

Hayden Lake Irrigation District 2006 Annual Drinking Water Quality Report

Hayden Lake Irrigation District presents the 2006 Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you, our customers, with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve and protect our water resources.

Our water source is the Rathdrum-Prairie Aquifer. This Aquifer serves many wells in the surrounding area and is a reliable source of drinking water. Your help to maintain its quality benefits all of the residents who depend on this source.

The District is disappointed to report that in 2006 we experienced three violations of drinking water standards. Those violations are fully explained at the end of this report, one was for failing to monitor for nitrate at one of our well sites, the other two were for total coliform bacteria contaminations in April and December. The District mailed notices of each of those coliform events to its patrons at that time. If you have any questions concerning your water utility, please contact Alan Miller, District Administrator at 772-2612. We value our customers and want you to be informed about your water utility. If you wish to learn more, please attend any of our regularly scheduled meetings held on the first and third Tuesday of each month at 6:00 p.m. Meetings are held at the District office located at 2160 West Dakota Avenue in Hayden.

Hayden Lake Irrigation District routinely monitors for contaminants in your drinking water in accordance with State and Federal laws. 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 their potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791** or researching on line at: www.epa.gov/safewater/

The following table describes any contaminants detected in our water within the past 5 years. If multiple samples are taken during a five year period, only the most recent results will be shown. The District samples for many additional contaminants however they were not detected in laboratory analysis.

Contaminant	Date	Well # 1	Wells # 2 & 3	Well #4	MCL	MCLG	Violation	Typical source of Contaminant
Nitrate	12-1-2006		ND	1.6*	10	10	Y*	Runoff from Fertilizer; Leaching from Septic Tanks; Sewage; Erosion of Natural Deposits
Fluoride	12-4-2001	.6	.6	ND *	4	4	N	Erosion of Natural Deposits; Discharge from Fertilizer and Aluminum Factories
Radiological Gross Alpha	2-8-2001	.2	.8	3.4	15	0	N	Erosion of Natural Deposits
Radiological Uranium	11-29-2006			5 (ug/l)	30(ug/L)	0	N	Erosion of Natural Deposits

* Larix well monitored for nitrate 11-29-2006 and for fluoride 10-26-2004

Violation was for failing to monitor at well #1

Contaminant	Dates	Location	Detected	Violation	Typical Source of Contaminant
Total Coliform Bacteria	4-3- & 12-2006	Distribution System	Presence	Yes	Naturally Present in the Environment

Contaminant	# Samples	Date	Our water 90 th percentile	Range of detection	Action Level	MCLG
Lead	20	9-8_11-5-2004	ND (ppb)	ND to 2 (ppb)	15 (ppb)	0 (ppb)
Copper	20	9-8_11-5-2004	0.1 (ppm)	ND to 0.21 (ppm)	1.3 (ppm)	1.3 (ppm)

The following list explains terms you may not be familiar with, and assists in understanding the table provided above.

- **MCL** Maximum Contaminant Level is in milligrams per liter (mg/l) unless otherwise specified. One milligram per liter is equivalent to one part per million (ppm). Put another way, one ppm is equal to one part contaminant per one million parts drinking water. Or one penny in \$10,000.
- **ug/L** represents micrograms per liter, one ug/L is equivalent to one part per billion (ppb). Or one penny in \$100,000.
- **Radiological** contaminants are expressed in pico Curies per liter (pCi/L) unless otherwise specified.
- **MCLG** Maximum Contaminant Level Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Total Coliform** is monitored monthly at various locations in the District's water distribution system. At least two samples must show presence of coliform bacteria in order for a violation to have occurred.
- **Lead and Copper**
 - Testing is done at specified homes within the District
 - The 90th percentile of results is the reportable level
 - This means that 90% of all results are at or below (less than) the reported level
 - In our district the results from 20 samples consisted of two homes with 2 ppb and 18 homes with no detectable level of lead
 - **Action Level** is the point at which the District must take action to reduce lead or copper levels in the water
- ND means non-detect; this means that the contaminant was below the laboratories ability to reliably measure that contaminant.

Maximum Contaminant Levels (MCL) are the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology. MCLs are set at very stringent levels, to understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level or greater for a lifetime to have a one-in-a-million chance of having the described health effect. 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. EPA/CDC guidelines on appropriate methods to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Or on line at: <http://www.epa.gov/safewater/>

Our District relies on our customers to help us prevent harmful contamination of the drinking water system. You can help us accomplish this by completing the annual testing of all backflow prevention assemblies on your property. Annual testing of all backflow assemblies by a certified tester is required by the District and the state. We can supply you with a list of acceptable testers.

