



# ANNUAL WATER QUALITY REPORT

## During 2005 Our Drinking Water Met Federal EPA And State Requirements.

# 2005

### YOU ARE INVITED!

You can also learn more by attending one of our regularly scheduled City Council meetings. They are held on the first and third Tuesday of each month at 7:00 pm at Centerville City Hall located at 250 North Main. Please check the City Council agenda prior to attending because our water system is not discussed at every meeting.

The Centerville City Water Division works around the clock to provide top quality water to every tap. Please call our office at 292-8232 if you have any questions. We ask that all our customers help us protect our water sources, which are vital to our community, our way of life and our children's future.

### Centerville City

655 North 1250 West  
Centerville, Utah 84014

Phone: 801-292-8232  
Fax: 801-292-8251  
mcarlson@ccpublicworks.com

We are very pleased to provide this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past years. Our goal is, and always has been, to provide to you a safe and dependable supply of drinking water.

### Where do we get our Water?

In 2005, water pumped from our underground wells provided 71% of our drinking water. Centerville City also purchased 163 million gallons of water, or 29%, from Weber Basin, which is treated surface water from the Weber River drainage.

### Certified Operators

Centerville City's water operators are certified in water distribution and have been trained in backflow prevention. What does this mean to you as the water customer?

Our personnel have been trained and know how to make repairs, keep contaminated water out of our water system and handle problems as they arise.

The City's crew maintains approximately 71 miles of water mains and 767 fire hydrants. Centerville City delivered water to 4,112 customer accounts serving a population of 16,000 in 2005.

For the fiscal year 2005, our Water Department's budget was \$1,710,551. Much of the budget was spent upgrading the water system to meet the needs of our customers for today as well as the future.

### Source Protection

Centerville has a Drinking Water Source Protection Plan. What is a Source Protection Plan? It identifies potential sources of contamination and our source protection areas, which include many homes.

Many of our sources are in remote and protected locations and there is very little potential for source contamination. Other sources are within the range and influence of private homes, so we ask everyone to be careful of what may be discharged around your yard or street such as oil, antifreeze, fertilizer, pesticides, etc. The Drinking Water Source Protection Plan is available for review at the Public Works Building located at 655 North 1250 West.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## ..... AWARDS! .....



The Centerville City Water System was recently awarded the Most Outstanding Water System serving a population over 10,000 by the Rural Water Association of Utah.

### Fluoride

Centerville City residents have been receiving optimum fluoride delivery since May 2003. Our monthly average of 0.953 met the optimal application requirements. Most pump stations now have fluoride equipment in operation. If you have any questions about fluoride, please call the Davis County Health Department at 801-451-3296 or Centerville Public Works at: 801-292-8232.

### The Church Well Fill Station

The Fill Station is located at 200 South 200 East on the northeast corner. By the touch of one button, citizens can get pristine well water that has nothing added.



We want our valued customers to be informed about their water utility. If you have any questions, please contact Centerville City Public Works at 292-8232, Monday through Friday except holidays. You may ask for Randy Randall, Public Works Director; Michael Carlson, Water Supervisor & Deputy Public Works Director; or Rosalyn Brown, Public Works Secretary.

# WHAT IS IN YOUR WATER?

Centerville City routinely monitors for contaminants in your drinking water in accordance with Federal and Utah State regulations. The following table shows the detection of the following constituents in your water for the period of January 1<sup>st</sup> to December 31, 2005. It is important to note, none of these were in excess of the safe limit as determined by the EPA.

**Non-Detects (ND)** - lab analysis show the constituent isn't present.  
**ND/Low - High** - Our water system has multiple sources. In order to accurately report testing results, we show the lowest and highest value detected for all sources in this table (including the water from Weber Basin.)  
**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.  
**Parts per billion (ppb) or Micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.  
**Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.  
**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.  
**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.  
**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  
**Maximum Contaminant Level (MCL)** - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.  
**Maximum Contaminant Level Goal (MCLG)** - (mandatory language) The "Goal"(MCLG) 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.

