



**CUWCD Overview for the  
Legislative Water Development  
Commission  
August 20, 2019**







## Who are we?

***The Central Utah Water Conservancy District (CUWCD) was created in 1964. CUWCD is governed by a Board of 18 Trustees who are nominated by county councils and commissions, appointed by the Governor, and confirmed by the Utah State Senate to serve four-year terms.***

## Board of Trustees



G Wayne Andersen  
Utah County



JR Bird  
Duchesne County



Jim Bradley  
Salt Lake County



Shelley Brennan  
Duchesne County



Max Burdick  
Salt Lake County



Kirk L Christensen  
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Tom Dolan  
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Steve Farrell  
Wasatch/Summit  
County



Nathan Ivie  
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Bill Lee  
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Al Mansell  
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Mike Mckee  
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Wasatch/Summit  
County



Aimee Newton  
Salt Lake County



N Gawain Snow  
Uintah County



Edwin Sunderland  
Sanpete County



Byron Woodland  
Juab County



Boyd Workman  
Uintah County



## ***What are our strategic statements?***

***Our Mission:*** To responsibly plan for the future by developing, delivering, and efficiently using our limited water resources.

***Our Vision:*** To provide a safe and secure water supply, to empower and challenge employees, and to be a leader in the water industry.

***Our Values:*** We value safety, integrity, quality, and people.



# What do we do?

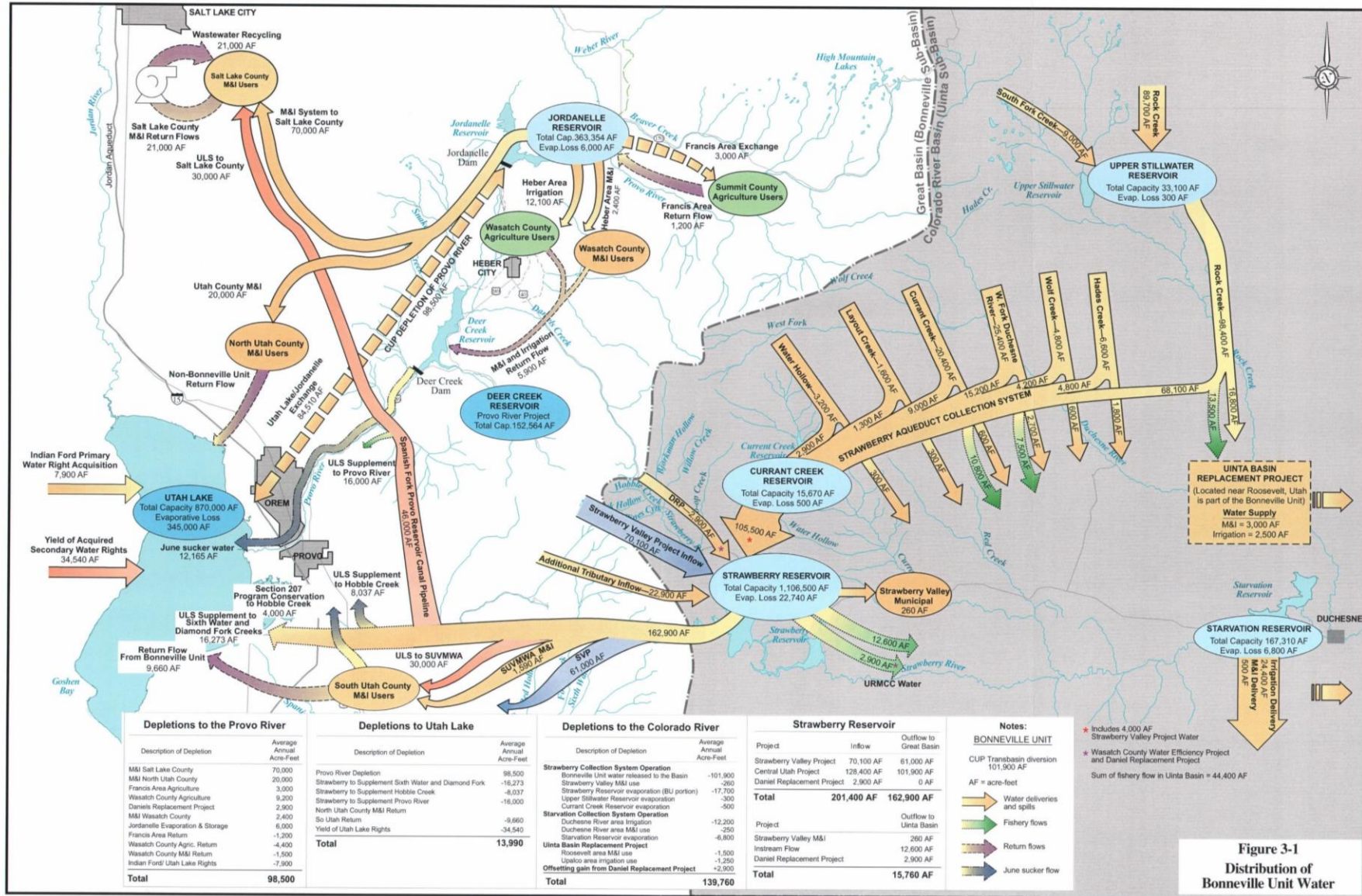
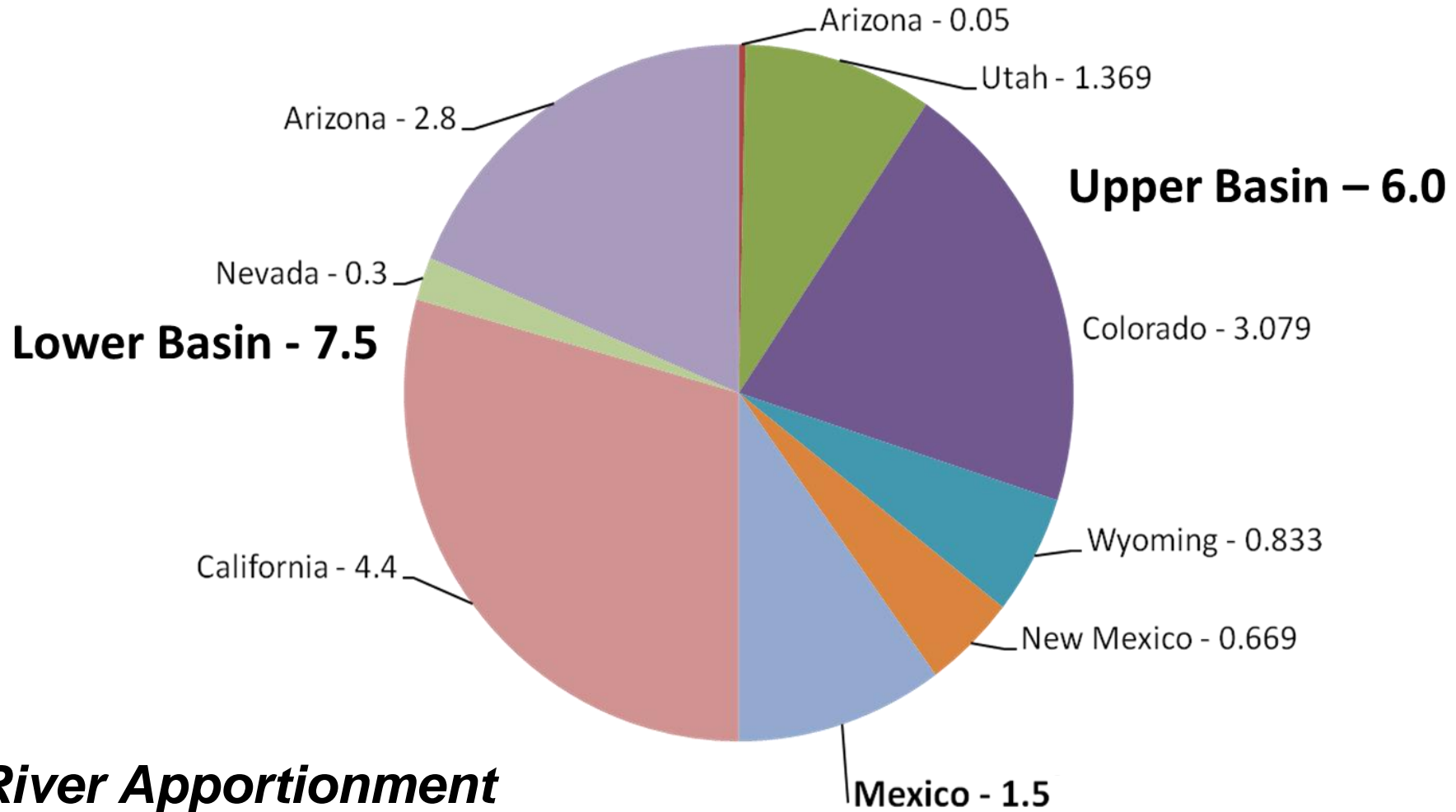


