



## VISION

To Provide World-Class Municipal Services through Operational Excellence and a Culture of Innovation

## MISSION

Exceptional Service for an Exceptional Community

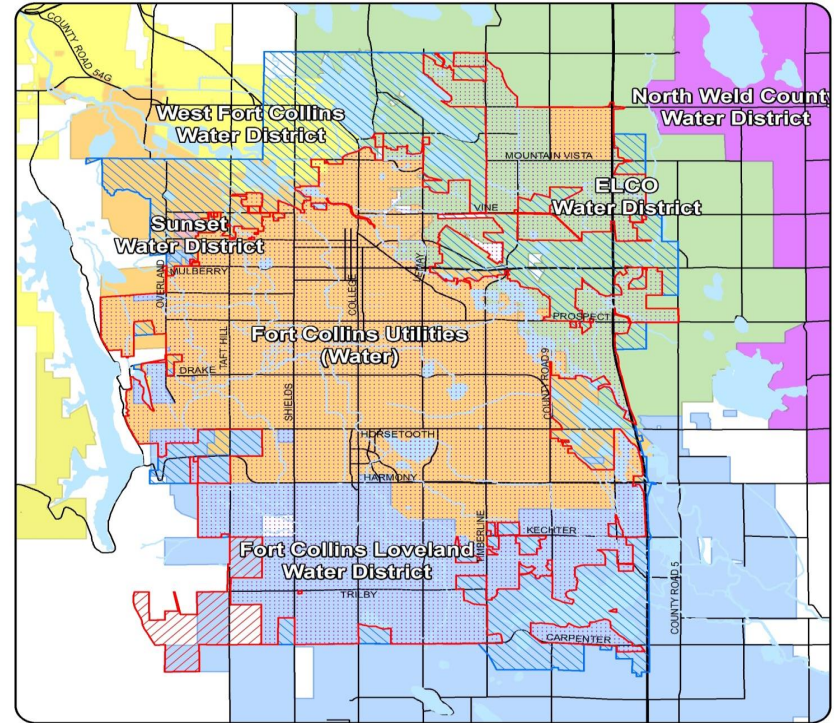
## VALUES

Collaboration – Excellence – Integrity  
Outstanding Service – Safety & Well-being  
Stewardship

# Fort Collins Water Providers

- East Larimer County Water District (ELCO)
- Fort Collins Loveland Water District (FCLWD)
- Fort Collins Utilities (FCU)

