2023

Town of Windsor **Drinking Water**

CONSUMER CONFIDENCE REPORT

for Calendar Year 2022

TOWN OF WINDSOR® COLORADO

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Public Water System ID CO0162843

WATER QUALITY

We are proud to release our 2022 water quality report. We believe it is essential to inform our water consumers about water services, water quality, and contaminant levels so that every citizen knows of the Town of Windsor's commitment to providing safe drinking water to the community.

Through an intensive testing process involving Fort Collins, Greeley, the Northern Weld County Water District, and the Town of Windsor, we have achieved a level of water purity that is compliant with all federal and local regulations, ensuring water safety and quality in your home and the in the community.

If you have questions regarding this report, contact Deputy Director of Public Works Brian Rowe at 970-674-5400 or browe@windsorgov.com.

GENERAL INFORMATION

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. 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, who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections.

These people should seek advice about drinking water from their healthcare providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at 1-800-426-4791, or visit the EPA Drinking Water Regulations website.

To ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

SOURCES OF DRINKING WATER

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, which 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 storm water runoff, and residential uses.
- ***Organic chemical contaminants***, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.
- ***Radioactive contaminants***, that can be naturally occurring or be the result of oil and gas production and mining activities.

Source Water Assessment & Protection (SWAP)

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report, visit the state's Consumer Confidence Rule webpage. The report is under "Source Water Assessment Reports," then "Assessment Reports by County." Select ***Weld County*** and find ***162843; Windsor Town of*** or contact Brian Rowe at 970-674-5400.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water are listed on the next page.

Lead in Drinking Water

If present, elevated lead levels can cause serious health problems (especially for pregnant women and young children). Lead levels at your home may be higher than in other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested.

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.

Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or on the EPA website.

OUR WATER SOURCES

The Town of Windsor purchases water from other water systems and is required to attach/include water quality data for purchased water with this report. Click on the district name below to find those suppliers' most current Consumer Confidence Report.

Source (Purchased From)	Source Type	Water Type
CITY OF GREELEY 162321	Consecutive Connection	Surface Water
FT COLLINS-LOVELAND WATER DISTRICT 135292	Consecutive Connection	Surface Water
NORTH WELD COUNTY WATER DISTRICT 162553	Consecutive Connection	Surface Water

The ***City of Greeley's*** drinking water comes from waters located in four river basins: Cache la Poudre (including six high-mountain reservoirs in the Poudre Basin), Laramie, Big Thompson (including a portion of the C-BT and Windy Gap projects), and Colorado. In addition, storage in a plains reservoir system (Boyd Lake, Lake Loveland, and Horseshoe Lake) provides for peak summer demands. The City of Greeley treats raw water at the Boyd Lake or Bellevue Water Treatment Plants. This system provides approximately 30% of Windsor's water.

Fort Collins and North Weld water comes from the Cache la Poudre River and Colorado-Big Thompson (C-BT) watersheds. These districts collaborate with other water providers to develop and implement water quality monitoring programs for Horsetooth Reservoir and the upper Cache la Poudre watershed. They partner with other organizations regionally to monitor and analyze water quality in the C-BT watershed; visit http://www.btwatershed.org/ for more information. Monitoring data is used to trend water quality changes in our watersheds over time. These systems together provide approximately 70% of Windsor's water.

Potential sources of contamination in source water may come from hazardous waste generators, chemical inventory/storage sites, toxic release inventory sites, permitted wastewater discharge sites, aboveground, underground and leaking storage tank sites, solid waste sites, existing/abandoned mine sites, other facilities, commercial/industrial & transportation, low intensity residential, urban recreational grasses, row crops, fallow, pasture/hay, deciduous forest, evergreen forest, mixed forest, septic systems, oil/gas wells, and road miles.

DETECTED CONTAMINANTS

According to federal and state laws, the Town of Windsor routinely monitors for contaminants in your drinking water. Unless otherwise noted, the following tables show all detections from January 1 to December 31, 2022. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data, though representative, may be more than one year old.

Violations and Formal Enforcement Actions, if any, are reported in the next section of this report. Note: Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section, the Town of Windsor did not detect any contaminants in the last round of monitoring.