Figure 3-1  
Distribution of Bonneville Unit Water



# Compact and Treaty Apportionment Based on Current Hydrology *(in million acre feet per year (MAFY))*

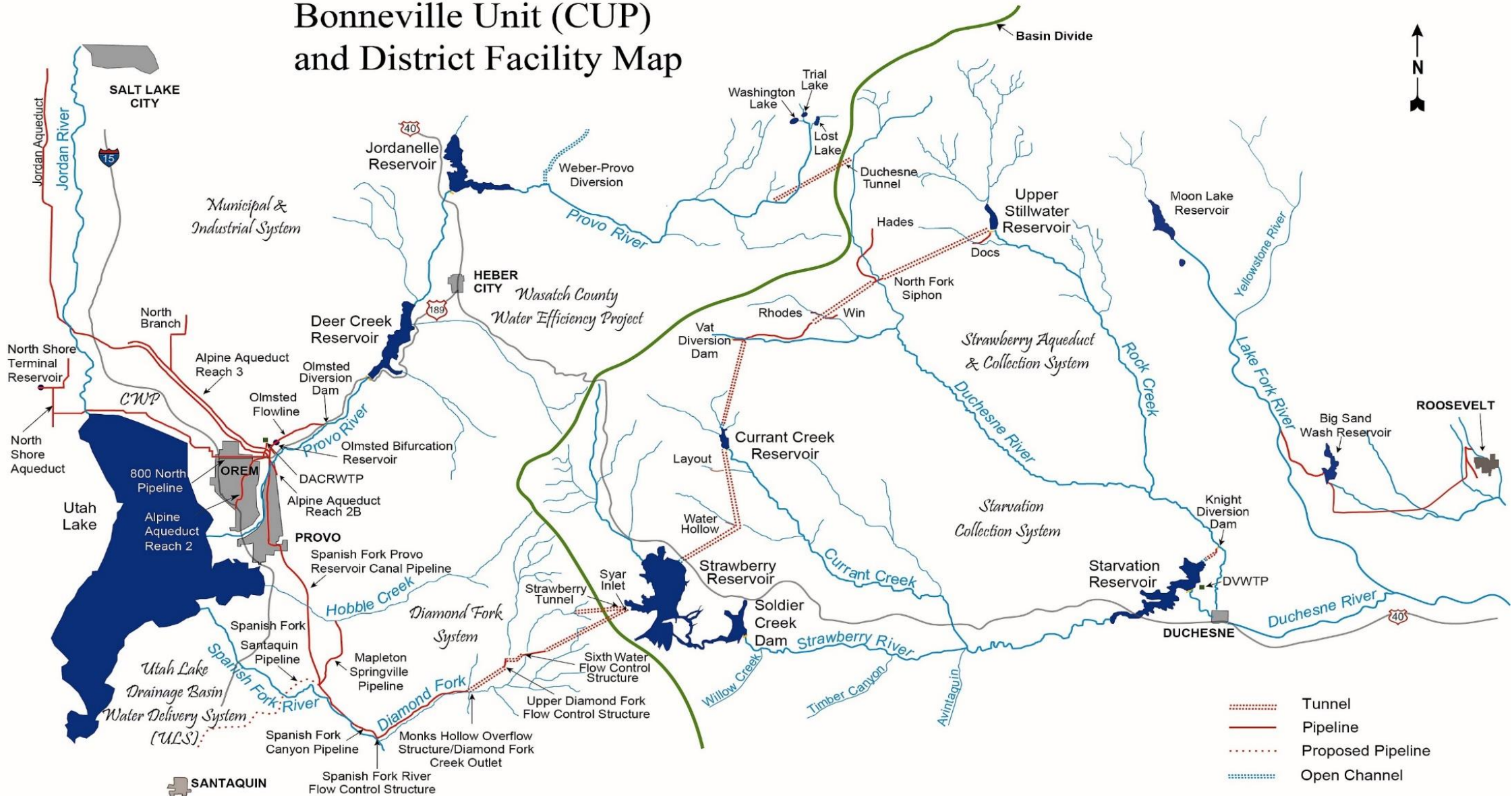


**Colorado River Apportionment**

**TOTAL – 15.0 MAFY**



# Bonneville Unit (CUP) and District Facility Map



## Utah's Long-Term Demographic and Economic Projections Summary

Principal Researchers: Pamela S. Perlich, Mike Hollingshaus, Emily R. Harris, Juliette Tennert & Michael T. Hogue

### Background

The Kem C. Gardner Policy Institute prepares long-term demographic and economic projections to support informed decision making in the state. The Utah Legislature funds this research, which is done in collaboration with the Governor's Office of Management and Budget, the Office of the Legislative Fiscal Analyst, the Utah Association of Governments, and other research entities. These 50-year projections indicate continued population growth and illuminate a range of future dynamics and structural shifts for Utah. An initial set of products is available online at [gardner.utah.edu](http://gardner.utah.edu). Additional research briefs, fact sheets, web-enabled visualizations, and other products will be produced in the coming year.

### State-Level Results

#### Population

- Utah's population is projected to increase from approximately 3 million in 2015 to 5.8 million in 2065. This represents an increase of 2.8 million people with an annual average rate of change of 1.3 percent.
- The Utah population reached 3 million in 2015. Utah is projected to reach 4 million in 2032 (17 years after 2015), 5 million in 2050 (18 years after 2032), and 5.8 million in 2065.
- Though growth rates are projected to decelerate over the next 50 years, they are also projected to exceed national growth rates. Utah's growth in each decade ranges from 9.7 percent (2050-2060) to 16.7 percent growth (2010-2020). The national range is 4.4 percent (2050-2060) to 7.5 percent (2010-2020).

#### Components of Population Change

- Utah's total fertility rate (average number of children born to a Utah woman in her lifetime) is projected to

continue the existing trend of a slow decline. From 2015-2065, rates are projected to decline from 2.32 to 2.29. These rates are projected to remain higher than national rates that move from 1.87 to 1.86 over a similar period.