All provide treated water service to portions of the GMA



## Water Supply & Demand Management Policy

Water  
Supply  
Reliability

Water  
Efficiency/  
Demand  
Mgmt

Climate  
Resilience

Water  
Quality

Surplus  
Raw Water  
Mgmt

Regional  
Cooperation



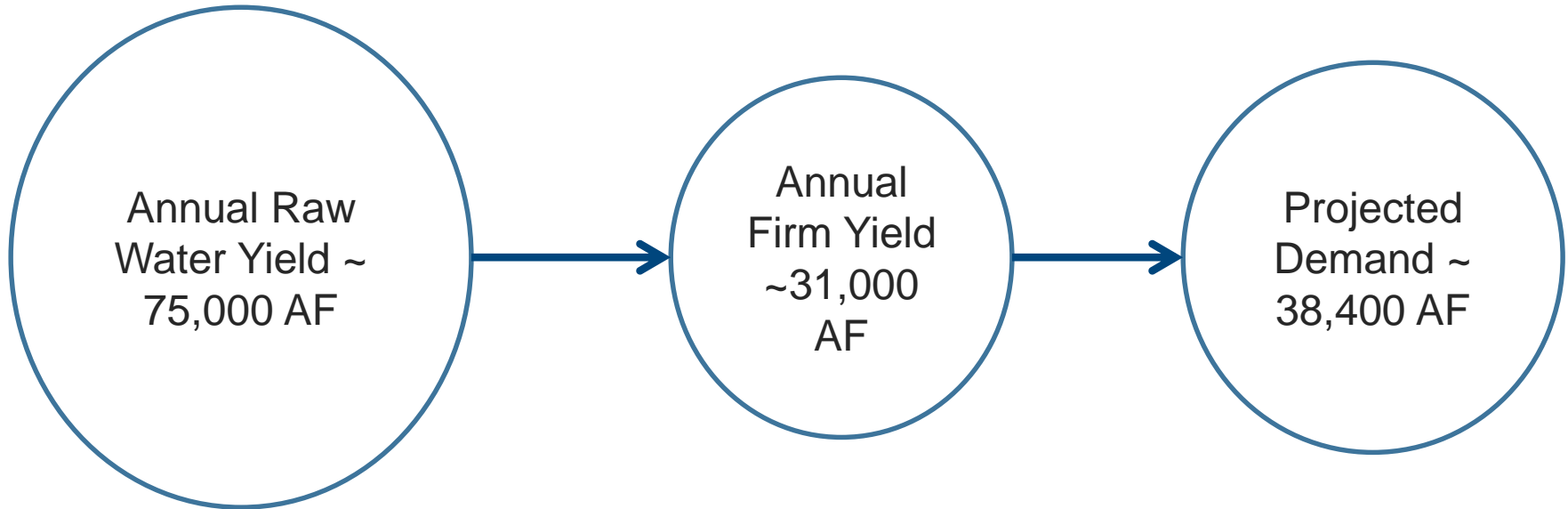
Horsetooth  
Reservoir



Poudre River



Michigan Ditch/Joe  
Wright Reservoir



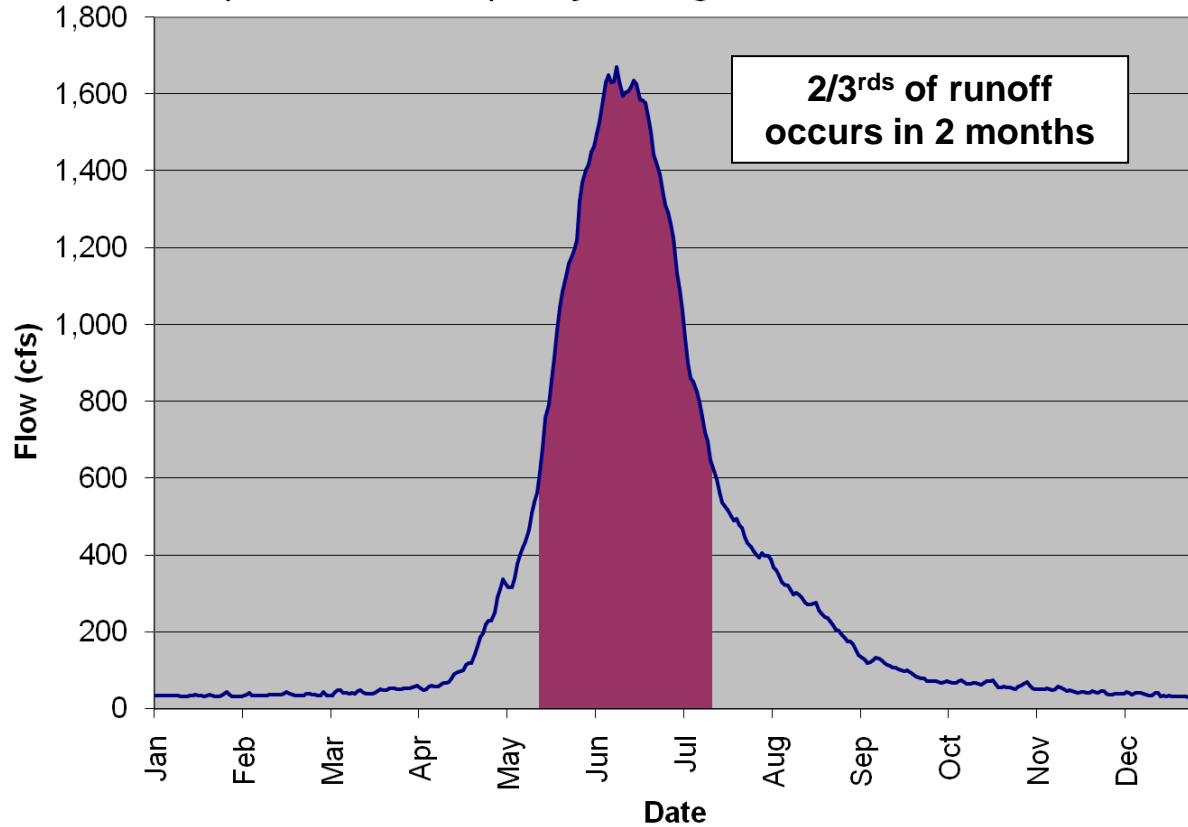
# Water Supply Planning Criteria

Planning Demand Level  
150 gpcd planning demand  
level

Drought Criterion  
1-in-50 year drought

Storage Reserve Factor  
20%

**Poudre River at the Mouth of the Canyon Gage  
(USGS 06752000) Daily Average Flow for 1950-2008**



## Halligan Reservoir Enlargement

- Existing Reservoir on North Fork of Poudre River
- Pursuing enlarged to ~14,525 AF
  - Existing NPIC ~6,400 AF
  - Utilities ~8,125 AF
- Meet Future Demands
- Drought Security
- Emergency Storage Reserve



## Rigden Reservoir

- Full utilization of existing water rights
- Collaborative Project
  - Utilities, Parks, Natural Areas
- 1700 AF Storage for Utilities
- Cost ~\$14M



## 2016 WATER CONSERVATION REPORT

### Our Mission

Cultivate a water-efficient, adaptive and knowledgeable customer base through education and cost-effective water efficiency programs while supporting the City's Strategic Plan and its social, environmental and economic health.