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water									
Water Source	Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	TT Min. Ratio	TT Violation	Typical Sources
CITY OF GREELEY	Total Organic Carbon Ratio	2022	1.32	0.95 to 1.51	20	Ratio	1.00	No	Naturally present in the environment

Disinfection Byproducts Sampled in the Distribution System										
Water Source	**Contaminant Name**	**Year**	**Average**	**Range Low-High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
CITY OF GREELEY	Total Haloacetic Acids (HAA5)	2022	24.71	12.9 to 38.8	32	ppb	60	N/A	No	Byproduct of drinking water disinfection
CITY OF GREELEY	Total Trihalomethanes (TTHM)	2022	48.89	27.9 to 68.8	32	ppb	80	N/A	No	Byproduct of drinking water disinfection
CITY OF GREELEY	Chlorite	2022	0.24	0.15 to 0.29	12	ppb	1.0	.8	No	Byproduct of drinking water disinfection
FORT COLLINS LOVELAND WATER DISTRICT	Total Haloacetic Acids (HAA5)	2022	23.23	17.1 to 33.5	32	ppb	60	N/A	No	Byproduct of drinking water disinfection
FORT COLLINS LOVELAND WATER DISTRICT	Total Trihalomethanes (TTHM)	2022	30.83	19.5 to 45.1	32	ppb	80	N/A	No	Byproduct of drinking water disinfection
FORT COLLINS LOVELAND WATER DISTRICT	Chlorite	2021	0.36	0.17 to 0.44	6	ppb	1.0	.8	No	Byproduct of drinking water disinfection
NORTH WELD COUNTY WATER DISTRICT	Total Haloacetic Acids (HAA5)	2022	26.3	19.9 to 33.1	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
NORTH WELD COUNTY WATER DISTRICT	Total Trihalomethanes (TTHM)	2022	37.96	26.46 to 56.54	16	ppb	80	N/A	No	Byproduct of drinking water disinfection
NORTH WELD COUNTY WATER DISTRICT	Chlorite	2021	0.44	0.43 to 0.44	3	ppb	1.0	.8	No	Byproduct of drinking water disinfection
LOCAL SAMPLES	Total Haloacetic Acids (HAA5)	2022	27.33	16.6 to 55	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
LOCAL SAMPLES	Total Trihalomethanes (TTHM)	2022	47.66	33.6 to 79.6	16	ppb	80	N/A	No	Byproduct of drinking water disinfection

Disinfectants Sampled in the Distribution System									
Water Source	**Disinfectant Name**	**Time Period**	**Results**	**No. of Samples Below Level**	**Sample Size**	**TT Requirements**	**TT Violation**	**MRDL**	**Typical Sources**
CITY OF GREELEY	Chlorine	Dec 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	101	At least 95% of samples per period must be at least 0.2 ppm OR if the sample size is less than 40, no more than 1 sample is below 0.2 ppm.	No	4.0 ppm	Water additive used to control microbes
FORT COLLINS LOVELAND WATER DISTRICT	Chlorine	Dec 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	60	At least 95% of samples per period must be at least 0.2 ppm OR if the sample size is less than 40, no more than 1 sample is below 0.2 ppm.	No	4.0 ppm	Water additive used to control microbes
NORTH WELD COUNTY WATER DISTRICT	Chlorine	Dec 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	18	At least 95% of samples per period must be at least 0.2 ppm OR if the sample size is less than 40, no more than 1 sample is below 0.2 ppm.	No	4.0 ppm	Water additive used to control microbes
LOCAL SAMPLES	Chlorine	Dec 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	20	At least 95% of samples per period must be at least 0.2 ppm OR if the sample size is less than 40, no more than 1 sample is below 0.2 ppm.	No	4.0 ppm	Water additive used to control microbes

