

# Fort Collins Utilities Water Efficiency Plan (WEP) Update

## City Council Work Session

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Water Conservation Specialist

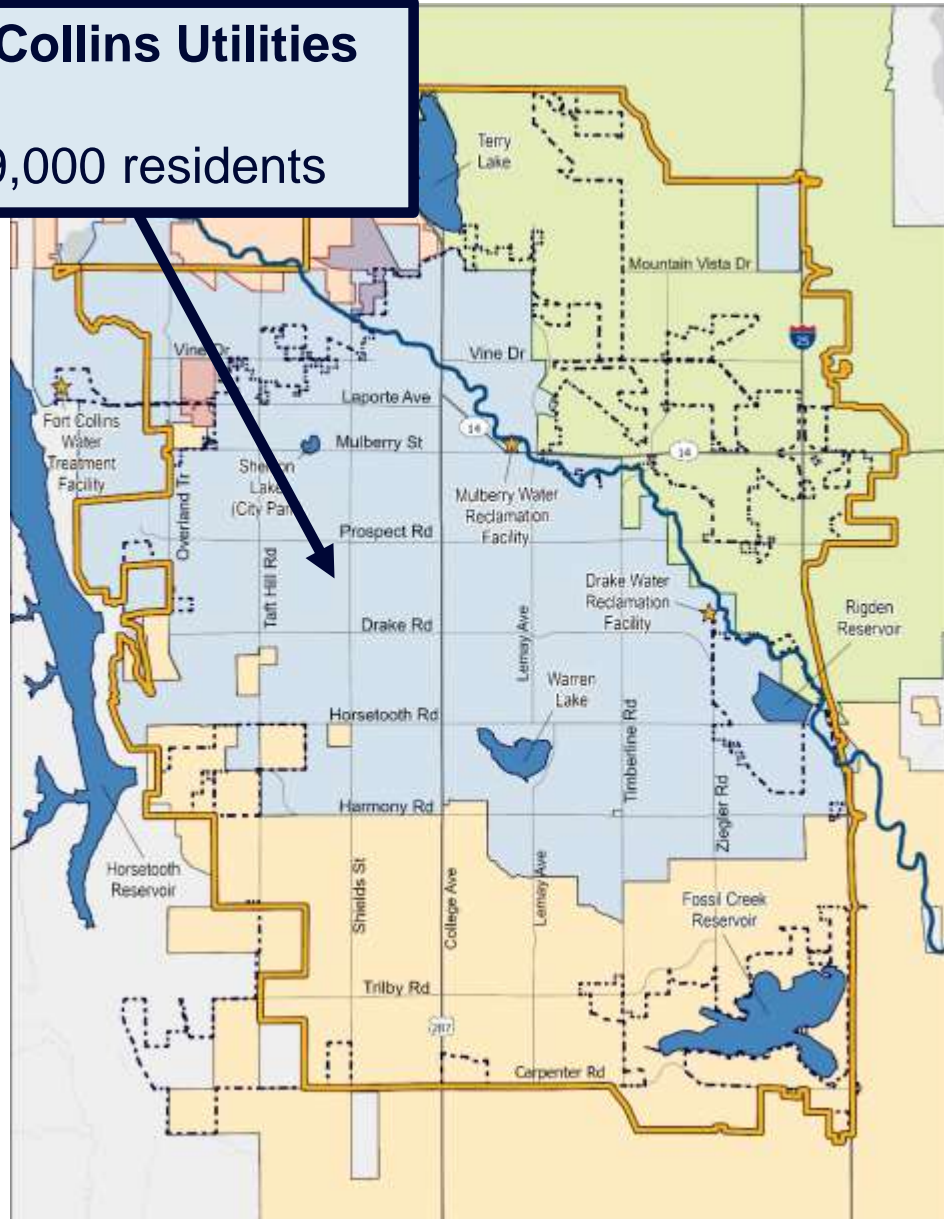




1. Do the proposed conservation goals and strategies align with what you see as our community values?
2. Does the WEP work to-date meet “ambitious but comfortable” guidance?
3. What else does Council need to know prior to staff seeking approval of the updated WEP?

## Fort Collins Utilities

~ 139,000 residents



## Utilities Water Profile

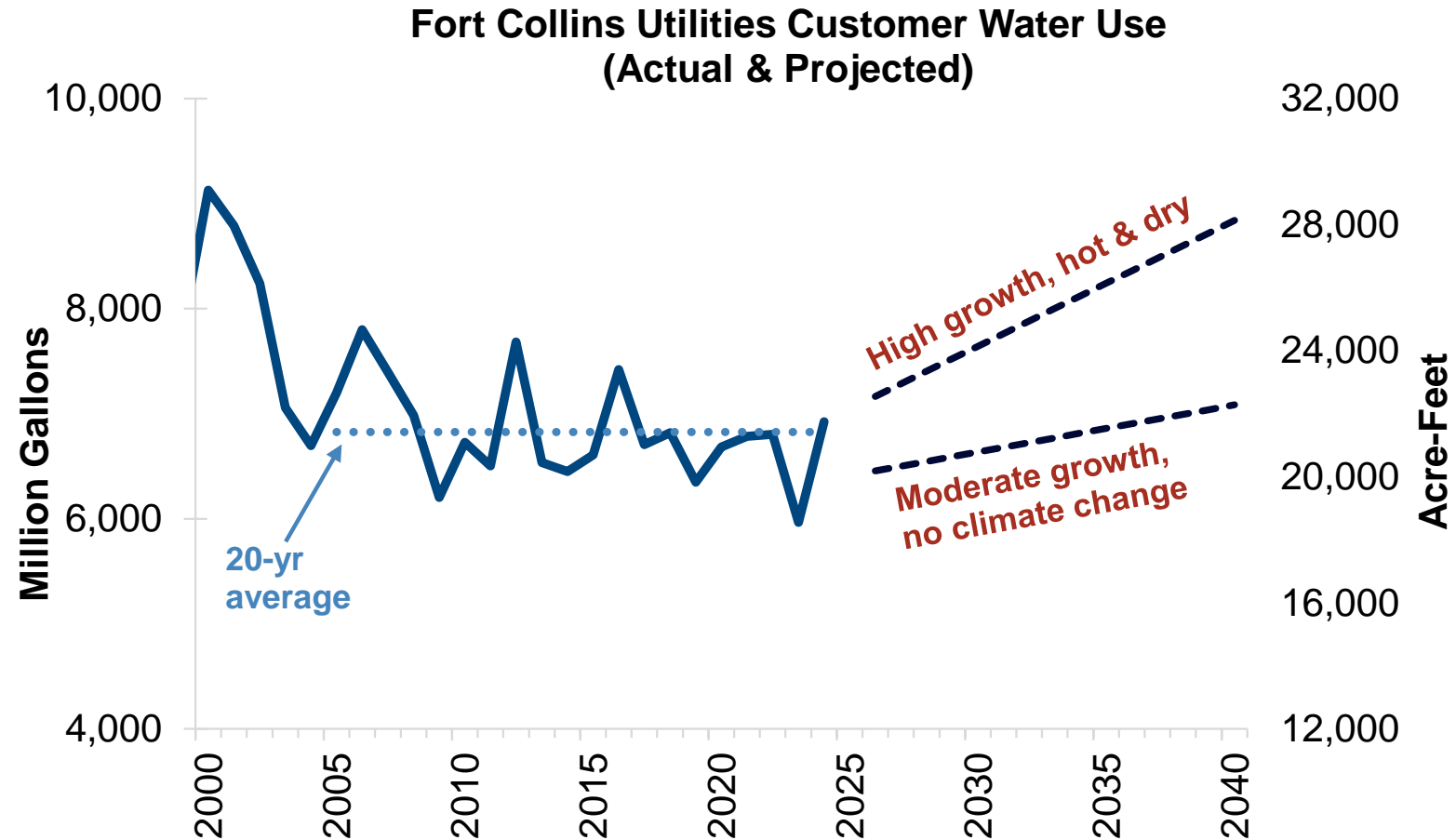
- 6,032,000,000 gallons (18,500 acre-feet) annual treated water use
- 60% indoor, 40% outdoor
- 60% residential, 40% commercial