The City of Fort Collins Utilities has a strong commitment to ensure the efficient use of its natural resources. The Utilities' Water Conservation Program is 40 years in the making and has resulted in lower per capita water use, even as population has grown significantly. These programs have benefited customers and Utilities by delaying or avoiding significant capital costs through reduced water bills.

Find out more at  
[fcgov.com/water-efficiency-plan](http://fcgov.com/water-efficiency-plan)  
[fcgov.com/conserv](http://fcgov.com/conserv)



**WATER EFFICIENCY** is doing  
**MORE WITH LESS** – not doing without

On average, residential customers used  
**78 GALLONS PER PERSON PER DAY**

**DOWN 38% SINCE 2008**

In 2016 alone, water conservation programs saved about

**70 MILLION GALLONS OF WATER**

which is equal to water use of 786 single-family homes in Fort Collins.

**x 786**

**WATER EFFICIENCY REDUCES ENERGY USE.**  
Energy is used to treat, transport and heat water.

**WATER CONSERVATION PROGRAMS** engaged customers thousands of times throughout the year, with over

**x 3,600**

people attending a variety of classes and events and about **4,500 CUSTOMERS** participating in a program or completing an efficiency project.

SAVING EVEN MORE...

**SUSTAINED CONSERVATION**

means that treatment facilities and other infrastructure don't need to be as large and will cost less.

**EXAMPLE: WATER TREATMENT PLANT**

The water treatment plant was built for a larger average demand. We now rent the excess capacity to other water providers, which  
**RESULTS IN MILLIONS OF DOLLARS OF REVENUE EACH YEAR.**

**EXAMPLE: HALLIGAN WATER SUPPLY STORAGE**

The Halligan Water Supply Storage project does not need to be as big, which led to **\$0 MILLION IN ADDED COSTS.**

**THE XERISCAPE DEMONSTRATION GARDEN**

at City Hall was built in 1986 and is the 2nd oldest in the world.

**DEMONSTRATES ATTRACTIVE LANDSCAPES THAT SAVE WATER**

**2016 XERISCAPE INCENTIVE PROGRAM**

During the pilot year of the Xeriscape Incentive Program, **10 TRANSFORMATIONS** were completed, which equals over **15,000 SQUARE FEET** of high-water use turf transformed into beautiful, water-wise landscapes.

