2023

WATER CONSERVATION ANNUAL REPORT

Fort Collins Utilities has a strong commitment to ensuring the efficient and responsible use of our natural resources. Our Water Conservation Program started in 1977 and we continue to innovate how we help the community use water wisely.

Gallons per capita per day (GPCD) is the total treated water used by commercial and residential customers, divided by the service area population (about 80% of Fort Collins), divided by 365 days. GPCD helps determine if conservation and efficiency efforts and practices are impacting community water use, irrespective of population growth. GPCD fluctuates greatly with weather – hotter and drier months during the irrigation season create higher water demands for our community.



WATER CONSERVATION AND EFFICIENCY AT A GLANCE

GPCD is down 42% since 2000.





PROGRAMS AND SERVICES

LEARN MORE

Residential Programs and Rebates: *fcgov.com/save-water* Commercial Programs and Rebates: *fcgov.com/water-efficiency*

WATER



Estimated Water Savings (MG)

Another way to evaluate our impact on water use within our service area is estimated water savings.

Estimated water savings only include results from programs and services that have measurable water savings, a large portion of which persist for years to come. Many of the services we provide can't be easily measured.

Compared to 3-year historical average (2020-2022), residential water use was down 20% and commercial water use was down 8%. This is largely due to a 123% increase in precipitation during the irrigation season in 2023 compared to prior years' average.

Overall, Utilities treated 6.1 billion gallons of water (including unmetered use and other water losses), which

equals 122 gallons per person per day (GPCD). This is a 42% reduction in GPCD since 2000 and meets our goal of reaching 130 GPCD by 2030. However, 2023's record rainfall and wet, cool irrigation season played a large role and reduced total treated water use by about 13%. If we receive less rain in summer of 2024, it is likely that GPCD will increase.



WATER USE AND CLIMATE IMPACTS

Water use is constantly fluctuating - both our individual uses and our community use. There are many factors that impact how much water we use, but year-to-year fluctuations are mostly attributed to weather. Long-term water reduction trends generally result from efficient actions by water users. When we have cooler and wetter weather, our water use decreases, as seen in 2023, 2023's record precipitation during irrigation season is not likely to start a trend. Our region is expected to continue warming and may receive less precipitation over time due to climate change. Hotter and drier weather makes water efficiency an even more critical strategy to managing a reliable water supply.

• The Colorado Climate Center's 2024 Climate Change in Colorado reports a 2.3 degree F increase statewide since 1980 and estimates another 1-4 degree F increase by 2050. Summer and fall are projected to warm slightly more than winter and spring, extending the irrigation season into the fall. The future of Colorado's precipitation is much less clear. Additional warming will drive greater evaporative demand, which influences the amount of water needed by plants to stay healthy. Therefore, warmer temperatures will likely contribute to more frequent and severe droughts, regardless of changes in precipitation.



Community Gallons per Capita per Day (GPCD) & Precipitation (in)

The 2019 Water Supply **Vulnerability Study**

estimates climate impacts will decrease water supplies and increase water demands. squeezing water resources from both ends. This will likely increase the need for outdoor watering restrictions.

OTHER FACTORS THAT INFLUENCE WATER USE INCLUDE:

- Conservation: Actions such as taking shorter showers, monitoring your outdoor water use, turning off the faucet while brushing your teeth and other behaviors add up and can make a collective difference.
- Efficient Fixtures/Appliance/Landscapes: Homes and businesses that have water efficient appliances, fixtures, irrigation, and technologies use less water every time someone flushes, washes, showers, or waters their landscape.
- Leaks: The average household in the US wastes 10,000 gallons of water due to leaks every year, which is about 12% of total average annual household water use. 10% of homes have leaks that waste 90 gallons or
- **Population:** More people means more water use. Total residential and commercial water use all increase with a growing population.
- Land Development Patterns and Urban Design: Less dense developments with more landscaped areas require more outdoor water use to maintain. Landscape types that are not regionally adapted or native to our area, such as turf grasses and others, require more water than nature provides.



