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# Memorandum

Date: July 9, 2025

To: Water Commissioners

Through: Jill Oropeza, Sr. Director, Integrated Water Sciences & Planning

From: Alice Conovitz, Water Conservation Specialist

Subject: 2025 Fort Collins Utilities Water Efficiency Plan: Summary of Final Comments and

**Planned Changes** 

## **BOTTOM LINE**

This memorandum outlines the changes that will be incorporated into the final Water Efficiency Plan (WEP) as a result of feedback received on the draft WEP from community members, the Colorado Water Conservation Board (CWCB), and City of Fort Collins Boards and Commissions. Staff will seek City Council approval of the final WEP at the Sept. 2, 2025 meeting.

As the WEP is intended to be a high-level, goal-setting framework for water efficiency efforts, some feedback, while valuable, is more appropriately addressed during the implementation phase, following WEP approval.

Staff provided the draft WEP to Water Commission in the June 5, 2025 meeting materials. It can also be viewed online at ourcity.fcgov.com/wep.

## **COMMUNITY COMMENTS AND PLANNED RESPONSES**

Fort Collins Utilities (Water Utilities) conducted an extensive public engagement process as part of preparing the draft WEP (described in the document in Section 3.5 and Appendix B). Public comments on the draft WEP were received from April 23 to June 23, 2025. During this time, the draft WEP was posted online and community members could submit comments via an online form or through direct email to staff. Although the draft was prepared in English only, translation via Google Translate was available for most sections, and the online comment form was offered in both English and Spanish. Community members could also request a mailed printed version of the draft WEP and comment form. Staff promoted the public comment period through a Utilities bill insert, social media, emails, newsletters, websites, and public events.

Staff received eight online forms and one direct email during the public comment period. They are summarized as follows:

#### Goals

Understandable: 3 Yes, 4 Somewhat, 0 No

• Reflect community values: 3.7 (out of 5)

- Appropriate for our community: 2 Yes, 4 Somewhat, 1 No
- Applicable to my life: 2 Yes, 4 Somewhat, 1 No
- Ambitious: 4 Yes, 3 Somewhat, 0 No

## Strategies

- Understandable: 3 Yes, 4 Somewhat, 0 No
- Applicable to my life: 3 Yes, 4 Somewhat, 0 No
- Target right uses: 4 Yes, 3 Somewhat, 0 No
- Appropriate for our community: 3 Yes, 4 Somewhat, 0 No
- Adequately support customers: 2 Yes, 3 Somewhat, 2 No

Write-in comments generally aligned with the feedback received during WEP engagement. No changes to the WEP document are planned in response to the comments received.

### **CWCB COMMENTS AND PLANNED RESPONSES**

The Colorado Water Conservation Board (CWCB) is the state's approving agency for WEPs. CWCB staff completed an initial red flag review of the draft WEP and found that "it appears to meet the required criteria." CWCB requested staff include a more detailed discussion of the climate change scenarios used in the WEP to evaluate potential future water demands and savings potential for efficiency strategies.

To address the CWCB comments, staff plan to prepare a detailed climate assessment memorandum to be provided to CWCB separate from the WEP. Additionally, staff prepared the following draft text and summary figures intended to be incorporated into WEP Section 1.3.1:

Colorado Climate Center researchers provided a customized analysis of localized future maximum temperature and precipitation projections for Fort Collins. This analysis used Coupled Model Intercomparison Project Phase 6 (CMIP61) climate datasets that were statistically downscaled using the Localized Constructed Analogs (LOCA)2 method, which yields an ensemble of modeled climate projections at a localized geographic scale suitable for hydrologic modeling. The Shared Socioeconomic Pathway scenario SSP2-4.53, informally

<sup>&</sup>lt;sup>1</sup> CMIP6, coordinated by the World Climate Research Programme, is the most current set of global climate model data produced using numerous climate models within an integrated framework. Additional information is available at <a href="mailto:pcmdi.llnl.gov/CMIP6">pcmdi.llnl.gov/CMIP6</a>.