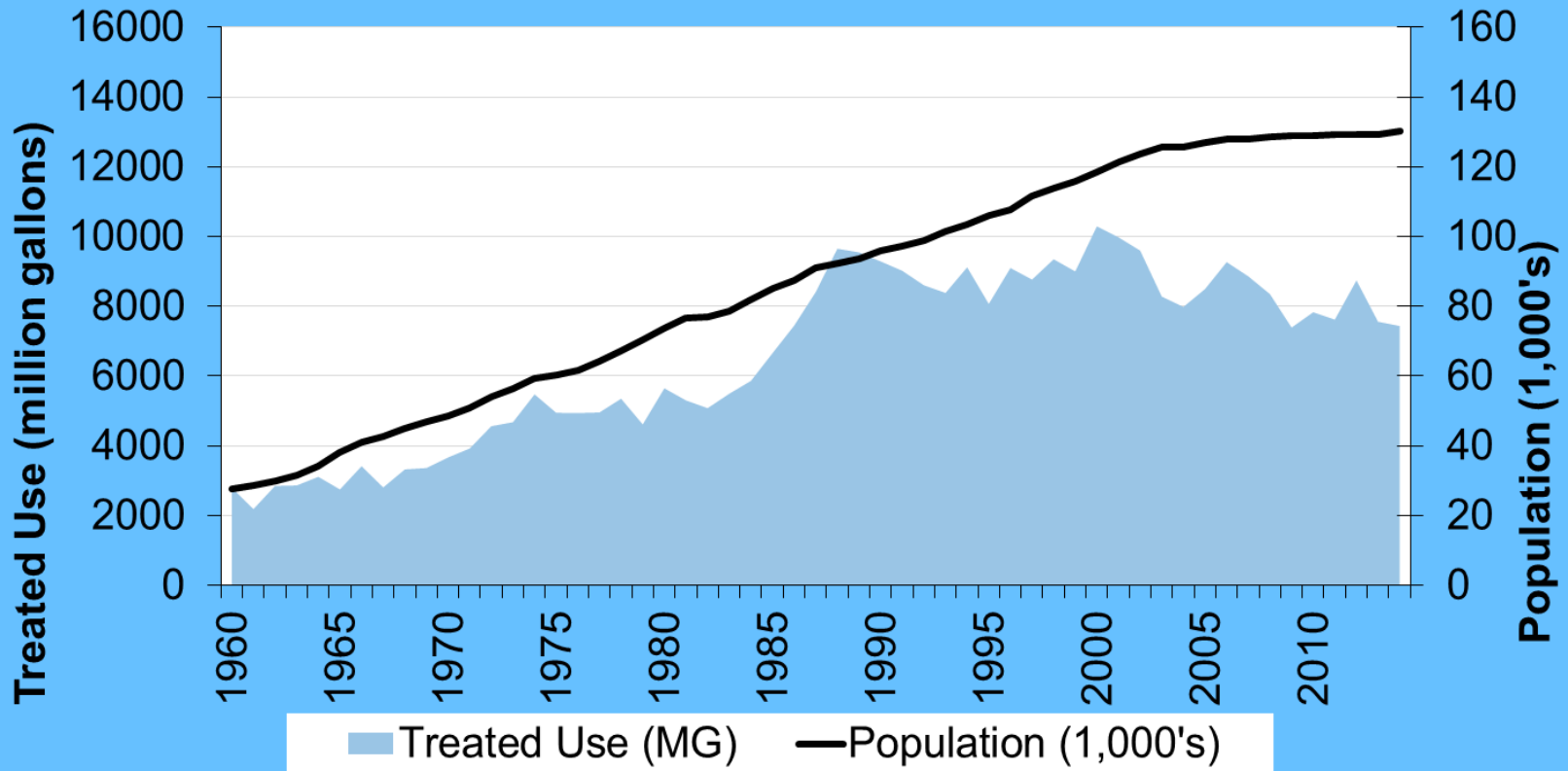
**EFFICIENCY IS CHEAPER THAN BUYING NEW**

Efficiency programs cost **LESS THAN A PENNY PER GALLON** saved annually (even less over the lifetime of the action). **NEW WATER SUPPLIES CAN COST UP TO 15 CENTS PER GALLON.**

## Water Efficiency

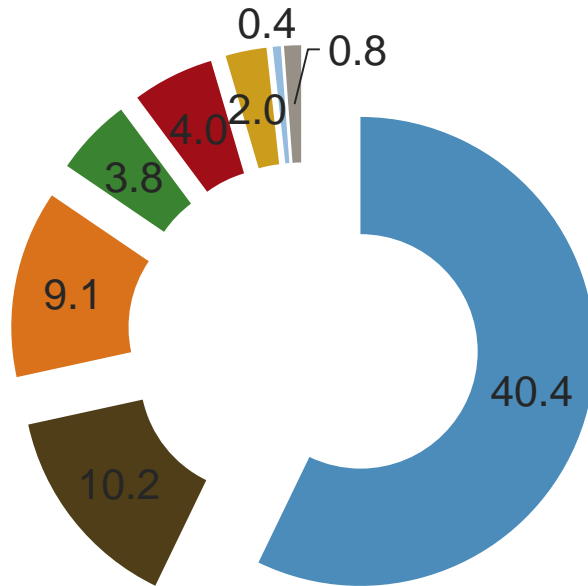
- Doing more with less
- Provide water for multiple beneficial purposes
- Reduce the need for capital expansion projects and certain operational costs
- Prepare for potential impacts of climate change

