **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agricultural application, and septic tanks.
  - **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.
- In order to ensure the tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits in bottled water that provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 infection. These people should seek advice about drinking water from their healthcare providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

Public participation regarding water quality issues are welcome at our Streets, Trails and Utilities Commission meetings, which are held at 7:00 p.m. on the first Monday of each month at Norco City Hall, Council Chambers, located at 2870 Clark Avenue, Norco, California. City of Norco water operations staff is also available to answer any questions you may have regarding our water supply at 951.270.5607.

SPECIAL NOTICE TO ALL EMPLOYERS, LANDLORDS, AND SCHOOLS, State Law (Section 116465(G)(3) of the California Health and Safety Code) requires that you provide copies of this notice to all of your employees, tenants, or students (and parents of minor students) within ten days of you receiving this notice. Generally, you may fulfill this responsibility by posting this notice at each site where drinking water is dispensed and/or mailing a copy of the notice. Failure to give notice as required could make you civilly liable in an amount not to exceed \$1,000 for each day of delay in notification.

#### **Where to Contact Us**

Should you have additional questions regarding your water quality, please feel free to contact us at:  
**Public Works Department** 951-270-5607; **Utility Billing** 951-582-5546; **After Hours Emergency** 951-371-1143

Este informe contiene information muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien 951-270-5607

**CITY OF  
NORCO**

PRESORTED  
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US POSTAGE  
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PERMIT 44

**POSTAL CUSTOMER  
NORCO CA 92860**

**NORCO'S WATER MEETS OR EXCEEDS ALL STATE AND  
FEDERAL WATER QUALITY STANDARDS**

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2009 CONSUMER CONFIDENCE REPORT  
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