<sup>&</sup>lt;sup>2</sup>LOCA version 2 datasets provide CMIP6 climate model projections over a 6-kilometer grid scale. Additional information is at <u>loca.ucsd.edu</u>. Dr. David Pierce at the University of California San Diego Scripps Institution of Oceanography led the development of this open-source dataset, which is available for download at https://cirrus.ucsd.edu/~pierce/LOCA2/CONUS\_regions\_split/.

<sup>&</sup>lt;sup>3</sup> Shared Socioeconomic Pathway scenario describes the future scenarios of human societal developments used in climate modeling. The SSP2-4.5 pathway is a scenario in which the current patterns of social, economic, and technological trends are similar to historical patterns.

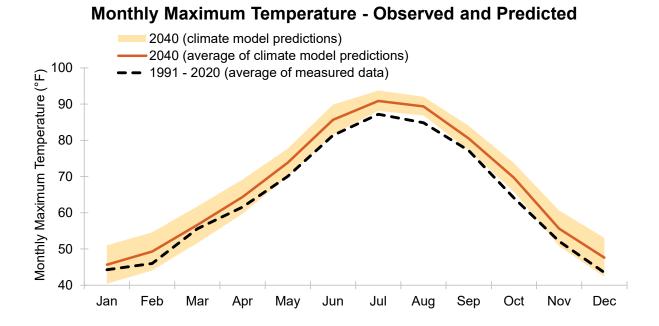
referred to as the "middle-of-the-road" scenario, was used for the Fort Collins analysis.

The Colorado Climate Center analysis produced monthly maximum temperature and total precipitation outputs for 1991 – 2100. The 1991 – 2014 period is a subset of the historical climate simulations from the CMIP6-LOCA dataset, and the 2015 – 2100 period uses future climate projections under the SSP2-4.5 scenario. Data were statistically processed to generate a mean and range of projections for each month in this time period. The range was defined by the mean of model predictions plus/minus one standard deviation. Figure 4 (upper plot) presents the range of predicted temperatures for 2040, as well as the average for the 30-year period from 1991 – 2020, which was used as the Water Efficiency Tool (WET) water demand model baseline. The lower plot in Figure 4 presents the same information for total monthly precipitation.

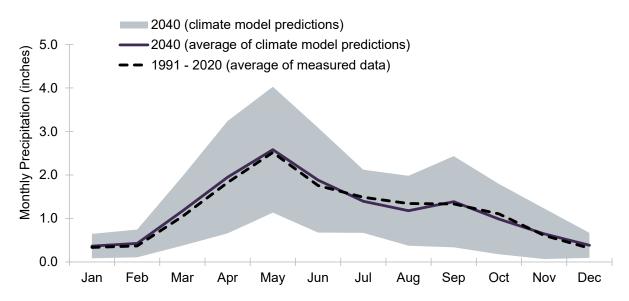
As shown in the figures, climate model projections for the Fort Collins area indicate that, by 2040, monthly maximum temperatures will generally be warmer relative to the 30-year period from 1991 – 2020. Climate model predictions for monthly precipitation vary, suggesting that it is difficult to predict whether the future amount of precipitation in Fort Collins is likely to be higher, lower, or similar to the 1991 – 2020 period.

Staff used the Colorado Climate Center's projections to generate monthly temperature and precipitation inputs to model water demand and efficiency strategy savings for this WEP.

Figure 1. Predicted monthly maximum temperature and monthly precipitation for Fort Collins, relative to 1991 – 2020.



# **Monthly Precipitation - Observed and Predicted**



### **BOARD AND COMMISSION COMMENTS AND PLANNED RESPONSES**

Water Utilities staff sought feedback on the draft WEP from the following City of Fort Collins Boards and Commissions:

- Natural Resources Advisory Board On June 26, 2024, staff presented an overview of the WEP and led an engagement activity to seek input on water efficiency strategies as they pertain to urban tree health/benefits and raw water irrigation. On May 21, 2025, staff presented an overview of the WEP draft that was available during the public comment period and solicited final input from Board members. The Natural Resources Advisory Board provided a letter of support for the WEP update to City Council on June 18, 2025.
- Parks and Recreation Advisory Board On May 28, 2025, staff presented an overview
  of the WEP draft that was available during the public comment period and solicited final
  input from Board members. They provided specific comments, which staff addressed
  through revisions to the WEP text and a comment response memorandum dated June
  23, 2025. Staff returned to address questions at the June 25, 2025 meeting. The Parks
  and Recreation Advisory Board drafted a letter of support for the WEP update that they
  will review at their July 23, 2025, meeting.
- Planning and Zoning Commission On May 9 and May 15, 2025, staff presented an overview of the WEP draft that was available during the public comment period and solicited final input from Commissioners. They unanimously-approved a motion to support the WEP at their May 15, 2025 hearing.

Water Commission – Staff met with Water Commission on April 6, 2023, and May 18, 2023, to seek early input on efficiency strategies to consider for evaluation during the WEP update. Staff met with the Water Commission again on March 20, 2025, and June 5, 2025, to provide an update and seek feedback on proposed goals and strategies. Staff will seek support for the final WEP at Water Commission's July 17, 2025 meeting.

The remainder of this section summarizes comments from boards and commissions on the draft WEP, and planned responses. The comments shown here drove planned WEP revisions and/or are representative of repeated themes.

#### **WEP Goals**

Comment: Provide additional information about how the 4% goal was chosen. Comment: Explain mechanisms used to achieve goals.

Response: Staff will add new text to WEP Section 3.1 (Water Efficiency Goals) to summarize the goal-setting process. The following is a draft of the new text:

Goal 1 was set based on a "top-down" analysis of expected demand increase paired with a "bottom-up" analysis of feasible savings: Staff estimated future water demand increases based on a range of growth and climate conditions ("top down"), then set a reduction goal based on (1) outperforming historical Water Conservation Division program savings of approximately 2% each year, paired with (2) analysis of cumulative potential water savings from efficiency strategies described in Section 4 of this WEP ("bottom up").

The volume of savings associated with the 4% reduction in Goal 1 is determined based on projected demands for Water Utilities' customers under a range of future growth and climate scenarios. Because demands vary year-to-year, for a specific percent reduction target (i.e., 4%) the volume (millions of gallons) of savings would go up or down based on variability in consumption. Staff estimate that a 4% reduction in 2040 demand is estimated to require 280-355 million gallons (860-1,090 acre-feet) of efficiency savings which reflects the range of estimated 2040 demands driven by different climate and growth scenarios. This level of savings would be an increase of more than two times over average measured Water Conservation Division savings from 2020-2024. To gradually progress to the final 2040 goal, interim annual targets will be tracked from 2030-2040.

Goal 2 was set based on collaborative discussions across City departments and alignment with the two-year municipal budgeting cycle, with the intent to average one new landscape resilience project with each two-year cycle.

## **Efficiency Strategies**

Comment: One survey theme was that it's critical to engage home owners associations (HOAs), landscaping professionals, and realtors; Utilities should explore more strategies targeted at these groups.

Response: The Water Utilities currently offer a wide range of water efficiency programs, including a subset that serve non-residential customers with large landscapes, like HOAs. The WEP outlines the following existing and proposed large landscape strategies:

- Xeriscape Incentive Program rebates for commercial customers
- HOA and commercial irrigation assessments
- Irrigation equipment rebates
- Programs that support landscape and irrigation contractors who serve HOAs and other large landscapes, such as the Waterwise Professionals Network
- Proposed strategy: Wrap-around support for water efficiency in community green spaces or HOAs and large turf areas. This is envisioned as a stepwise program that offers irrigation education, irrigation equipment upgrades (e.g., smart controllers), turf conversions, and ongoing maintenance.

Based on a keyword analysis, we estimate there are approximately 250 HOAs in Water Utilities' service area and about 325 water taps that serve their common areas or facilities. Those taps use about 240 million gallons of water annually, which is approximately 4% of all treated water use within the service area. While staff agree that expanding water efficiency strategies related to HOAs and other large landscapes is important, due to the amount of water used and current level of support from public engagement, no changes to the WEP document are planned in response to these comments, as this level of detail is inconsistent with staff's intention for the WEP to be a high-level framework. Rather, staff will prepare or update detailed program plans for the efficiency strategies identified for implementation following City Council's approval of the WEP. Staff will prioritize addressing relevant data gaps that could significantly advance implementation. For example, staff have already identified updated landcover data and analyses as a valuable need.