## Treated water use and population, 1960 - 2014 Fort Collins Utilities



# How Are We Doing?

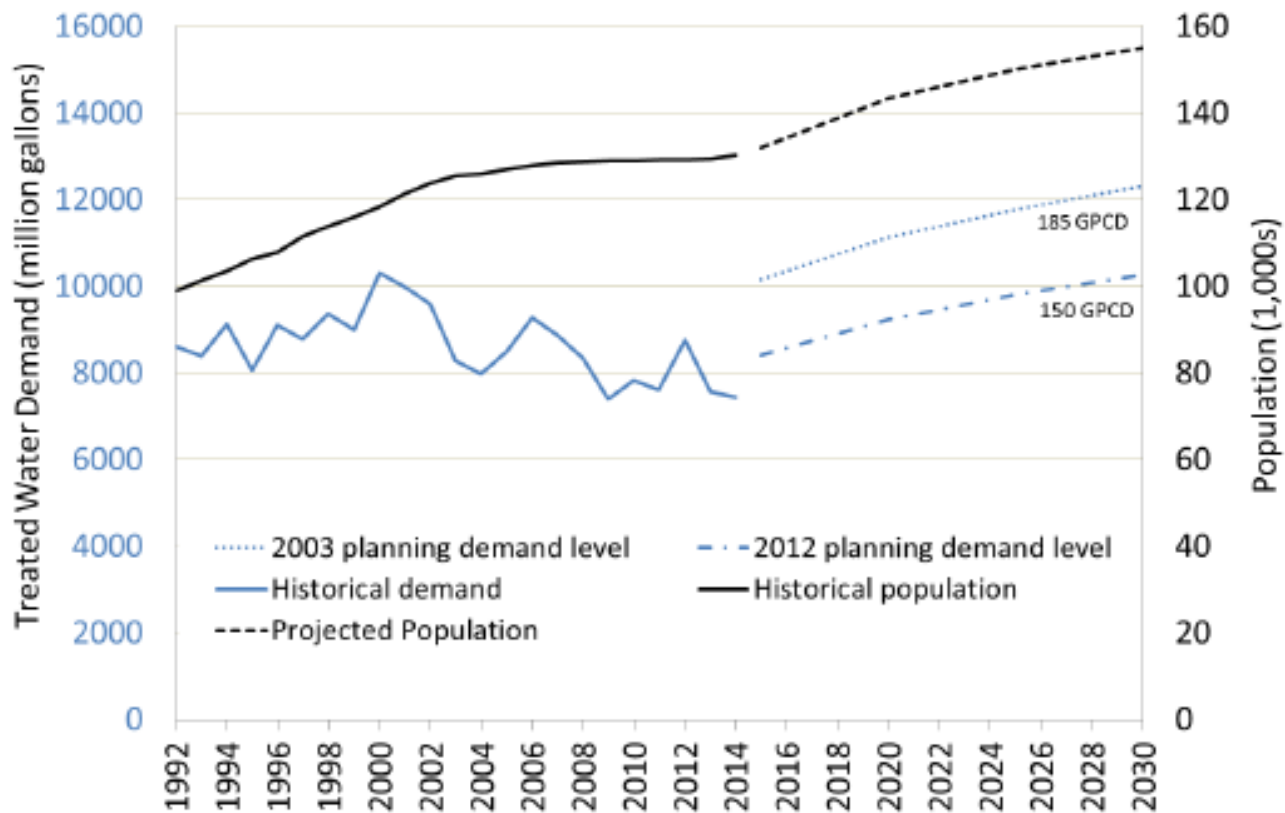
## 2016 Water Savings (million gallons)



- Informational Reports
- Residential Rebates
- Commercial Rebates
- Direct Install Programs
- Audits & Assessments
- Continuous Consumption
- Landscape Programs