## TEST RESULTS

| Contaminant   | Violation Y/N | Level Detected ND/Low-High | Unit Measurement | MCLG | MCL   | Date Sampled | Likely Source of Contamination   |
|---|---------------|----------------------------|------------------|------|---|--------------|--|
| <b>Microbiological Contaminants</b>   |               |                            |                  |      |   |              |  |
| Total Coliform Bacteria   | N             | 0                          | N/A              | 0    | Presence of coliform bacteria in 5% of monthly samples  | 2005         | Naturally present in the environment   |
| Fecal coliform and <i>E.coli</i>  | N             | 0                          | N/A              | 0    | a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive | 2005         | Human and animal fecal waste   |
| Turbidity for Ground Water  | N             | 0-1.2                      | NTU              | N/A  | 5   | 2005         | Soil runoff  |
| <b>Radioactive Contaminants</b>   |               |                            |                  |      |   |              |  |
| Alpha emitters  | N             | 2-10                       | pCi/l            | 0    | 15  | 2005         | Erosion of natural deposits  |
| Beta/photon emitters*   | N             | 3-9                        | pCi/L            | 0    | 50  | 2005         | Decay of natural and man-made deposits.  |
| *Beta/photon emitters: The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta/photon emitters. |               |                            |                  |      |   |              |  |
| <b>Inorganic Contaminants</b>   |               |                            |                  |      |   |              |  |
| Antimony  | N             | ND                         | ppb              | 6    | 6   | 2005         | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder                                      |
| Arsenic   | N             | ND-1200                    | ppb              | 0    | 10  | 2005         | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes                   |
| Asbestos  | N             | W                          | MFL              | 7    | 7   |              | Decay of asbestos cement water mains; erosion of natural deposits  |
| Barium  | N             | 10-30                      | ppb              | 2000 | 2000  | 2005         | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                               |
| Beryllium   | N             | ND                         | ppb              | 4    | 4   | 2005         | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries |

## TEST RESULTS

| Contaminant  | Violation Y/N | Level Detected ND/Low-High | Unit Measurement | MCLG            | MCL             | Date Sampled | Likely Source of Contamination  |
|--|---------------|----------------------------|------------------|-----------------|-----------------|--------------|---|
| Cadmium  | N             | ND                         | ppb              | 5               | 5               | 2005         | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints |
| Chromium   | N             | ND                         | ppb              | 100             | 100             | 2005         | Discharge from steel and pulp mills; erosion of natural deposits  |
| Copper<br>90% results<br># of sites that exceed the AL | N             | a.1269<br>b.0              | ppb              | 1300            | AL=1300         | 2005         | Corrosion of household plumbing systems; erosion of natural deposits  |
| Cyanide  | N             | ND                         | ppb              | 200             | 200             | 2005         | Discharge from steel/metal factories; discharge from plastic and fertilizer factories   |
| Fluoride   | N             | ND-400                     | ppb              | 4000            | 4000            | 2005         | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories           |
| Lead<br>90% results<br># of sites that exceed the AL   | N             | a. 3<br>b.0                | ppb              | 0               | AL=15           | 2005         | Corrosion of household plumbing systems, erosion of natural deposits  |
| Mercury (inorganic)                                    | N             | ND                         | ppb              | 2               | 2               | 2005         | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland                   |
| Nitrate (as Nitrogen)                                  | N             | 800-3000                   | ppb              | 10000           | 10000           | 2005         | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits   |
| Nitrite (as Nitrogen)                                  | N             | W                          | ppb              | 10000           | 10000           | 2005         | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits   |
| Selenium   | N             | ND1200                     | ppt              | 50000           | 50000           | 2005         | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines                                    |
| Sodium   | N             | 25-51                      | ppm              | None set by EPA | None set by EPA | 2005         | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.  |
| Sulfate  | N             | 13-38                      | ppm              | 500*            | 500             | 2005         | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland                   |
| Thallium   | N             | ND                         | ppb              | 1               | 2               | 2005         | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories   |
| TDS (Total Dissolved Solids)                           | N             | 160-328                    | ppm              | 1000**          | 1000**          | 2005         | Erosion of natural deposits   |

\*If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used.