Inorganic Contaminants Sampled at the Entry Point to the Distribution System										
Water Source	**Contaminant Name**	**Year**	**Avg**	**Range Low-High**	**Sample Size**	**Unit of Measure**	**MCL**	**MCLG**	**MCL Violation**	**Typical Sources**
CITY OF GREELEY	Barium	2022	0.05	0.03 to 0.08	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System										
Water Source	Contaminant Name	Year	Avg	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
CITY OF GREELEY	Fluoride	2022	0.5	0.2 to 0.8	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
CITY OF GREELEY	Nitrate	2022	0.1	0.06 to 0.14	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
CITY OF GREELEY	Selenium	2022	0.85	0 to 1.7	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Summary of Turbidity Sampled at the Entry Point to the Distribution System						
Water Source	Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
CITY OF GREELEY	Turbidity	May	Highest single measurement: 0.34 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
CITY OF GREELEY	Turbidity	Dec	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Lead and Copper Sampled in the Distribution System									
Water Source	Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
CITY OF GREELEY	Lead	7/18/2022 to 9/14/2022	7.4	101	ppb	15	5	No	Corrosion of household plumbing systems; Erosion of natural deposits
CITY OF GREELEY	Copper	7/18/2022 to 9/14/2022	0.2	101	ppb	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Lead and Copper Sampled in the Distribution System									
Water Source	**Contaminant Name**	**Time Period**	**90th Percentile**	**Sample Size**	**Unit of Measure**	**90th Percentile AL**	**Sample Sites Above AL**	**90th Percentile AL Exceedance**	**Typical Sources**
FORT COLLINS LOVELAND WATER DISTRICT	Copper	1/12/2022 to 2/18/2022	0.14	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
FORT COLLINS LOVELAND WATER DISTRICT	Lead	1/12/2022 to 2/18/2022	3	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
NORTH WELD COUNTY WATER DISTRICT	Copper	6/18/2021 to 6/29/2021	0.26	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
NORTH WELD COUNTY WATER DISTRICT	Lead	6/18/2021 to 6/29/2021	2.7	30	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
LOCAL SAMPLES	Copper	7/19/2021 to 7/21/2021	0.2	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
LOCAL SAMPLES	Lead	7/19/2021 to 7/28/2021	5.3	31	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Secondary Contaminants**							
Water Source	**Contaminant Name**	**Year**	**Average**	**Range Low-High**	**Sample Size**	**Unit of Measure**	**Secondary Standard**
CITY OF GREELEY	Sodium	2022	28.1	9.6 to 46.7	2	ppm	N/A

**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Non-Health Based Violations

These violations do not usually mean there was a water quality problem. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), reported the sample result after the due date, and still need to complete a report/notice by the required date.

Water Source	Name	Description	Time Period
LOCAL SAMPLES	REVISED TOTAL COLIFORM RULE (RTCR)	Failure to have adequate coliform bacteria sample sites – R518	12/09/2022 – 01/27/2023
LOCAL SAMPLES	PUBLIC NOTICE	Failure to notify the public/consumers	11/30/2020 - 04/27/2023
LOCAL SAMPLES	CROSS CONNECTION RULE	Failure to meet cross-connection control and/or backflow prevention requirements—M613	10/30/2020 – 07/07/2022
LOCAL SAMPLES	CROSS CONNECTION RULE	Failure to meet cross-connection control and/or backflow prevention requirements—M612	12/09/2022 – 02/15/2023
LOCAL SAMPLES	CROSS CONNECTION RULE	Failure to meet cross-connection control and/or backflow prevention requirements—M610	12/09/2022 – 02/15/2023

Health-Based Violations

Maximum contaminant level (MCL) violations: Test results for this contaminant show that the level was too high for the period shown. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation we discussed in a past notice. We are evaluating, or we already completed an evaluation, to find the best way to reduce or remove the contaminant. We will update you with quarterly notices if the solution takes an extended time.

Treatment technique (TT) violations: We failed to complete an action that could affect water quality. Please read the information shown below about potential health effects for vulnerable populations. This is likely the same violation we told you about in a past notice. We were required to meet a minimum operation/treatment standard, we were required to make upgrades to our system, or we were required to evaluate our system for potential sanitary defects, and we failed to do so in the period shown below. We will update you with quarterly notices if the solution takes an extended time.

Water Source	Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
CITY OF GREELEY	STORAGE TANK RULE	Failure to inspect storage tank(s) and/or failure to correct storage tank defects – F334	08/05/2022 to 10/28/2022	May pose a risk to public health	N/A	N/A
CITY OF GREELEY	CROSS CONNECTION RULE	Failure to meet cross-connection control and/or backflow prevention requirements—M611	08/05/2022 to 11/17/2022	We need an adequate backflow prevention and cross-connection control program. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: we failed to comply with the requirements for surveying our system for cross-connections, AND/OR we failed to complete the testing requirements for backflow prevention devices or methods.	N/A	N/A