This year many of you have helped in maintaining water quality by participating in the cross connection survey. This has helped us to protect your drinking water in high-risk areas by installing the proper backflow assembly. Thank you for your prompt response.

As mentioned earlier the District experienced three violations of Idaho Drinking Water Standards in 2006.

One of those violations involved the Districts failure to monitor for nitrate in one of its wells. There is no plausible explanation for failing to do something. Upon notification the district did complete the monitoring at its well as soon as possible. The monitoring was completed January 31, 2007 at well #1. To prevent this problem from future occurrences the administrator has taken a more hands on role of monitoring the Districts sampling requirements and satisfaction of them. The 2007 results were 0.8

mg./L at well #1, this result will be shown on the 2007 Annual Drinking Water Report. Maximum allowable contaminant levels for nitrate are 10 mg./L

The required notification of this failure can be found on the last page of this Annual Water Report.

The District regrets this oversight, we take the requirements for monitoring water quality seriously. Historically nitrate contamination has been very low at our well sites, this is the good news hidden in the bad. Reliance on municipal sewer systems rather than septic systems, and reasonable use of fertilizers for farming and home lawns will continue to help protect the Aquifer from contamination.

The other two violations in 2006 were from a detected presence of total coliform bacteria in routine samples taken in April and December 2006. In each case a notification was mailed to each of our patrons within 30 days of the event. If you would like a copy of those notifications they are posted on our website: www.haydenirrigation.com along with this report, or stop by our office during regular business hours and one will be provided to you.

The District continues to take steps to ensure that the water quality is protected. Because we do not chlorinate (disinfect) our water we have some of the most stringent requirements of contractors working on our water system to prevent contamination. We continue to refine those requirements to provide greater levels of protection. The District prefers to provide high quality water to its users without disinfection or other treatment. To accomplish this we will continue to refine our methods of protecting water quality.

Thank you for allowing us to continue providing your family with drinking water this year. Hayden Lake Irrigation District works around the clock to provide the best water quality at every tap. We ask that all our customers help us protect our water resources, which is the heart of our community, our way of life and our children's future.

Additional copies of this report are available from our office at 2160 West Dakota or from our website at www.haydenirrigation.com

***The Board and Staff
Hayden Lake Irrigation District***

**Important Information About Your Drinking Water
Monitoring Requirements Not Met for
Hayden Lake Irrigation District
Public Water System ID1280087**

Our water system violated a drinking water standard IN 2006. Even though this was not an emergency, as our customers you have the right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the calendar year 2006 we did not monitor or test for nitrate at one of our well sites and therefore cannot be certain of the water quality during that time. Public Water Systems are required to monitor for nitrate once during each calendar year. Our well site #1 was not monitored in 2006 as required.

At this time there is nothing our customers need to do regarding this incident. A table below list the past 5 years of nitrate sampling completed at these two well sites. This table is provided to assist our customers in making informed choices about their water.

The District failed to complete this monitoring. As a result the administrator has taken a greater role in assuring all monitoring is completed in a timely and reasonable manner. The District regrets this oversight.

To provide additional information and for a better understanding of the potential health risks the following table is provided. This table illustrates nitrate sample results for the past five years at our well sites. Nitrate has a maximum contaminant level of 10 milligrams per liter (mg./L). This means that levels up to that are allowable in drinking water. When a public drinking water system exceeds 50% of that level it must complete monitoring quarterly rather than annually.

Year	Well #1	Well #2&3	Well #4
2006	Missed sample	ND	1.6
2005	0.6	0.6	2.0
2004	ND	0.5	2.8
2003	ND	0.5 & 0.6	
2002	ND & 0.7	0.5	

ND means 'non-detect' meaning the level was below the laboratory detection limit
Some years 2 samples were taken and are represented as 'result' & 'result'
Well # 4 was a new well brought on line in 2004

For more information please contact Alan Miller, District Administrator at (208) 772-2612, by email at alan.hlid@cda.twcbc.com or at the District office located at 2160 W. Dakota Avenue, Hayden

Please share this information with all the other people who drink this water. Especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Hayden Lake Irrigation District, Public Water System ID # 1280087
Distributed July 1, 2007