\*\*If TDS is greater than 1000 ppm the supplier shall demonstrate to the Utah Drinking Water Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source is available.

## TEST RESULTS

| Contaminant   | Violation Y/N | Level Detected ND/Low-High | Unit Measurement | MCLG | MCL | Date Sampled | Likely Source of Contamination  |
|---|---------------|----------------------------|------------------|------|-----|--------------|---|
| <b>Synthetic Organic Contaminants including Pesticides and Herbicides</b> |               |                            |                  |      |     |              |   |
| 2,4-D   | N             | W                          | ppb              | 70   | 70  | 2005         | Runoff from herbicide used on row crops   |
| 2,4,5-TP (Silvex)   | N             | W                          | ppb              | 50   | 50  | 2005         | Residue of banned herbicide   |
| Acrylamide  | TT            | W                          | N/A              |      | TT  | 2005         | Added to water during sewage/wastewater treatment   |
| Alachlor  | N             | W                          | ppb              | 0    | 2   | 2005         | Runoff from herbicide used on row crops   |
| Atrazine  | N             | W                          | ppb              | 3    | 3   | 2005         | Runoff from herbicide used on row crops   |
| Benzo(a)pyrene (PAH)  | N             | W                          | ppt              | 0    | 200 | 2005         | Leaching from linings of water storage tanks and distribution lines                         |
| Carbofuran  | N             | W                          | ppb              | 40   | 40  | 2005         | Leaching of soil fumigant used on rice and alfalfa  |
| Chlordane   | N             | W                          | ppb              | 0    | 2   | 2005         | Residue of banned termiticide   |
| Dalapon   | N             | W                          | ppb              | 200  | 200 | 2005         | Runoff from herbicide used on rights of way   |
| Di(2-ethylhexyl) adipate  | N             | W                          | ppb              | 400  | 400 | 2005         | Discharge from chemical factories   |
| Di(2-ethylhexyl) phthalate  | N             | W                          | ppb              | 0    | 6   | 2005         | Discharge from rubber and chemical factories  |
| Dibromochloropropane  | N             | W                          | ppt              | 0    | 200 | 2005         | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards       |
| Dinoseb   | N             | W                          | ppb              | 7    | 7   | 2005         | Runoff from herbicide used on soybeans and vegetables                                       |
| Diquat  | N             | W                          | ppb              | 20   | 20  | 2005         | Runoff from herbicide use   |
| Dioxin [2,3,7,8-TCDD]   | N             | W                          | ppq              | 0    | 30  | 2005         | Emissions from waste incineration and other combustion; discharge from chemical factories   |
| Endothall   | N             | W                          | ppb              | 100  | 100 | 2005         | Runoff from herbicide use   |
| Endrin  | N             | W                          | ppb              | 2    | 2   | 2005         | Residue of banned insecticide   |
| Epichlorohydrin   | TT            | W                          | N/A              | 0    | TT  | 2005         | Discharge from industrial chemical factories; an impurity of some water treatment chemicals |
| Ethylene dibromide  | N             | W                          | ppt              | 0    | 50  | 2005         | Discharge from petroleum refineries   |
| Glyphosate  | N             | W                          | ppb              | 700  | 700 | 2005         | Runoff from herbicide use   |
| Heptachlor  | N             | W                          | ppt              | 0    | 400 | 2005         | Residue of banned termiticide   |
| Heptachlor epoxide  | N             | W                          | ppt              | 0    | 200 | 2005         | Breakdown of heptachlor   |
| Hexachlorobenzene   | N             | W                          | ppb              | 0    | 1   | 2005         | Discharge from metal refineries and agricultural chemical factories                         |
| Hexachlorocyclopentadiene   | N             | W                          | ppb              | 50   | 50  | 2005         | Discharge from chemical factories   |
| Lindane   | N             | W                          | ppt              | 200  | 200 | 2005         | Runoff/leaching from insecticide used on cattle, lumber, gardens                            |
| Methoxychlor  | N             | W                          | ppb              | 40   | 40  | 2005         | Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock             |