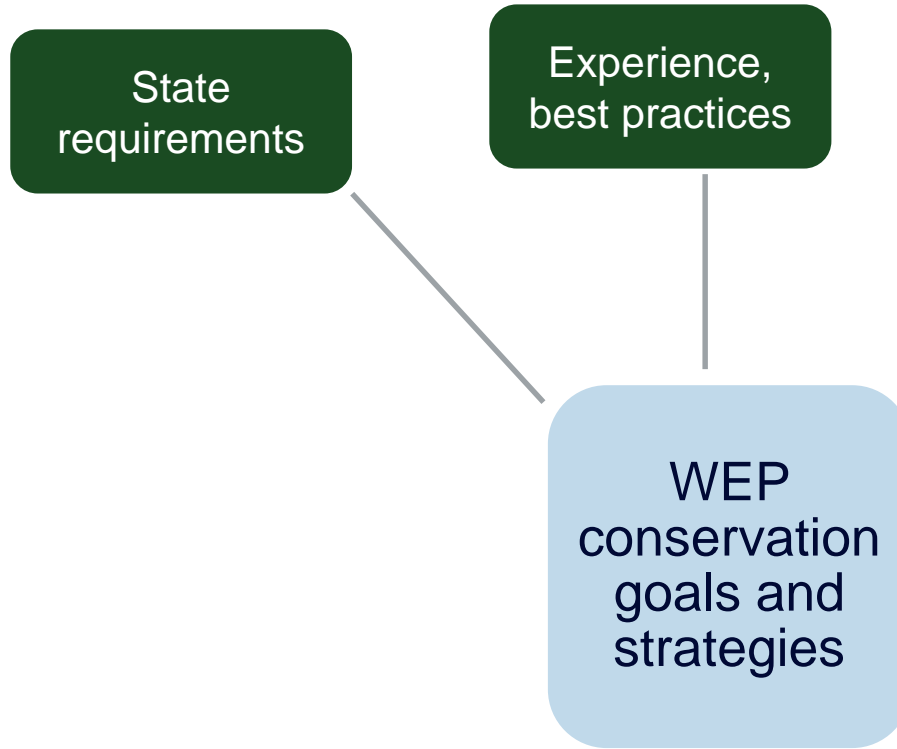
## Why a WEP?

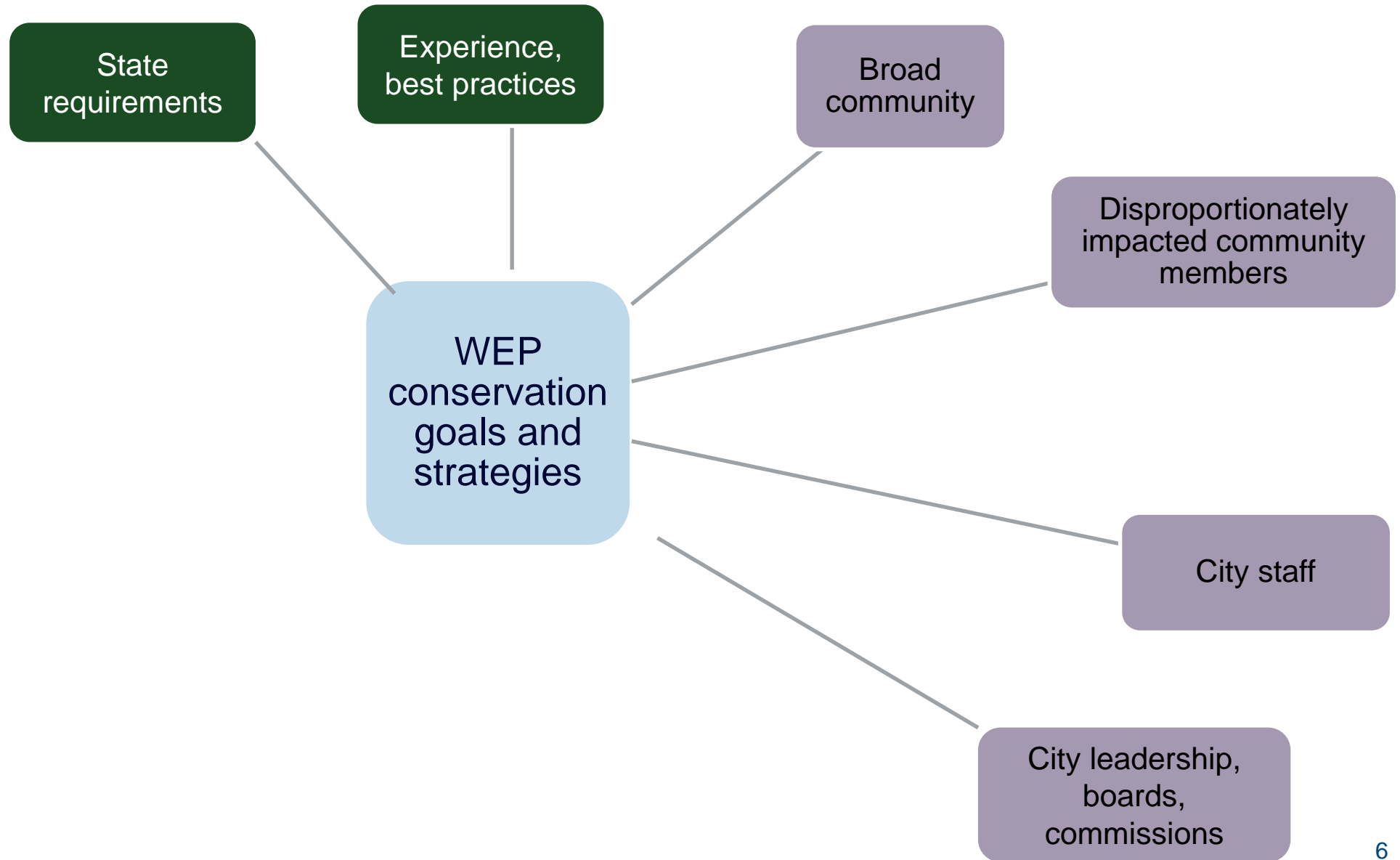
- Guide water use and conservation
- Set goals
  - 2015 goal: 130 GPCD by 2030
- Prioritize strategies: programs, incentives, policies
- Minimize risk of water shortage
- Meet state requirements

# Preparing for Our Uncertain Water Future

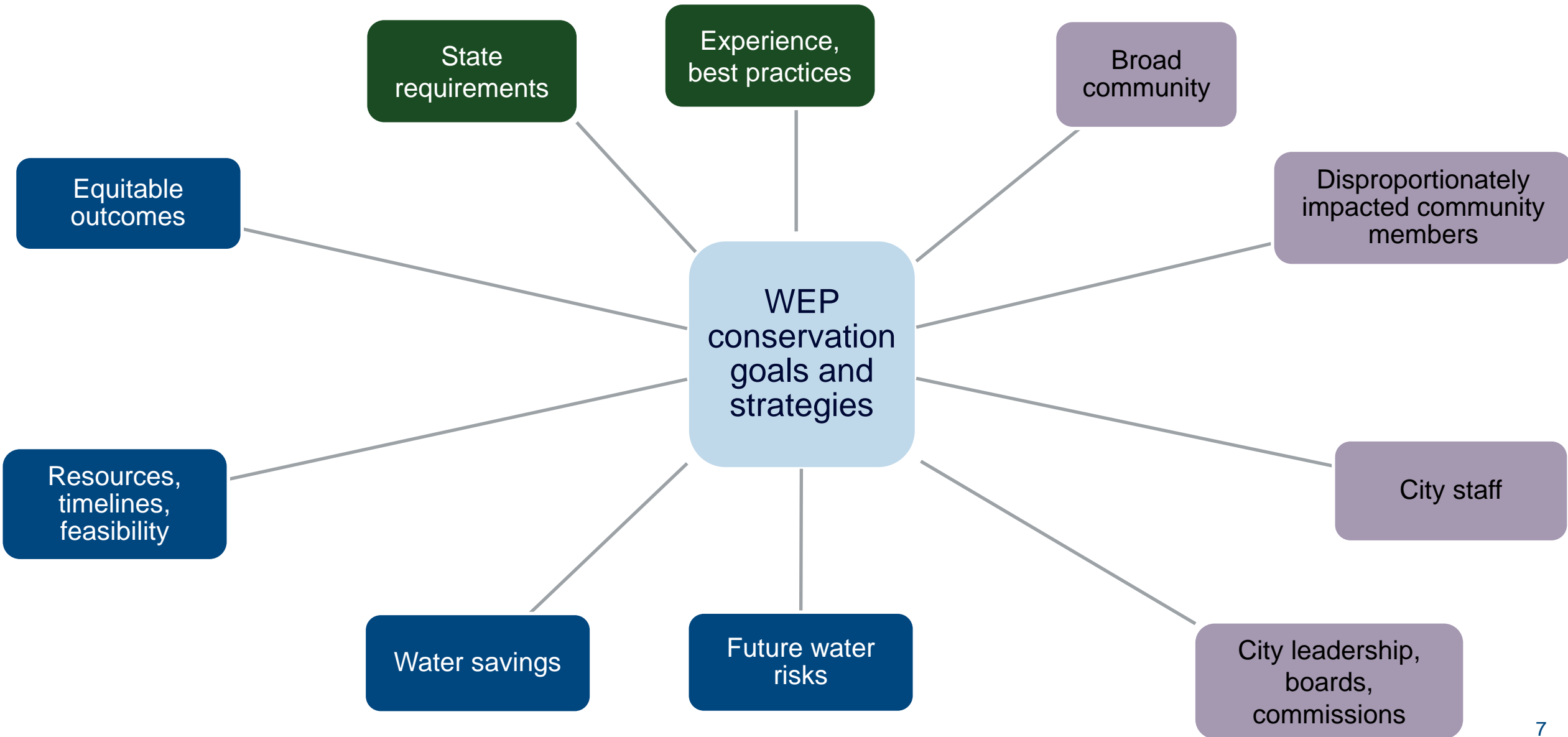
- Growth and climate drive potential for more water shortages
- Conservation:
  - Lowers annual demand by about 2% (135 MG or 415 AF)
  - Builds resilience, prepares community to act
  - Minimizes increases to utility and customer costs
- Storage, water rights portfolio, and land use planning also critical