Total:  
**70**  
**million**  
**gallons**  
saved in  
2016

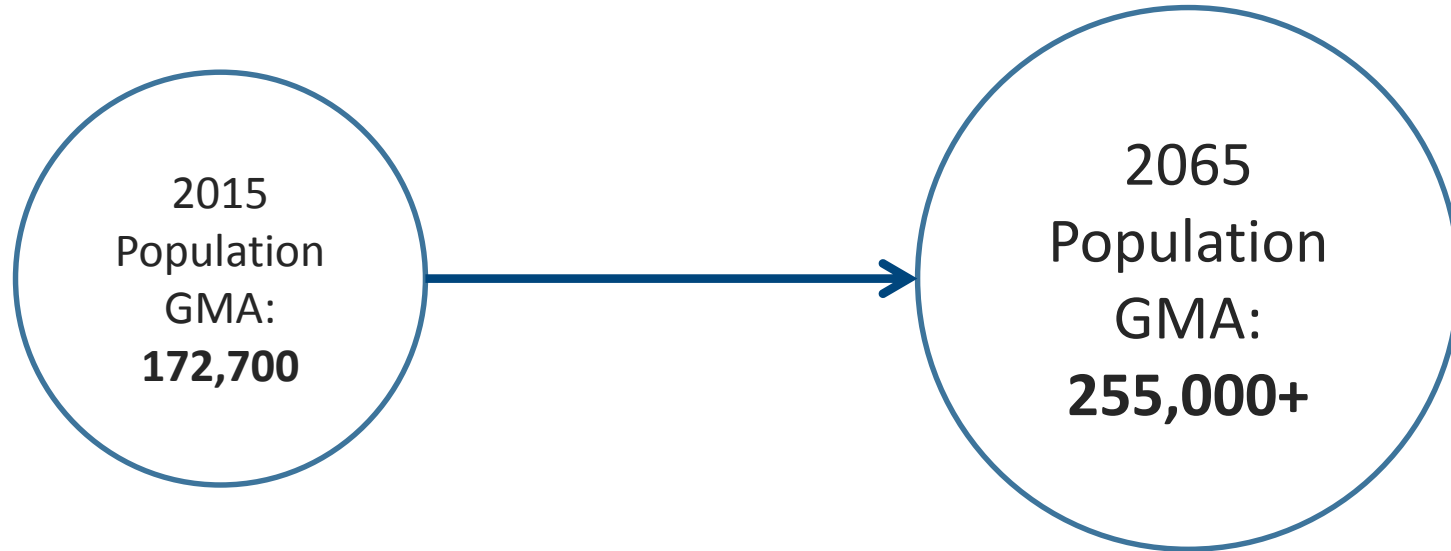
## Treated Water Demand and Historical Planning levels Fort Collins Utilities