Comment: Projects for turf-to-xeric conversions on City-owned property should be designed to maximize co-benefits such as insect and pollinator habitat and native plant restoration; water savings should not be the only selection/design criterion.

Response: Staff will add text to the description of the "Targeted Turf-to-Xeric Conversions on City-Owned Properties" strategy to emphasize the opportunity for ecological co-benefits.

Additional comments related to efficiency strategies:

- Given the support for regulatory strategies expressed in customer surveys, Utilities should consider pursuing more regulatory measures.
- On-bill financing should not be limited to high-cost projects and multi-year loans, but rather should be available to income-qualified customers for lower-cost equipment replacements and landscape/irrigation conversions.

- Develop more educational materials pertaining to climate-based scenarios in reference to the "cost of inaction" to elevate the seriousness of water scarcity in the Northern Colorado landscape.
- Examine recognition programs at various scales (e.g., individual household, neighborhood, business, etc.) to promote conservation behavior change.

Response: Staff will prepare or update detailed program plans for the efficiency strategies identified for implementation following City Council's approval of the WEP. These program plans are intended to incorporate specific implementation details such as those included in these comments.

#### Collaboration

Comment: As much of Fort Collins' future growth will occur outside the City's water utility service area, tighter partnerships and programmatic integrations with service providers such as East Larimer County Water District (ELCO) and Fort Collins-Loveland Water District (FCLWD) are essential to achieving the WEP's goals. Without alignment across providers, new development risks falling short of the water efficiency standards Fort Collins has committed to.

Comment: Tighter integration and/or coordinating with ELCO, Fort Collins-Loveland Water Districts on their WEP plans.

Response: Staff will add new text to the WEP in Section 3 (Integrated Planning and Water Efficiency Benefits and Goals) to describe in more detail the differences between water providers in the City's Growth Management Area, current/ongoing collaborative efforts, as well as challenges/roadblocks.

Preliminary draft of new text to be added to the WEP:

Certain areas within the Growth Management Area are served by neighboring water providers. The largest adjacent water providers, East Larimer County (ELCO) and Fort Collins-Loveland Water District (FCLWD), have their own WEPs that describe goals and strategies for their service areas. Fort Collins Utilities values these partnerships and continues to look for ways to collaborate through coordinated information-sharing, planning, communications/outreach, and efficiency strategies.

Important differences exist between Water Utilities, ELCO, and FCLWD, including source water supply portfolios, organizational policies, size, staffing, mission and vision, financial resources, and growth patterns. Through ongoing and increased collaboration across water providers, there are opportunities to better plan for risk, improve the resiliency of the water supply systems, and improve alignment and understanding of policies, plans and processes to best serve customers. An analysis conducted in 2021 – 2022 by consultants, titled "Water Resources Matters in the Fort Collins Growth Management Area: Study Report Results," identified over 100 challenges and potential solutions to improve coordination across water providers.

Examples of current collaboration and coordination between water providers include:

- Interconnected infrastructure in the treatment and distribution systems
- regular information sharing about water supply and potential restrictions status
- biannual check-in meetings with FCLWD through the Utilities Business Resource Team, which supports industrial customers.

The WEP includes new strategies expected to encourage collaboration across water providers, such as:

- Establish regular contact and information sharing between Fort Collins' water providers and City Planning staff
- Further integrate water efficiency into strategic plans and policies
- Support One Water efforts and an integrated demand management approach

Comment: Tighter integration with Poudre School District (PSD), Colorado State University (CSU) and Front Range Community College (FRCC) for community resources and serve as first touchpoints for families

Response: Staff will add text to the WEP, Section 5.1 (Implementation) regarding communications and marketing to highlight the importance of seeking opportunities to partner with broad-reaching organizations, such as PSD, CSU, and Front Range Community College, as well as City departments.