# WEP Update Inputs



## Engagement

- Disproportionately impacted community members
- Broad engagement
- City staff following One Water **collaborative** approach

## Outcomes

- **5,000+** touchpoints
- Meetings, focus groups, community events, survey, OurCity, ads
  - Critical input from **Community Consultants**
- **40+ hours** connecting with staff

## Equity

- Elevate needs and ideas
- Increase equitable outcomes from conservation strategies
- Build equity evaluation into annual reviews and plans





# Translating Engagement Into Goals

Concerns about water scarcity and providing for future generations

Willingness to take action

Want everyone to take responsibility

Desire for landscape change away from turf grass



**Goal 1: All customers contribute to lowering annual water demand by 3% (about 225 million gallons) by 2040 to reduce risk of shortages**



**Goal 2: The City builds resilience by improving outdoor water efficiency across City-owned landscapes to benefit our community and environment**

# Goal 1: All customers contribute to lowering annual water demand by 3% by 2040



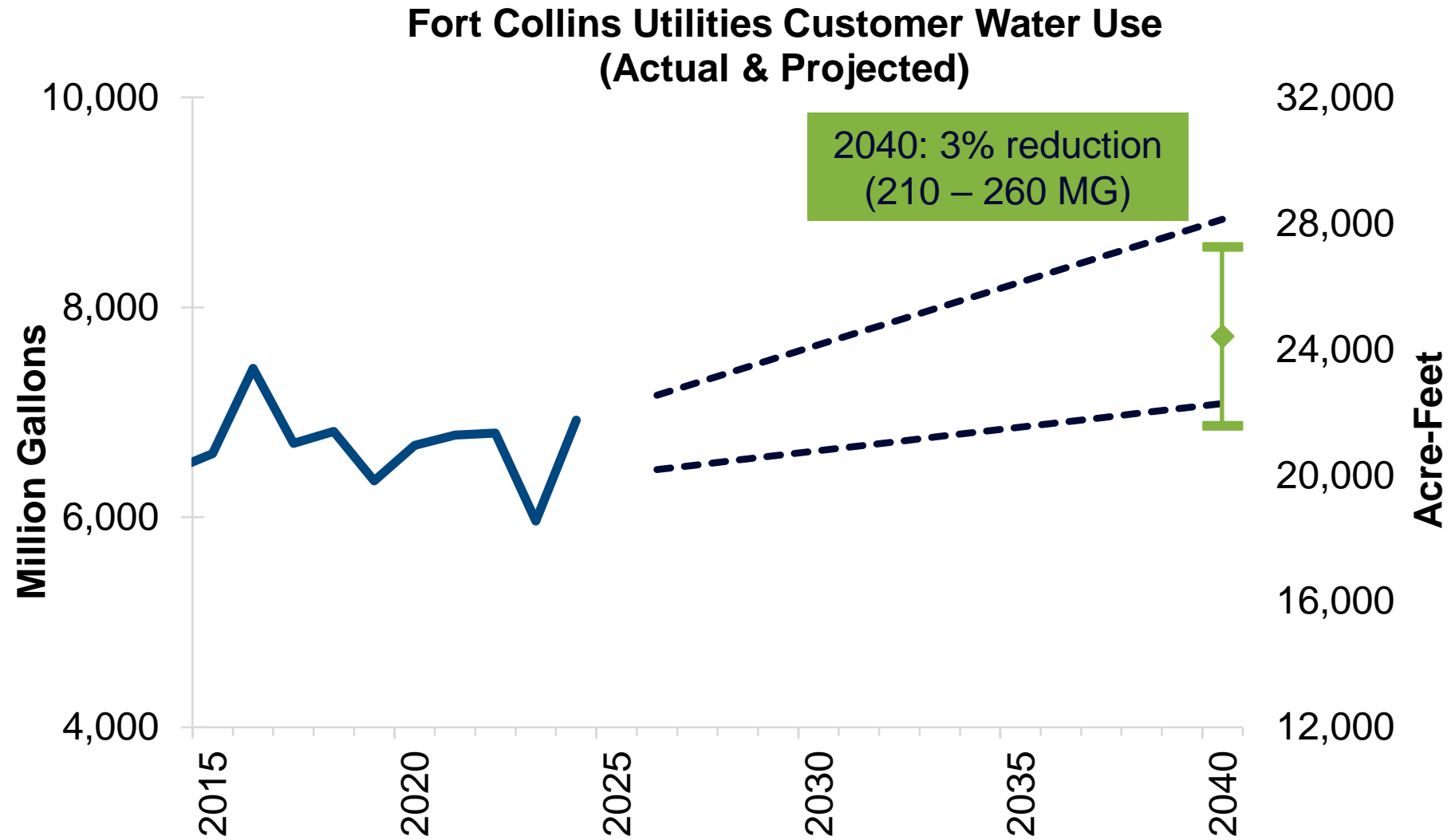
## Objectives

- Offset demand increases due to rising temperature
- Reduce barriers, expand access to opportunities
- Do our part and lower municipal water use

