2016 Consumer Confidence Report

Water System Name: **North Davis Meadows CSA #10** Report Date: March 10, 2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Water is supplied from two wells located on Fairway Drive and Blackhawk Place. A stand-by well is located east of 24375 Fairway Drive.

Drinking Water Source Assessment information: An assessment was completed in 2003. A copy of the Assessment is available at the Yolo County Planning, Public Works, and Environmental Services Department. Call 530-666-8811.

Time and place of regularly scheduled board meetings for public participation: The Yolo County Board of Supervisors meets twice a month on Tuesdays at 9:00 am in the Board Chambers in Woodland.

For more information, contact: Beth Gabor, Yolo County Manager of Operations and Strategy (PIO) Phone: (530) 666-8042

TERMS USED IN THIS REPORT

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 and 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 (USEPA).

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.

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.

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

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

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radiation)

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 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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. **Table 6 lists the results from samples taken from the distribution system.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	**Sample Date**	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	July 2016	6	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	July 2016	6	0.700	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 2 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	2015		89 - 99	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2015		410 - 450	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 3 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Arsenic (ppb)	2015		<2.0 – 2.4	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Barium (ppb)	2015		150 - 180	1000	(2000)	Erosion of natural deposits; discharge of oil drilling wastes and from mineral refineries.
Chromium (ppb)	2015		22 - 37	50	(100)	Erosion of natural deposits; discharge from steel and pulp mills; chrome plating.
Fluoride (ppm)	2015		0.33 – 0.36	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Gross Alpha	2016		1.26 – 3.79	15	0	Decay of natural and manmade products
Hexavalent Chromium (ppb)	**Quarterly During 2016**		**14 – 29***	**10**	**.02**	**Discharge from electroplating factories; leather tanneries; wood preservation; chemical synthesis; refractory production; textile manufacturing facilities; erosion of natural deposits.**
Nitrates (as NO3) (ppm) Sampled Monthly	**2016**		**3.6 – 13***	**10**	**10**	**Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.**
Selenium (ppb)	2015		5.6 - 28	50	30	Erosion of natural deposits; runoff from livestock lots (feed additive); discharge from petroleum, glass, and metal refineries; discharge from mines and chemical manufacturers.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Aluminum (ppb)	**Quarterly During 2016**		**33 – 460***	**200**		**Erosion of natural deposits; residue from some surface water treatment processes.**
Iron (ppb)	**Quarterly During 2016**		**54 – 930***	**300**		**Leaching from natural deposits; industrial wastes.**
Chloride (ppm)	2015		72 - 79	500		Runoff; leaching from natural deposits; seawater influence.
Specific Conductivity	2015		980 - 1000	1600		Substances that form ions when in water
Sulfate (ppm)	2015		58 - 76	500		Runoff/leaching from natural deposits.
Total Dissolved Solids (ppm)	2015		630 - 670	1000		Runoff/leaching from natural deposits.

TABLE 5 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Alkalinity (ppm)	2015		390 - 420	No	
Bicarbonate (ppm)	2015		390 - 420	No	
Boron (ppb)	2015		970 – 1200*	Yes	
Calcium (ppm)	2015		52 - 55	No	
Magnesium (ppm)	2015		69 - 77	No	
pH	2015	8.0		No	
Turbidity	2015		<0.10 – 0.25	No	

***Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 6 – DISTRIBUTION SYSTEM ANALYTICAL RESULTS						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Trihalomethanes (ppb)	2016	2.0	ND – 2.0	80	0	By-product of chlorination
Haleocetic Acids (ppb)	2016	.88	ND – 0.88	40	0	By product of chlorination
Coliform Bacteria	2016	Not Detected	NA	5%	0	Naturally occurring in the environment
Residual Chlorine (ppm)	2016	N/A	0.13 – 0.18	4	N/A	By-product of chlorination

Additional General Information on Drinking Water

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).

Nitrates in Drinking Water

Both of the wells serving your area exceeded the maximum contaminant level for nitrates in 2016. Nitrate in drinking water at levels above 10 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. High Nitrate levels 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.

Lead in Drinking Water

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 Yolo County Service Area 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.

Arsenic in Drinking Water

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Iron and Aluminum in Drinking Water

Water containing Iron and Aluminum in excess of the SMCL might tarnish or stain plumbing fixtures.

Boron in Drinking Water

Boron is not a regulated contaminant but is considered a contaminant of concern. When the concentration of Boron in drinking water exceeds 1000 ppb, then notification must be given to all water customers. Boron in groundwater is derived from the leaching of rocks and soils that contain borate or borosilicate minerals. The babies of some pregnant women who drink water containing Boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

Summary Information for Violation of a MCL, NL, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Primary MCL for Nitrates	**See Below**	**Since 2009**	**Actively seeking an alternative water supply**	**See above**
Primary MCL for Hexavalent Chromium	**See Below**	**Since August 2014**	**Actively seeking an alternative water supply**	**See Above**
Secondary MCL for Aluminum and Iron; Primary for Aluminum	**See Below**	**Since 2012**	**Actively seeking an alternative water supply**	**See above**
Unregulated Contaminant for Boron	**See Below**	**Since 2012**	**Actively seeking an alternative water supply**	**See above**

Summary Information for Operating Under a MCL Violation

Last year, both domestic wells serving the North Davis Meadows CSA exceeded the MCL for Nitrates. In an agreement with the State Water Board (formerly the Department of Public Health), a Compliance Order was given to the County. The County will continue to monitor the nitrate concentrations at each site every month until further notice. The Nitrate warning issued in 2009 by the Yolo County Planning, Public Works, and Environmental Planning (formerly the Yolo County Environmental Health Department) remains in effect. The Home Owners Association is work closely with consultants and the Health Department to seek an alternative water supply. For more information, please contact Beth Gabor 530.666.8042.

The two domestic wells and the stand-by well exceeded the Primary MCL for Hexavalent Chromium in 2016. These wells will be tested quarterly for this constituent and results will be reported to County Health and all residents. Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

The well located on Fairway Drive continues to produce water with high levels of Iron and Aluminum. Both wells produce water with a high level of Boron. At this time, Boron is not a regulated contaminant. However, notice must be given to the water user if the concentration is above 1000 ppm.