Preliminary draft of new text to be added to the WEP:

Staff will seek new opportunities to partner with broad-reaching organizations in the community such as schools, higher education institutions, and professional and community organizations to share information and promote efficiency.

#### **Cost of Inaction**

Comment: Resources in the plan for individuals to understand costs of inaction. Provide stats and what it costs related to actions/inactions, e.g., not updating irrigation systems or lawns over time.

Response: Staff plan to add the following new text to WEP Section 4 to provide examples of residential and business customer actions that would contribute to the WEP goals, including estimated water savings, customer costs, and water bill savings associated with efficiency strategies. Staff will also look for opportunities to highlight similar examples in the WEP Executive Summary and in future outreach materials.

Water Utilities customers have a variety of options to lower their water use, including the strategies outlined in this WEP. To illustrate how individual actions

can collectively help achieve the 4% reduction target in Goal 1, the following examples highlight actions different customers might take overtime:

## Residential customers

The average single-unit household in the Water Utilities service area uses about 80,800 gallons of water a year. This means that the average residential customer can help meet the 4% WEP goal by lowering their water use by about 3,200 gallons each year (relative to current average use).

- Change Showers: Swapping out a 2.5 gallon-per-minute showerhead for a free 1.5 gallon-per-minute version (currently offered for free through the Water Conservation Showerhead Swap program) and cutting shower time from 12 to 8 minutes can save up to 1,500 gallons per year and save about \$5 on water bills.
- Check Sprinklers: Outdoor water use spikes in the summer. Free
  irrigation assessments save participating households an average of 5,000
  gallons per year and over \$16 on water bills. Many lawns have
  correctable issues like inefficient watering schedules and broken or tilted
  heads
- Redo Landscapes: Native landscaping is water-smart, supports ecosystems, and looks great. A 1,000 square-foot project can save 6,000 gallons annually and lower water bills by about \$20 annually. The average cost to Xeriscape Incentive Program participants for a project of this size was \$1,840 and rebates can cover up to \$1,000 of that cost. Additional savings are possible through the Garden in a Box discounts.

## **Business customers**

The typical water use and potential for water efficiency savings varies based on business type, size, and other factors. The WEP includes a variety of commercial efficiency strategies, including custom rebates that let a business identify what opportunities work best for them.

- Plumbing Upgrades: Replacing 10 older urinals with WaterSense models could save a business between 26,000-60,000 gallons annually and up to \$180 on annual water bills. Even smaller changes—like upgrading five toilets—can cut 11,000 gallons a year. Rebates available for urinals and toilets typically offset about 20% of the installation costs.
- Water Efficient Large Landscapes: Replacing bluegrass turf with native grass species is a cost-effective strategy for reducing water use on large landscapes. Converting 10,000 square feet can save approximately

70,000 gallons annually. Water Utilities offers rebates up to \$15,000 for qualifying projects.

If detailed and accurate information can be found through research or analysis, staff will modify the WEP, Section 3.2 (Benefits of Water Efficiency), to include information that is directly relevant to the City of Fort Collins and customers. To date, quantified data has been difficult to find or analyze.

#### **ADDITIONAL PLANNED CHANGES**

Staff made the following additional changes to improve readability and incorporate the most up-to-date information available:

- Added an Executive Summary
- Moved the extensive tables of efficiency strategies to Appendix C and replaced them in the Section 4 text with easier-to-read bulleted lists
- In Appendix C tables, updated efficiency strategy water savings estimates based on updated water demand modeling that incorporated local climate change projections provided by the Colorado Climate Center
- Finalized summaries of public review in Section 6 and Appendix B to reflect the final feedback collection period

## **NEXT STEPS**

Staff are working toward the following timeline for WEP completion:

- July-August: Staff will prepare a final WEP that incorporates the revisions summarized in this memorandum
- July-September: Staff will provide a memorandum to other boards and commissions that includes a brief overview of comments and revisions incorporated into the final WEP.
- September: Seek City Council approval of the final WEP at the Sept. 2, 2025 meeting.