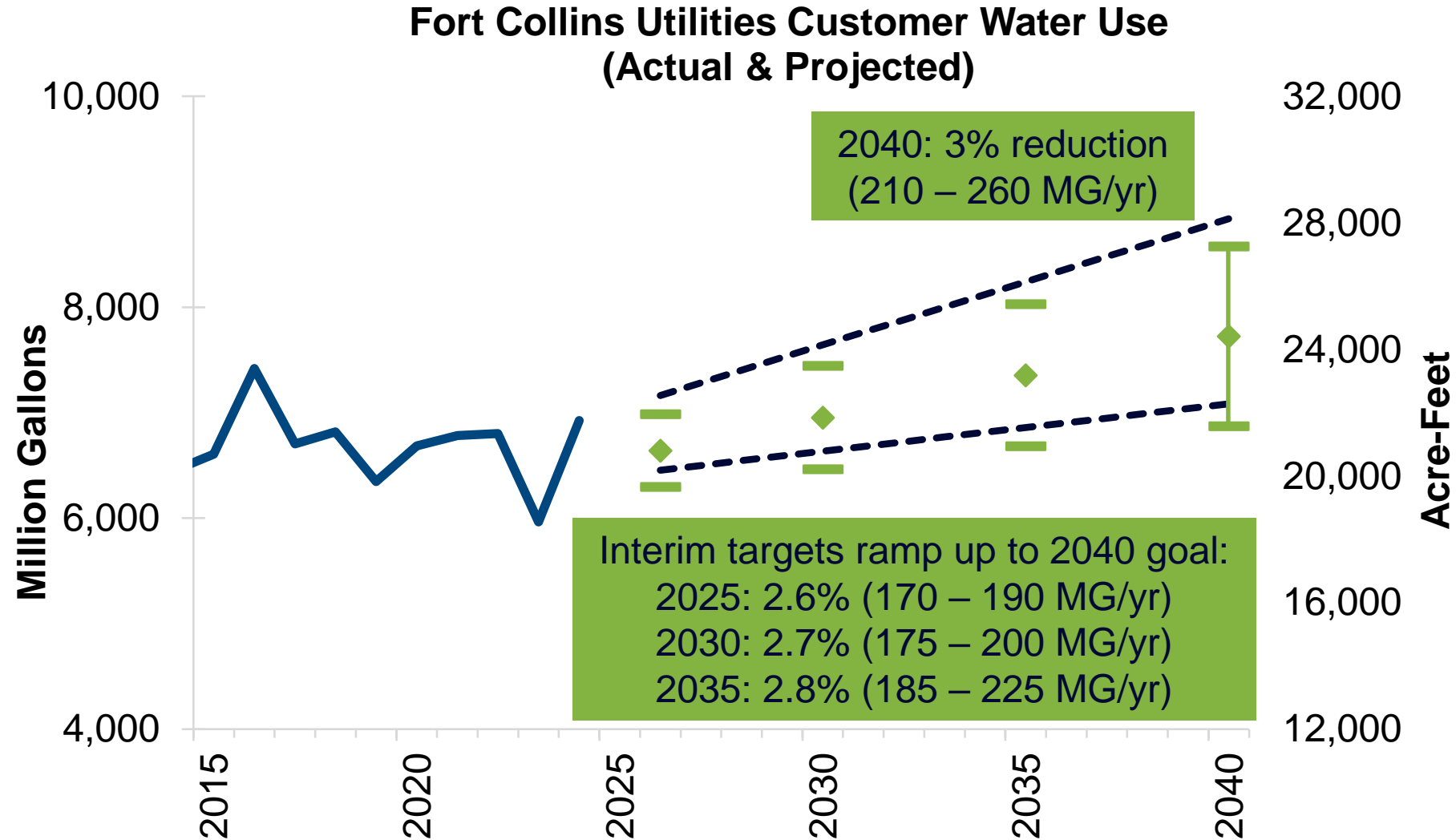
## Metrics

- Water demand by customer sector
  - Include City accounts, losses
- Water Conservation program savings
- Program participation rates

# Goal 1: All customers contribute to lowering annual water demand by 3% by 2040



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## Goal 2: The City builds resilience by improving outdoor water efficiency across City-owned landscapes



### Objectives

- Update aging landscapes to modern efficiency and design
- Build resilience
- Consider all City landscapes, including raw water and other service areas
- Prioritize water use on multi-benefit landscapes like trees and sports fields

### Metrics (City properties only)

- Number & area of irrigation upgrades
- Area of turf replaced with low-water landscape

# Water Conservation Areas of Impact

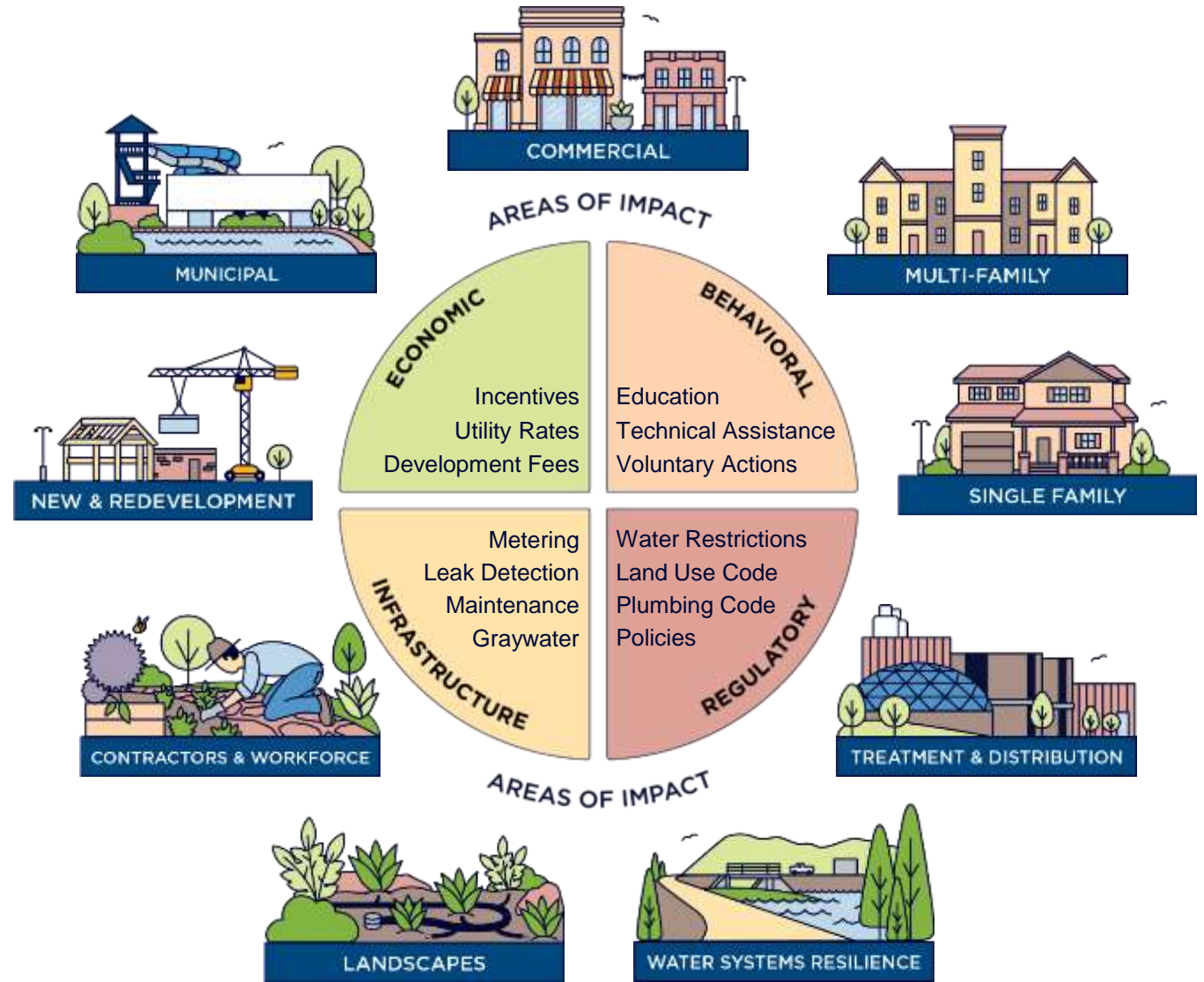
## Strategies impact our whole community

- Provide opportunities for all
- Customize to meet customer sector needs
- Lead by example
- Continue doing what works well

## Communications & marketing drive success

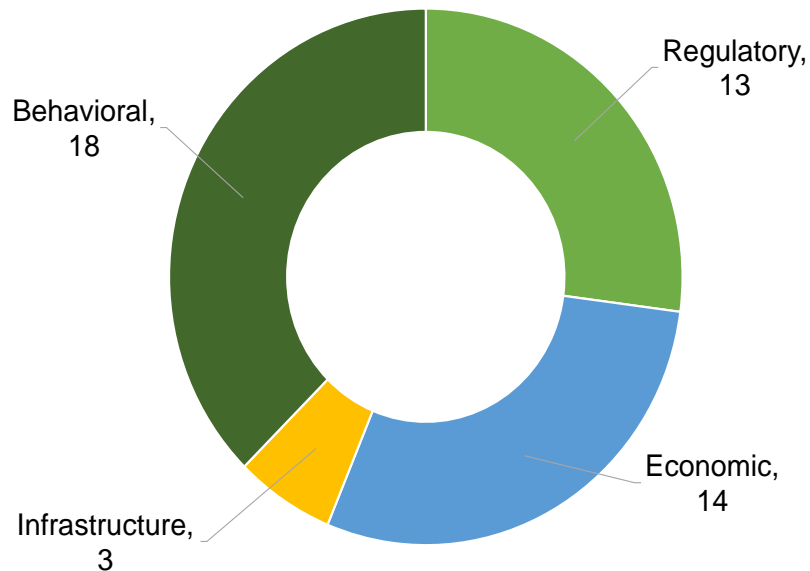
## Strategies are areas of opportunity

- Follow normal processes for approval post-WEP
- Track, report, and adjust over time to attain goals