## CHALLENGES/ OPPORTUNITIES



# Population Growth



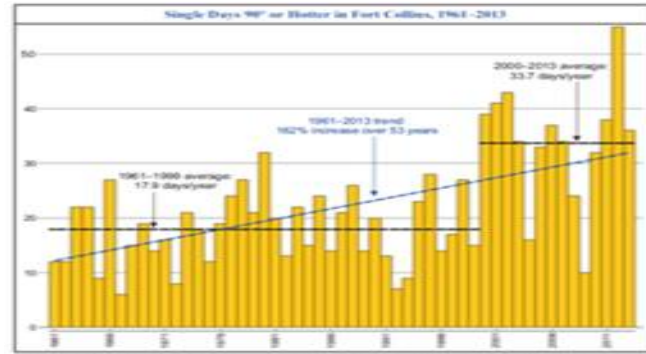
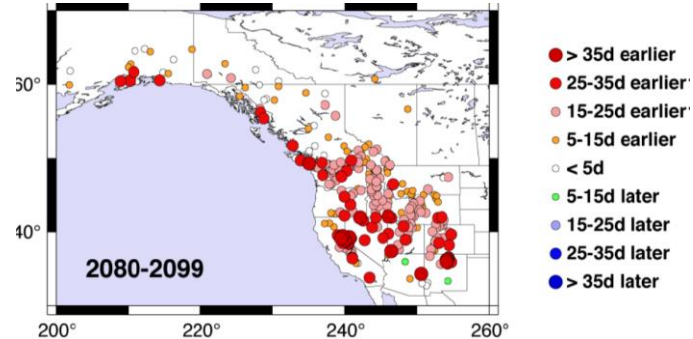
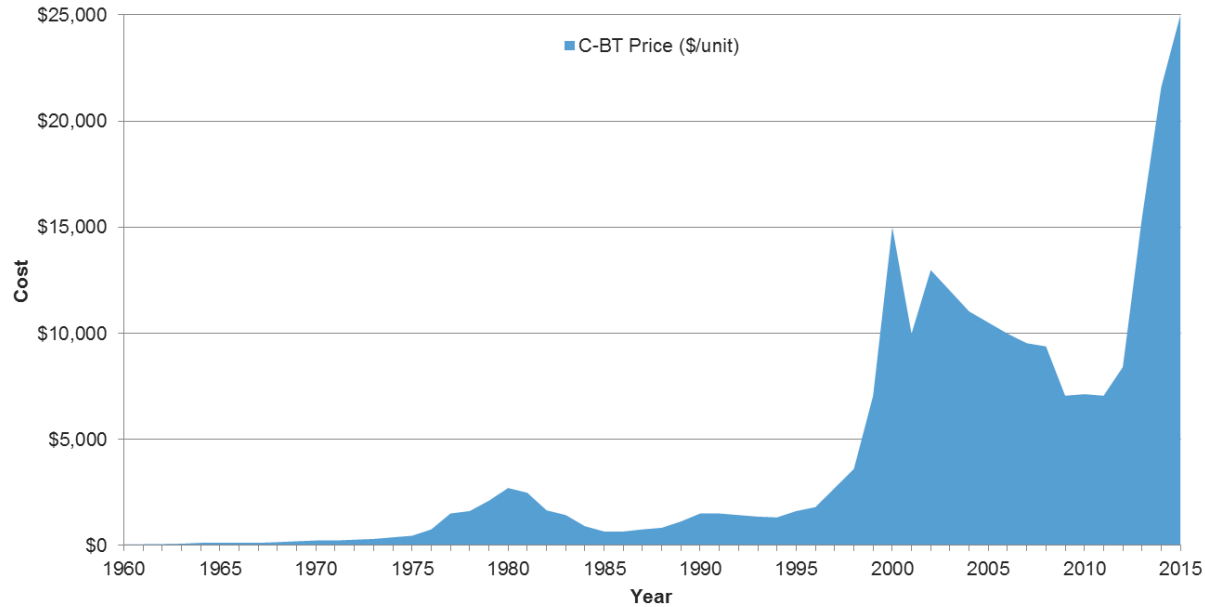
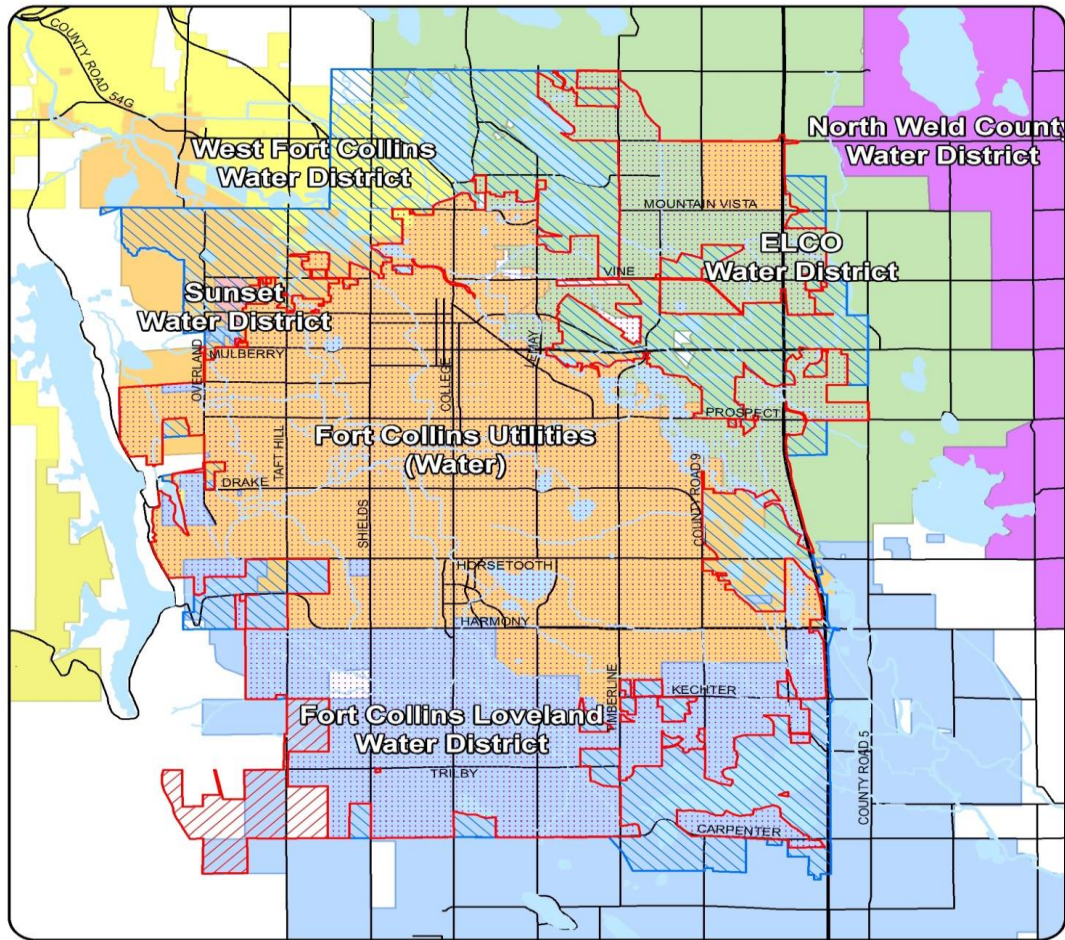


Figure 1. Number of days per year with maximum temperatures of 90°F or higher in Fort Collins, 1961-2013, showing averages for the 20th-century and 21st-century years in the period and the linear trend.