2023 WATER CONSERVATION HIGHLIGHTS

- Assisted Mobile Home Park Residents: Supported Neighborhood Services' Mobile Home Park DIY series to educate residents on water and energy efficiency. Water Conservation attended four sessions to support about 90 residents with indoor and outdoor water conservation via free, efficient fixtures and promoting our programs and resources.
- Provided free Certified Landscape and Irrigation Audit training: Hosted a two-day Irrigation Association class, taught by Water Conservation staff, where 23 participants learned to analyze landscape water use and increase irrigation efficiency.
- Sprinkler Checkup Program: Conducted 412 checkups across Utilities, Fort Collins-Loveland, and East Larimer County water districts. Four trained technicians assessed over 2 million square feet of irrigated landscapes, inspected over 11,000 sprinkler heads, and piloted our first Spanishlanguage checkups and informational

materials. In 2024, Utilities will provide checkups through a partnership with Resource Central, ensuring the program's continuity and allowing time for staff to explore future improvements. *fcgov.com/sprinklers*

- Distributed Water-Wise Pre-Designed Plant Pallets: Partnered with Nature in the City and Resource Central to distribute \$25 discounts on mostly native Garden in a Box kits to 170 residential water customers and \$100 discounts on Garden in a Box kits to 25 Income-Qualified Assistance Program customers and mobile home park residents. <u>fcgov.com/GIAB</u>.
- **Supported Affordable Housing:** Partnered with an affordable housing provider to install 144 high-efficiency toilets. Provided a rebate to support the project which otherwise would not have been financially feasible. This upgrade is estimated to save about 250,000 gallons annually. *fcgov.com/water-efficiency*.

2024 FOCUS AREAS

- Water Efficiency Plan: Updating the <u>2015 Water Efficiency</u> <u>Plan</u>, which guides how Utilities customers use water and recommends strategies to help use less. The updated WEP will set new water conservation goals, incorporate extensive public engagement, integrate land use planning, and employ numeric modeling and an equity analysis to help prioritize future water conservation programs, policies, and incentives. Learn more about the WEP update and provide feedback at fcgov.com/2024WEP.
- Colorado River Impacts and Water Shortage: Utilities staff monitors the Colorado River's status and ongoing discussions about water shortages impacting the seven states under the Colorado River Compact. Utilities sources about 60% of water distributed to customers from the Colorado River-Big Thompson project, which is stored in Horsetooth Reservoir and managed by <u>Northern Water</u>. If there are reductions in water use required in Colorado, Northern Water would determine if, when and how much our Utilities supplies would be reduced. If needed, we will respond to shortages using the <u>Water Shortage Action</u> <u>Plan</u>. As of now, there is no indication from Northern Water of the need for drought management action. <u>fcgov.com/WSAP</u>
- Landscape and Irrigation Training and Education: Hosting free monthly garden tours by foot and bike, partnering with Natural Areas for a sustainable landscape series, and offering a class on efficient home irrigation. Emphasizing

native plant landscaping education remains a priority due to its drought resilience and support for biodiversity and pollinators citywide. Utilities collaborates with numerous community organizations (One Canopy, Front Range Wild Ones, the CO Native Plant Society, People and Pollinators Action Network, the League of Women Voters, Nature in the City, USDA NRCS, Wildland Restoration Volunteers and Larimer Conservation District) for seed and plant swaps, while offering discounted education for landscape professionals. Additionally, we're teaming up with Northern Water to provide irrigation trainings and a native grass workshop. <u>fcgov.com/xip-events</u>

- **Xeriscape Codes:** Proposing new landscape standards in Land Use Code for City Council's consideration and adoption. New standards would apply to new development and significant redevelopment of commercial and multifamily properties. The following standards are proposed:
 - Limitations on the installation of high water use turf, with some exceptions.
 - Restriction of artificial turf.
 - 50% living plant coverage on the surface of landscaped areas.
 - Dedicated irrigation to trees to support tree health in times of water restrictions.

fcgov.com/xsa

LEARN MORE



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