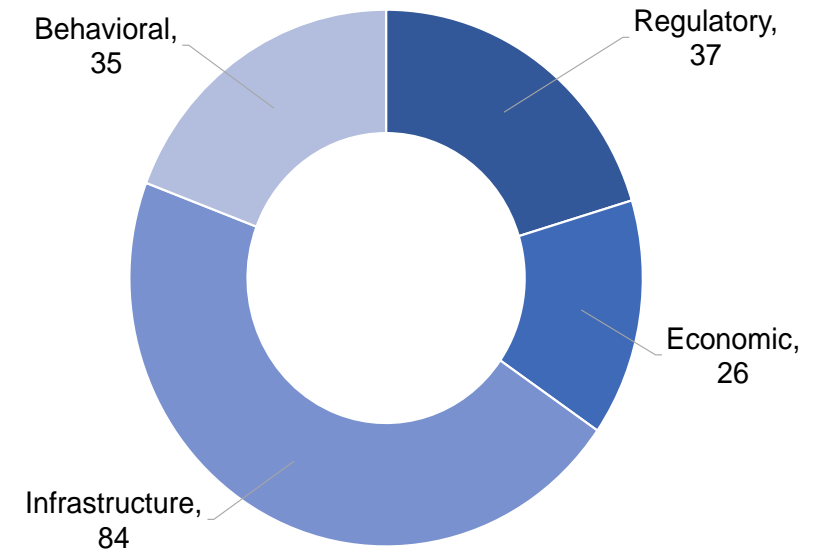


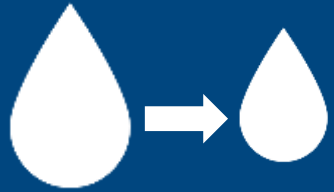
- Prioritized based on water savings, cost, feasibility, equitable outcomes, acceptance
- Engagement input:
  - Balance incentives and regulations
  - Minimize barriers
  - City already does a lot, community doesn't know

### Count of Strategies by Approach



### Estimated Water Savings by Approach





**All customers contribute to lowering annual water demand by 3% by 2040**

## **Customer Areas of Opportunity**

- HOA & large turf transformation
- Rental incentives, education
- Plumbing repair assistance
- Grants
- Land use policies & developer incentives
- Daytime watering limits
- Commercial water use benchmarking

## **City Areas of Opportunity**

- Retrofit City facilities with high-efficiency plumbing
- City facilities for pilots/examples
- Improve water loss tracking & increase line repair
- Consider equity in project prioritization





**The City builds resilience by improving outdoor water efficiency across City-owned landscapes**

## **Areas of Opportunity**

- Irrigation upgrades and/or turf reduction
  - Landings Park
  - Nature in the City projects
  - Water Treatment Facility
  - City Hall
- Increase dedicated tree irrigation
- Align planning & communications across departments

## **Existing Best Practices**

- Water use tracking
- Irrigation to ET need, audits, smart controllers
- Smart new design with xeriscape principles

# Cost Impact Evaluation for 2025-2040

**Goal 1**  
**Lower annual water demand by 3% by 2040**  
**\$1.5-1.75M/year**

- Water Conservation's ongoing budget (~\$1.5M)
- External grants
- Policy that impacts behavior
- BFO – two future enhancements

**Goal 2**  
**Build landscape resilience**  
**\$50K/year**

- Actions already occurring
- Grants (internal and external)
- Ongoing budgets
- 2050 Tax

**Cost of Inaction**

- **City** – Water purchases, regional competition, landscape damage, implementing restrictions
- **Customer** – Fees & rates, private landscape damage, responding to restrictions







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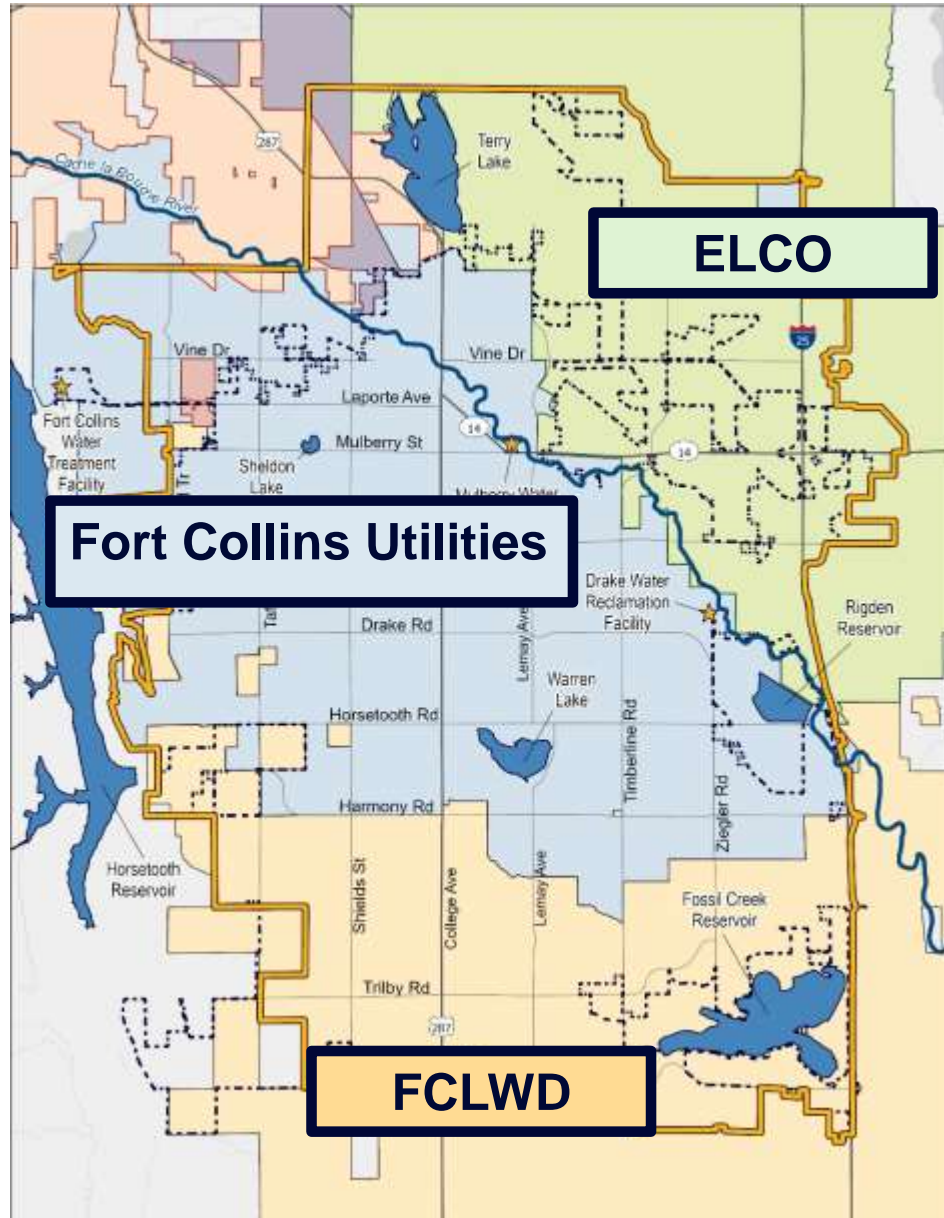
Thank you!