Water Source	Name	Description	Time Period	Health Effects	Compliance Value	TT Level or MCL
LOCAL SAMPLES	CROSS CONNECTION RULE	Failure to meet cross-connection control and/ or backflow prevention requirements—M615	12/09/2022 to 02/15/2023	We needed an adequate backflow prevention and cross-connection control program. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: We have permitted an uncontrolled cross-connection, AND/OR we have installed or permitted an uncontrolled cross-connection, AND/OR we failed to comply with the requirements for surveying our system for cross-connection, AND/OR we failed to complete the testing requirements for backflow prevention devices or methods, AND/OR we failed to notify the State Health Dept. of a backflow contamination event.	N/A	N/A
LOCAL SAMPLES	CROSS CONNECTION RULE	Failure to meet cross-connection control and/ or backflow prevention requirements—M614	12/09/2022 to 02/15/2023	We needed an adequate backflow prevention and cross-connection control program. Uncontrolled cross-connections can lead to inadvertent contamination of the drinking water. This is due to one or more of the following: We have permitted an uncontrolled cross-connection, AND/OR we have installed or permitted an uncontrolled cross-connection, AND/OR we failed to comply with the requirements for surveying our system for cross-connection, AND/OR we failed to complete the testing requirements for backflow prevention devices or methods, AND/OR we failed to notify the State Health Dept. of a backflow contamination event.	N/A	N/A

Additional Violation Information

Water Source	Description
CITY OF GREELEY	Describe the steps taken to resolve the violation(s) and the anticipated resolution date: The F334 violation of the Storage Tank Rule was due to a failure to implement the written plan for finished water storage tank inspections. The storage tanks posed a hazard to staff when performing regular inspections as required by the written plan due to the design of the floating covers. The violation was resolved by removing the three tanks from service and disconnecting them from the water system with concrete caps on October 25, 2022. Facility inactivation forms were submitted to CDPHE. The M611 violation of the Cross Connection Rule was due to a failure to test assemblies not tested in 2021 within 90 days of their active date in 2022. The violation was resolved by completing 100% of the 2021 required testing of backflow assemblies by December 2, 2022.

Water Source	Description
LOCAL SAMPLES	Describe the steps taken to resolve the violation(s) and the anticipated resolution date: FAILURE TO HAVE ADEQUATE COILFORM BACTERIA SAMPLE SITE – R518: We added more sample sites to make sampling more representative throughout the distribution system. This was resolved on 01/27/2023. FAILURE TO NOTIFY THE PUBLIC/CONSUMERS: We should have certified the delivery of a violation notice. This was resolved on 4/27/2023. FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M615: We instituted a backflow cross-connection program that meets all the requirements. This issue was resolved on 02/15/2023. FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M614: We instituted a backflow cross-connection program that meets all the requirements. This issue was resolved on 02/15/2023. FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M613: We instituted a backflow cross-connection program that meets all the requirements. This issue was resolved on 07/30/2022. FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M612: We instituted a backflow cross-connection program that meets all the requirements. This issue was resolved on 02/15/2023. FAILURE TO MEET CROSS-CONNECTION CONTROL AND/OR BACKFLOW PREVENTION REQUIREMENTS – M610: We instituted a backflow cross-connection program that meets all the requirements. This issue was resolved on 02/15/2023.

TERMS & ABBREVIATIONS

Action level (AL) — The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

Average (x-bar) — Typical value.

Compliance value — Single or calculated value used to determine if regulatory contaminant value (e.g. MCL) is met. Examples of calculated values include:

- 90th Percentile, Running Annual Average (RAA)
- Locational Running Annual Average (LRAA)

Formal enforcement action — Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

Gross alpha — Gross alpha particle activity compliance value. It includes radium-226, but excludes radon-222 and uranium.

Maximum Contaminant Value (MCL) — The highest level of a contaminant allowed in drinking water.

Maximum Contaminant Value Goal (MCGL) — The level of a contaminant in drinking water below which there are no known or expected risks to health. MCGLs allow for a margin of safety.

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 are no known or expected risks to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Nephelometric Turbidity Unit (NTU) — Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

Not Applicable (N/A) — Does not apply or is not available.

Parts Per Billion = Micrograms per Liter (PPB=UG/L) — One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

Parts Per Million = Milligrams per Liter (PPM=MG/L) — One part per million corresponds to one minute in two years or a single penny in $10,000.

Picocuries per Liter (PCI/L) — Measure of the radioactivity in water.

Range (R) — Lowest value to the highest value.

Sample size (N) — Number or count of values (i.e. number of water samples collected).