## Colorado-Big Thompson Project Unit Price vs. Fort Collins Utilities Use, Cash-in-Lieu Rate

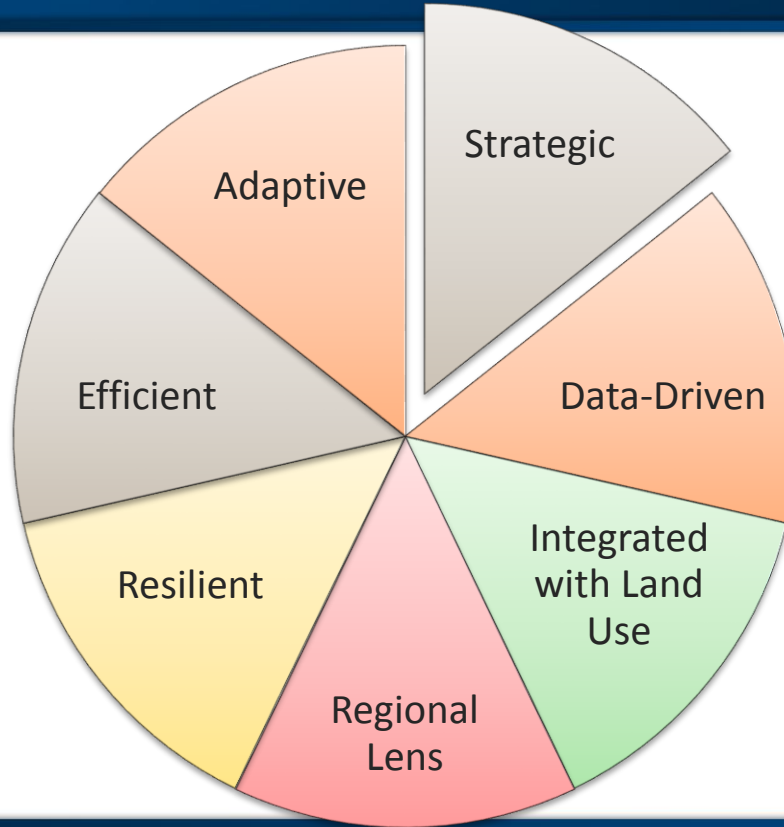




## Multiple Water Providers

# Regulatory Constraints





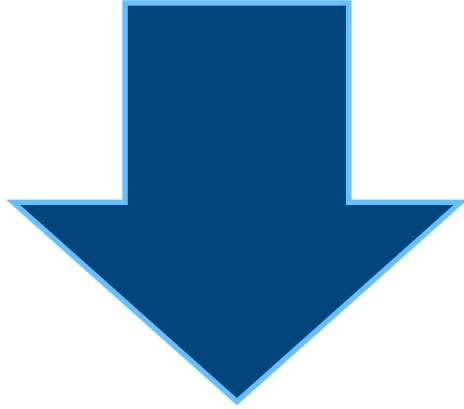
## Regional Water Collaboration

- Shared water resources
- Similar treatment/distribution facilities
- Common challenges
- Focus on:
  - Water Conservation
  - Water Resources Planning
  - Future Water Supplies/Infrastructure



# Water/Land Use Integration

INTERVENTION POINT	PURPOSE
<b>Planning &amp; Policy Making</b>	Goals and objectives for managing the intersection of natural resources and the built environment.
<b>Pre - Development</b>	Links new development to water supply planning
<b>At Development Review</b>	Determines what water resource management, conservation and efficiency requirements are applied to development.
<b>At Building &amp; Construction</b>	
<b>Post-Occupancy</b>	Incentivizes homeowners and renters to reduce water consumption.



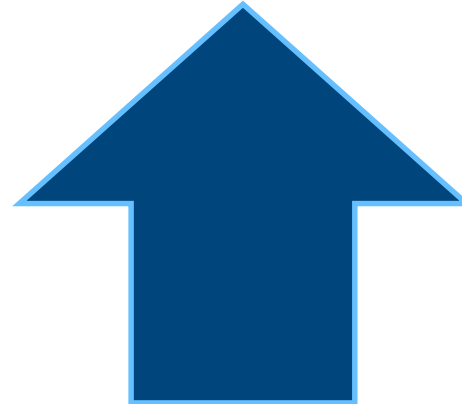
## Challenges

- Growth
- Cost - affordability
- Climate Trends
- Regional Challenges
- Regulatory Constraints



## Opportunities

- Integrated Water/Land Use Planning
- Watershed Protection/Mgmt
- Redundant Systems/Supplies
- Climate Vulnerability Planning
- Storage Development
- Demand Management
- Regional Collaboration





# THANK YOU!