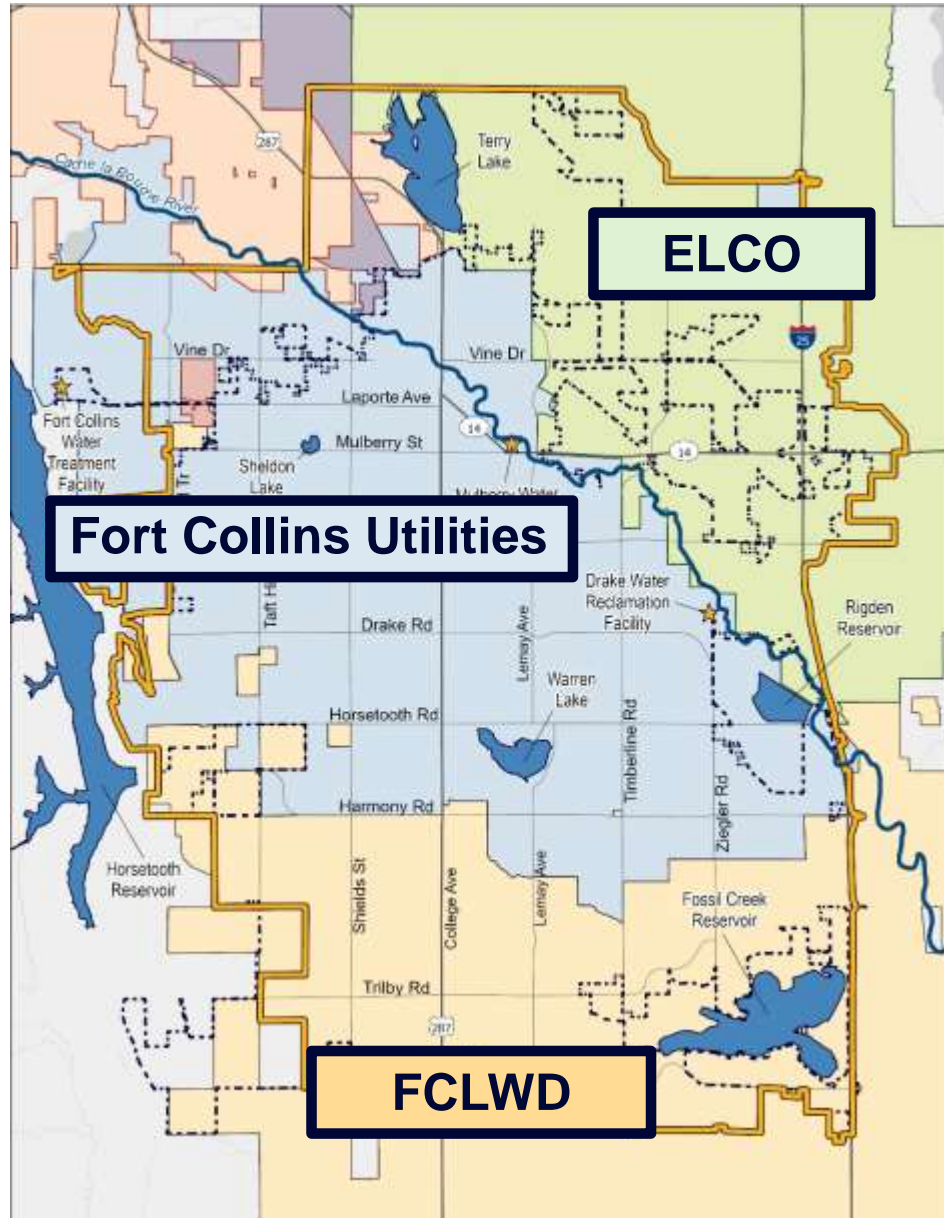
# Extra Slides

# Neighboring Water Providers: FCLWD's 2023 WEP



- 2023 WEP goal: Lower water use by 9% over the 10-year planning period (with specific customer sector targets)
- Expect demand to increase by almost 50% by 2033 (from 10,089 AF to 15,064 AF) due to growth/development
  - Heavily dependent on CBT & NISP
  - About 60% outdoor use
- Conservation activities expected to save up to 1,229 AF/yr
  - 12 activities identified in WEP
  - Most similar to what we already do
  - New ideas: hydrant flushing truck, SFR conservation taps

# Neighboring Water Providers: ELCO's 2024 WEP



- 2024 WEP goal: Achieve water savings goal of 172 AF/yr in 2033 (relative to baseline projected demand)
- Population expected to triple by 2045, which will be ~ 60% buildout
  - Heavily dependent on CBT
  - 43% outdoor use
    - ~20% of residential customers can access raw water for irrigation
- Conservation activities targeting 172 AF/yr savings by 2033
  - 8 activities identified in WEP
  - Similar to what we already do



# Water Provider Conservation Activities



Conservation Strategy / Activity	FCLWD	ELCO	FC Utilities
1. Work more closely with planning	X	X	X
2. Garden In A Box	X		X
3. Residential sprinkler assessments	X	X	X
4. Smart irrigation controller rebates/discounts	X		X
5. Restrictions	X	X	X
6. Wasting water/leaks prohibition		X	X
7. Property Manager and HOA irrigation education/training	X		X
8. Hydrant Flushing Filter Truck	X		
9. Metering, Water Loss Control, Rates/Fees, Education, *Graywater, Information, Etc.	X	X	X
<b>X</b> : indicates new activity			

# Water Use Priorities – 2019 Feedback

Higher Priority



Lower Priority

Priority Rank	Water Use Type	Votes
1	Indoor Home	99%
2	Health and Safety	94%
3	Indoor Business	77%
4	Other Landscaped Areas (Non-turf)	53%
5	Commercial/Public Recreation	40%
6	Turf Grass (Higher Water Use)	14%
7	Personal/Private Outdoor Recreation	9%

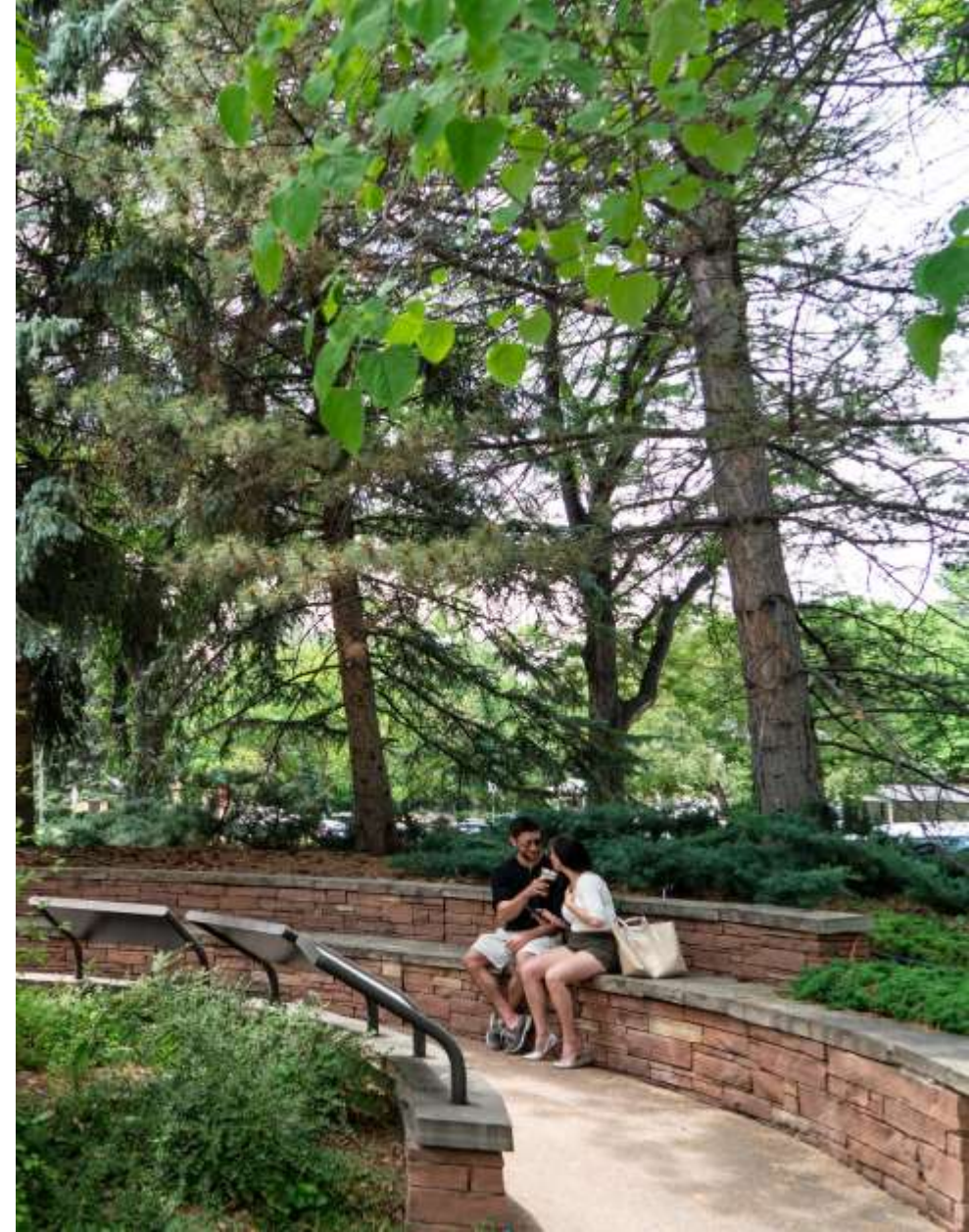
# WEP 2024 Community Engagement Takeaways

- Our *collective impact* should increase community resilience. Pursue conservation strategies that:
  - Impact our largest water users
  - Impact City operations; show how the City saves water
  - Everyone can participate in, even if only small water savings
  - Increase access and decrease burden
- There is support for a mix of incentives and regulations
  - Most people are willing to act
  - Conserving water is everyone's responsibility
  - Be thoughtful who you regulate, and who you incentivize
- Make water conservation engaging, accessible, and meaningful
  - Give people tools to understand their impact
  - Engage with people where and how they are comfortable
  - Offer flexible programs, processes