## TEST RESULTS

| Contaminant                          | Violation Y/N | Level Detected ND/Low-High | Unit Measurement | MCLG  | MCL   | Date Sampled | Likely Source of Contamination  |
|--------------------------------------|---------------|----------------------------|------------------|-------|-------|--------------|---|
| PCBs [Polychlorinated biphenyls]     | N             | W                          | ppt              | 0     | 500   | 2005         | Runoff from landfills; discharge of waste chemicals                     |
| Pentachlorophenol                    | N             | W                          | ppb              | 0     | 1     | 2005         | Discharge from wood preserving factories                                |
| Picloram                             | N             | W                          | ppb              | 500   | 500   | 2005         | Herbicide runoff  |
| Simazine                             | N             | W                          | ppb              | 4     | 4     | 2005         | Herbicide runoff  |
| Toxaphene                            | N             | W                          | ppb              | 0     | 3     | 2005         | Runoff/leaching from insecticide used on cotton and cattle              |
| <b>Volatile Organic Contaminants</b> |               |                            |                  |       |       |              |   |
| Benzene                              | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from factories; leaching from gas storage tanks and landfills |
| Carbon tetrachloride                 | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from chemical plants and other industrial activities          |
| Chlorobenzene                        | N             | ND                         | ppb              | 100   | 100   | 2005         | Discharge from chemical and agricultural chemical factories             |
| o-Dichlorobenzene                    | N             | ND                         | ppb              | 600   | 600   | 2005         | Discharge from industrial chemical factories                            |
| p-Dichlorobenzene                    | N             | ND                         | ppb              | 75    | 75    | 2005         | Discharge from industrial chemical factories                            |
| 1,2 - Dichloroethane                 | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from industrial chemical factories                            |
| 1,1 - Dichloroethylene               | N             | ND                         | ppb              | 7     | 7     | 2005         | Discharge from industrial chemical factories                            |
| cis-1,2-ichloroethylene              | N             | ND                         | ppb              | 70    | 70    | 2005         | Discharge from industrial chemical factories                            |
| trans - 1,2 -Dichloroethylene        | N             | ND                         | ppb              | 100   | 100   | 2005         | Discharge from industrial chemical factories                            |
| Dichloromethane                      | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from pharmaceutical and chemical factories                    |
| 1,2-Dichloropropane                  | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from industrial chemical factories                            |
| Ethylbenzene                         | N             | ND                         | ppb              | 700   | 700   | 2005         | Discharge from petroleum refineries                                     |
| Styrene                              | N             | ND                         | ppb              | 100   | 100   | 2005         | Discharge from rubber and plastic factories; leaching from landfills    |
| Tetrachloroethylene                  | N             | ND                         | ppb              | 0     | 5     | 2005         | Discharge from factories and dry cleaners.                              |
| 1,2,4 -Trichlorobenzene              | N             | ND                         | ppb              | 70    | 70    | 2005         | Discharge from textile-finishing factories                              |
| 1,1,1 - Trichloroethane              | N             | ND                         | ppb              | 200   | 200   | 2005         | Discharge from metal degreasing sites and other factories               |
| 1,1,2 -Trichloroethane               | N             | ND                         | ppb              | 3     | 5     | 2005         | Discharge from industrial chemical factories                            |
| Trichloroethylene                    | N             | ND-4200                    | ppt              | 0     | 5000  | 2005         | Discharge from metal degreasing sites and other factories               |
| TTHM [Total trihalomethanes]         | N             | ND13                       | ppb              | 0     | 100   | 2005         | By-product of drinking water disinfection                               |
| Toluene                              | N             | ND                         | ppb              | 1000  | 1000  | 2005         | Discharge from petroleum factories                                      |
| Vinyl Chloride                       | N             | ND                         | ppb              | 0     | 2     | 2005         | Leaching from PVC piping; discharge from plastics factories             |
| Xylenes                              | N             | ND                         | ppb              | 10000 | 10000 | 2005         | Discharge from petroleum factories; discharge from chemical factories   |
| Haloacetic Acids                     | N             | ND                         | ppb              | 60    | n/a   | 2005         | By-product of drinking water disinfection                               |
| Chlorine                             | N             | ND                         | ppm              | 4     | 4     | 2005         | Water additive used to control microbes                                 |