Treatment Technique (TT) — A required process intended to reduce the level of a contaminant in drinking water.

Variance and Exemptions (V/E) — Department permission to meet a MCL or treatment technique under certain conditions.

Violation — Failure to meet a Colorado Primary Drinking Water regulation.

Aerial view of Carter Lake Reservoir. Photo credit Ken Lund, Flickr.

WATER COLLECTION & DISTRIBUTION SYSTEM

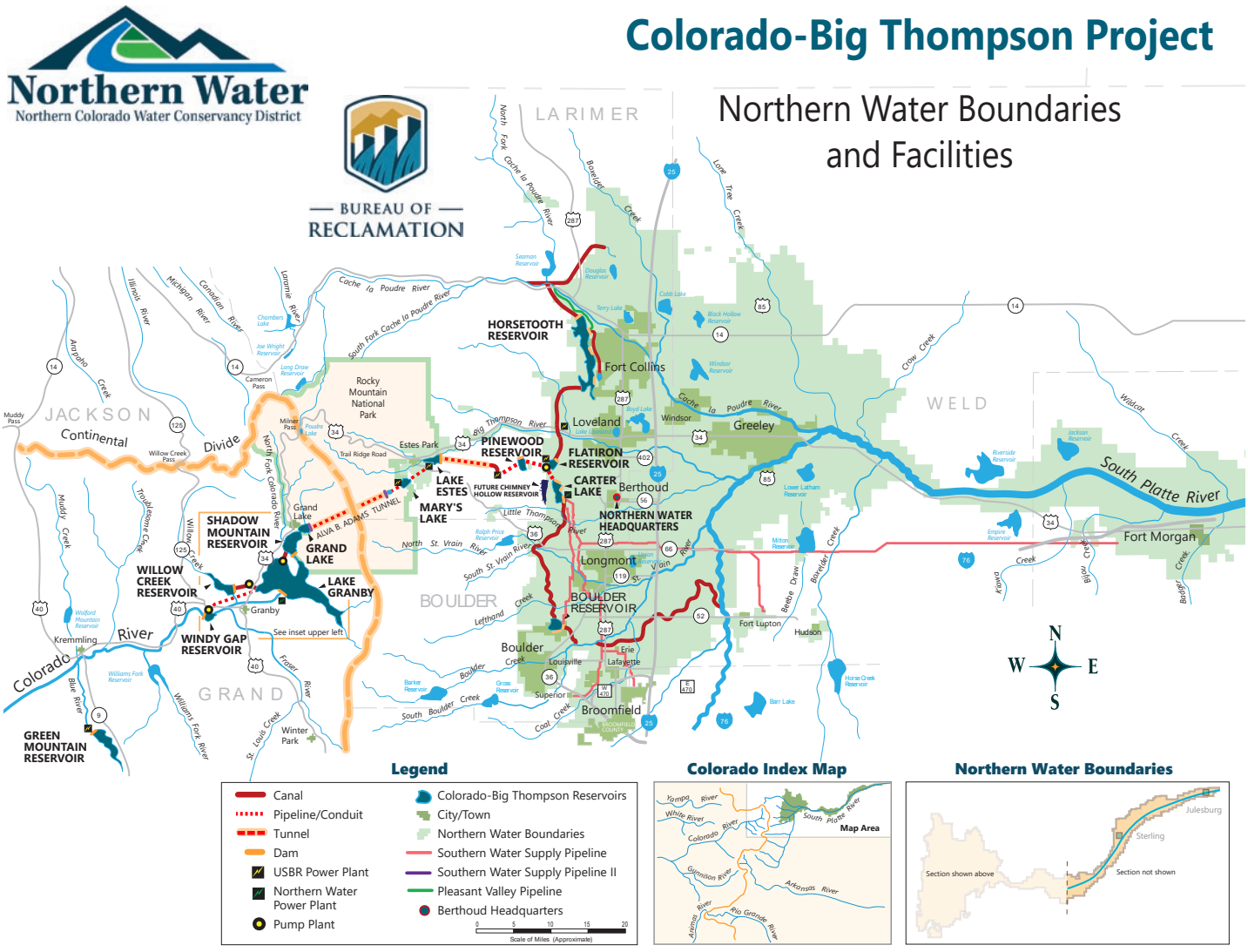

Illustration provided by Northern Colorado Water Conservancy District.

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