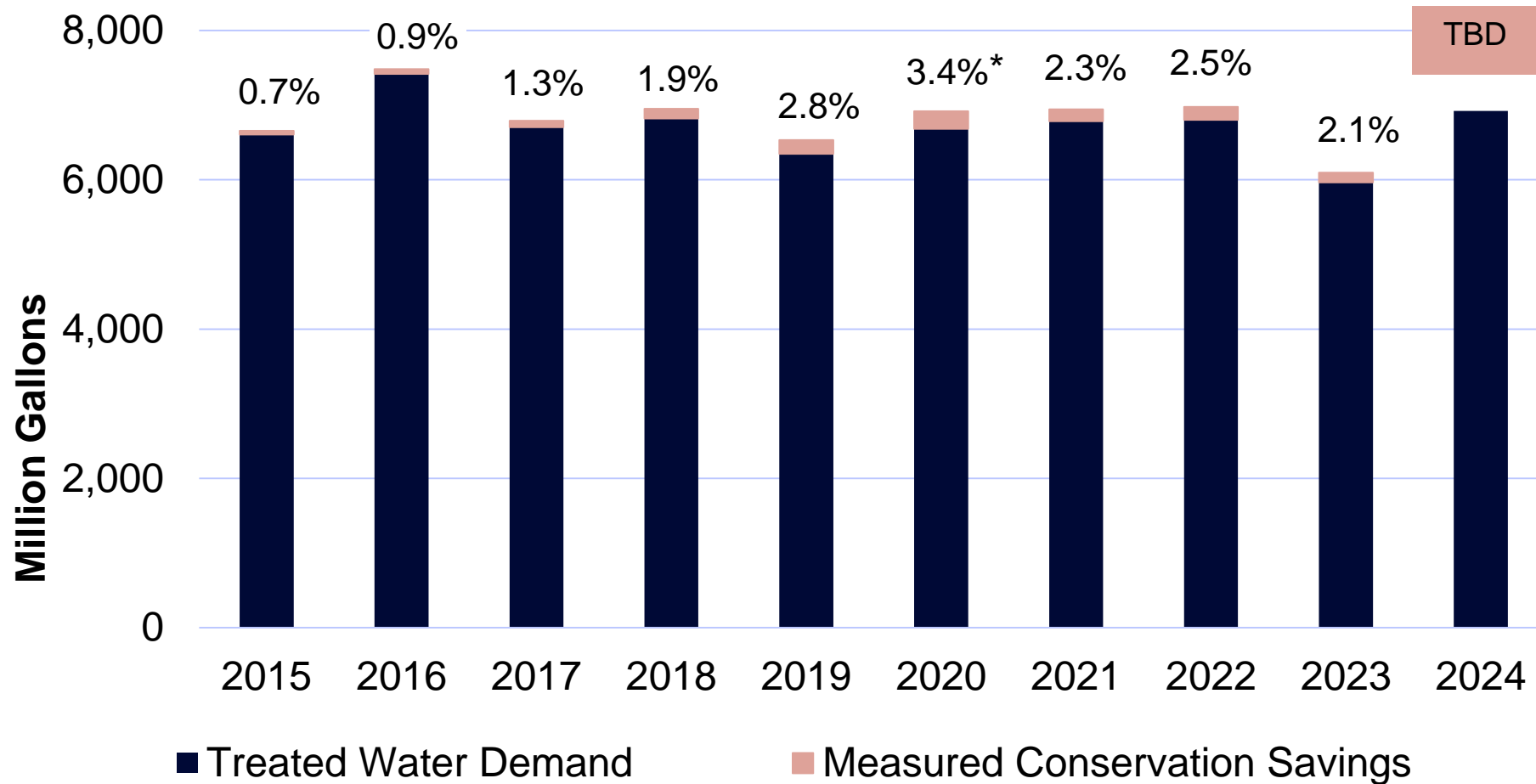


# WE 2025 Staff Engagement Takeaways

- Staff do a lot to use water wisely
- Many agreed on the importance of:
  - Water conservation for new builds
  - Xeriscaping
  - Indoor conservation opportunities
  - Raw water benefits
- Challenges
  - Public perception may not match City efforts
  - Public landscapes need to be safe, durable, attractive
  - Funding is needed to update older, water-hungry designs
  - More info wanted:
    - Public comments and appetite for xeric landscapes
    - Work/operations implications

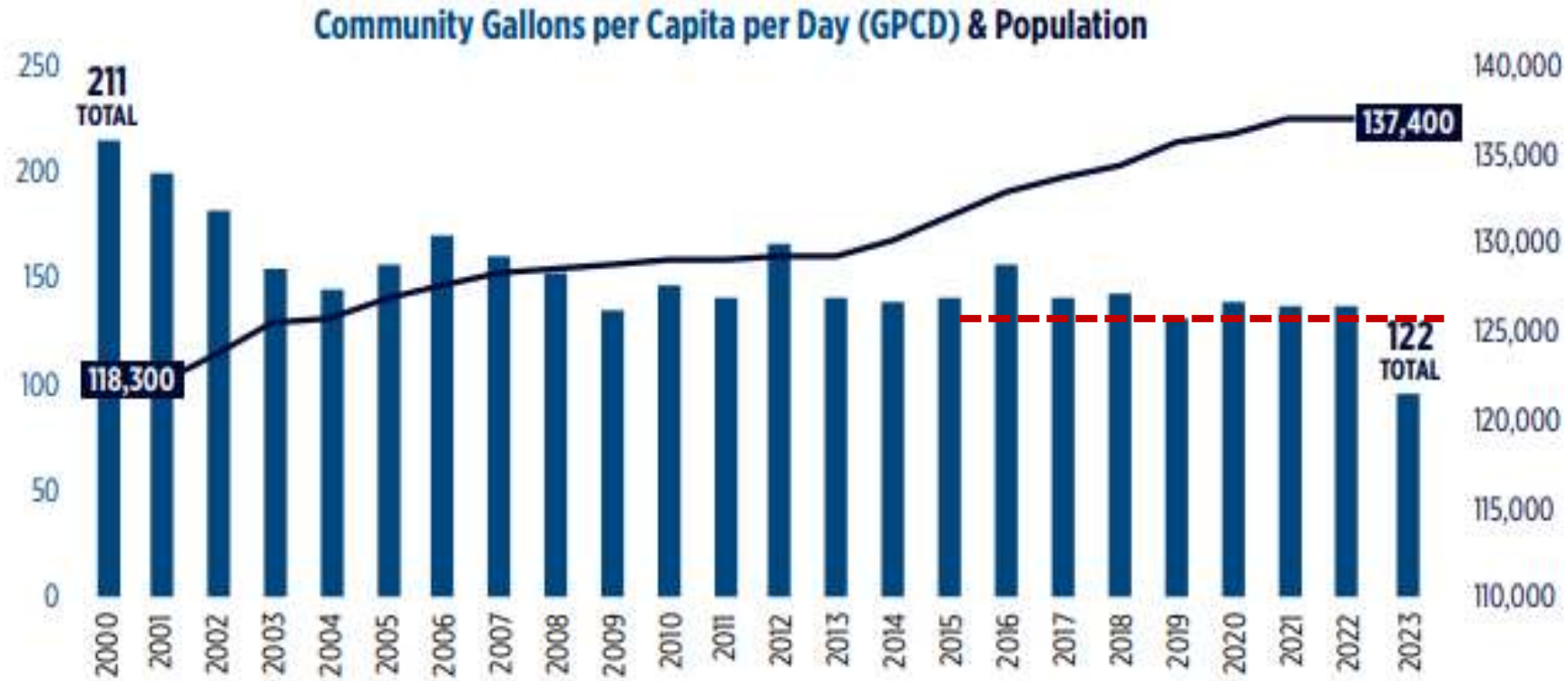


# Water Conservation Annual Savings



\* 2020 included 30 days of mandatory restrictions due to infrastructure project & wildfire; conservation program savings were estimated to be 1.9% without mandatory restrictions.