## TEST RESULTS

| Contaminant | Violation Y/N | Level Detected ND/Low-High | Unit Measurement | MCLG | MCL | Date Sampled | Likely Source of Contamination |
|-------------|---------------|----------------------------|------------------|------|-----|--------------|--------------------------------|
|-------------|---------------|----------------------------|------------------|------|-----|--------------|--------------------------------|

### Unregulated Contaminants

These are contaminants that some systems are required to monitor for but which EPA has not set MCLs.

| Contaminant               | Level Detected | Unit Measurement | Date Sampled | Contaminant             | Level Detected | Unit Measurement | Date Sampled |
|---------------------------|----------------|------------------|--------------|-------------------------|----------------|------------------|--------------|
| Chloroform                | ND             | Ppb              | 2005         | Aldrin                  | ND             | ppb              | 2005         |
| Bromodichloromethane      | ND             | Ppb              | 2005         | Butachlor               | ND             | ppb              | 2005         |
| Chlorodibromomethane      | ND             | Ppb              | 2005         | Carbaryl                | ND             | ppb              | 2005         |
| Bromoform                 | ND             | Ppb              | 2005         | Dicamba                 | ND             | ppb              | 2005         |
| m Dichlorobenzene         | ND             | Ppb              | 2005         | Dieldrin                | ND             | ppb              | 2005         |
| 1,1 Dichloropropene       | ND             | Ppb              | 2005         | 3 Hydroxycarbofuran     | ND             | ppb              | 2005         |
| 1,1 Dichloroethane        | ND             | Ppb              | 2005         | Methomyl                | ND             | ppb              | 2005         |
| 1,1,2,2 Tetrachloroethane | ND             | Ppb              | 2005         | Metolachlor             | ND             | ppb              | 2005         |
| 1,3 Dichloropropane       | ND             | Ppb              | 2005         | Metribuzin              | ND             | ppb              | 2005         |
| Chloromethane             | ND             | Ppb              | 2005         | Propachlor              | ND             | ppb              | 2005         |
| Bromomethane              | ND             | Ppb              | 2005         | 1,2,4-Trimethylbenzene  | ND             | ppb              | 2005         |
| 1,2,3 Trichloropropane    | ND             | Ppb              | 2005         | 1,2,3-Trichlorobenzene  | ND             | ppb              | 2005         |
| 1,1,1,2 Tetrachloroethane | ND             | Ppb              | 2005         | n-Propylbenzene         | ND             | ppb              | 2005         |
| Chloroethane              | ND             | Ppb              | 2005         | n-Butylbenzene          | ND             | ppb              | 2005         |
| 2,2 Dichloropropane       | ND             | Ppb              | 2005         | Napthalene              | ND             | ppb              | 2005         |
| o Chlorotoluene           | ND             | Ppb              | 2005         | Hexachlorobutadiene     | ND             | ppb              | 2005         |
| p Chlorotoluene           | ND             | Ppb              | 2005         | 1,3,5-Trimethylbenzene  | ND             | ppb              | 2005         |
| Bromobenzene              | ND             | Ppb              | 2005         | p-Isopropyltoluene      | ND             | ppb              | 2005         |
| 1,3 Dichloropropene       | ND             | Ppb              | 2005         | Isopropylbenzene        | ND             | ppb              | 2005         |
|                           |                |                  |              | Tert-butylbenzene       | ND             | ppb              | 2005         |
| Nickel                    | ND             | Ppb              | 2005         | Sec-butylbenzene        | ND             | ppb              | 2005         |
|                           |                |                  |              | Fluorotrichloromethane  | ND             | ppb              | 2005         |
|                           |                |                  |              | Dichlorodifluoromethane | ND             | ppb              | 2005         |
|                           |                |                  |              | Bromochloromethane      | ND             | ppb              | 2005         |

*All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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 potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.*



## CENTERVILLE CITY

655 North 1250 West

Centerville Utah 84014

Phone: 801-292-8232

Email: [mcarlson@ccpublicworks.com](mailto:mcarlson@ccpublicworks.com)

Web: [www.centervilleut.net](http://www.centervilleut.net)