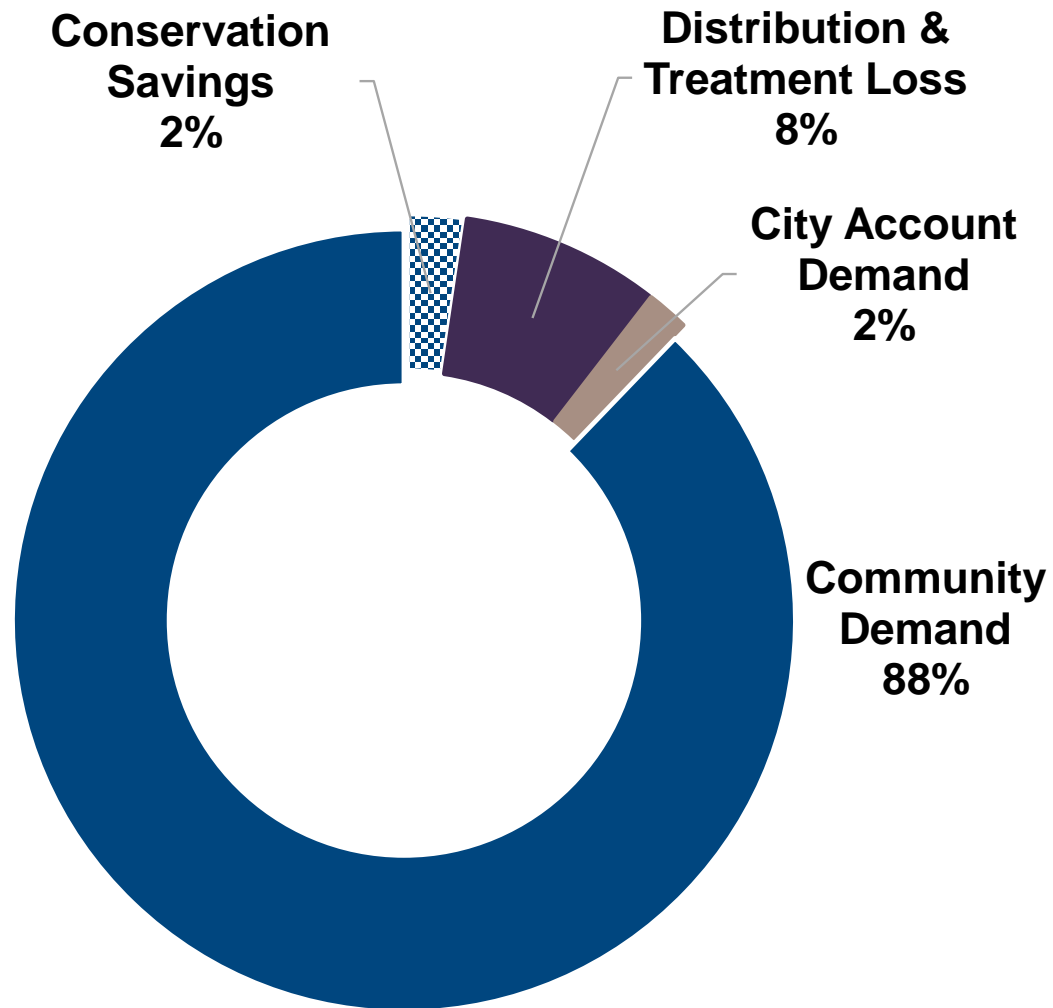
# Conservation Goal Setting



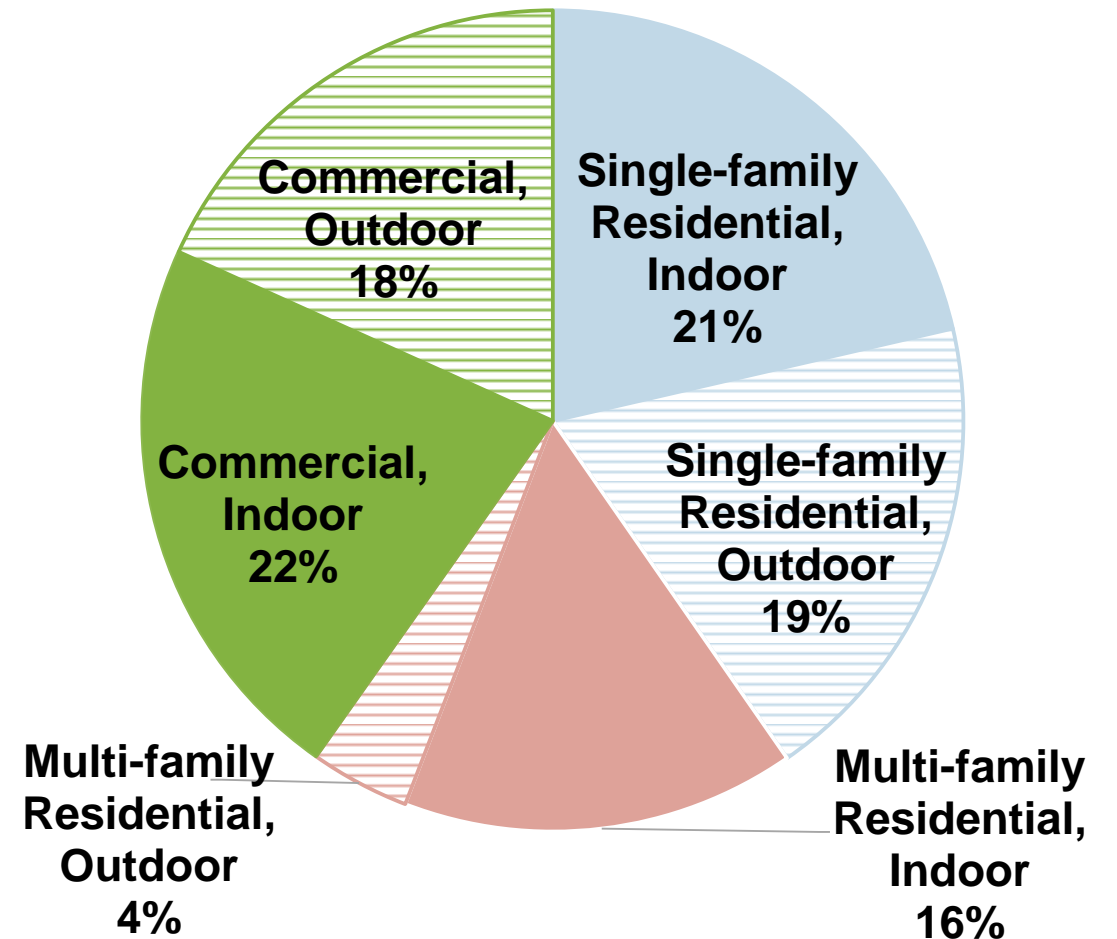
**Current WEP goal: 130 GPCD by 2030**

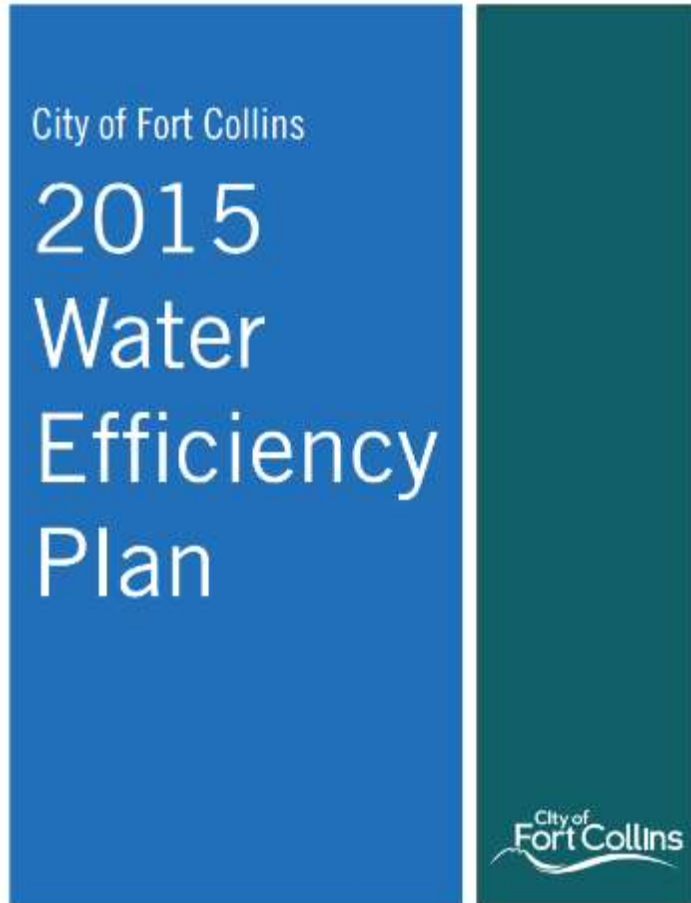
- 42% decrease in GPCD since 2000
- Met the goal in 2023 with help from record precipitation

**Average Annual Demand Including Savings and Non-Revenue Losses (2019 – 2024 average)**



**Annual Residential and Commercial Customer Demand (2022)**





[fcgov.com/WEP](http://fcgov.com/WEP)

Current WEP goal: 130 gallons per capita per day by 2030

## Areas of Opportunity

1. Leverage Advanced Meter Fort Collins data and capabilities
2. Promote and support greater outdoor water efficiency
3. Encourage greater integration of water efficiency into land use planning and building codes
4. Expand commercial and industrial sector strategies
5. Increase community water literacy