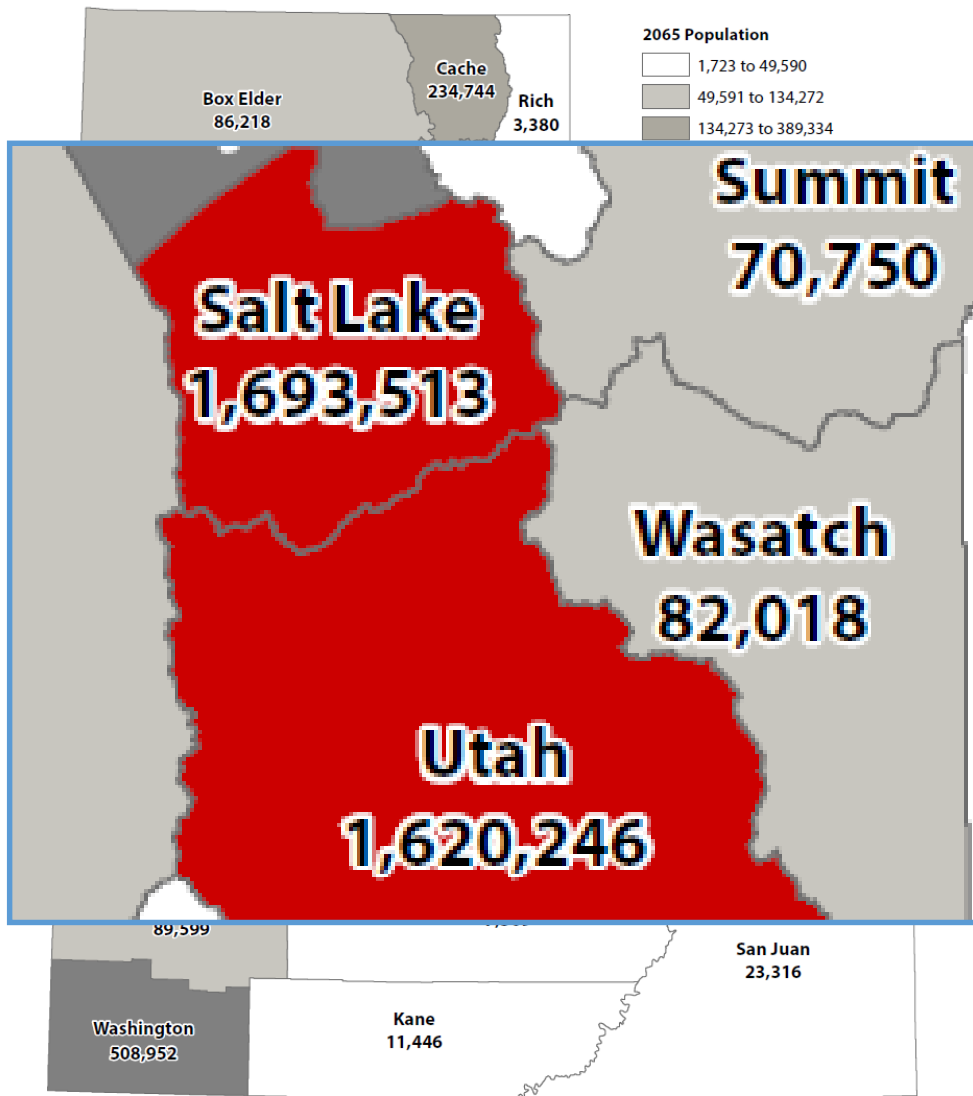
- In 2065, life expectancy in Utah is projected to be 86.3 for women and 85.2 for men. This is an increase of approximately 4 years for women and 6 years for men. The sharper increase for men narrows the life expectancy gap traditionally seen between the sexes.
  - Natural increase (births minus deaths) is projected to remain positive and account for two-thirds of the cumulative population increase to 2065. However, given increased life expectancy and declining fertility, the rate of natural increase is projected to slow.
  - Net migration is projected to be positive population growth, but the contribution to population change is projected to be smaller than in previous decades.
- #### Age Composition
- Utah's median age is projected to increase from 32.5 in 2015 to 37.5 in 2065, a 5-year increase. This is a larger share of the population aged 65 and older.
  - The share of the population ages 65 and older is projected to double over the next 50 years, rising from 10.2 percent of the population in 2015 to 20.3 percent in 2065.
  - In 2015, Utah had 372 centenarians (people at least 100 years old). That number is projected to be nearly 20 times greater by 2065, reaching 6,846 centenarians.

**“Utah’s population is projected to increase from approximately 3 million in 2015 to 5.8 million in 2065.”**



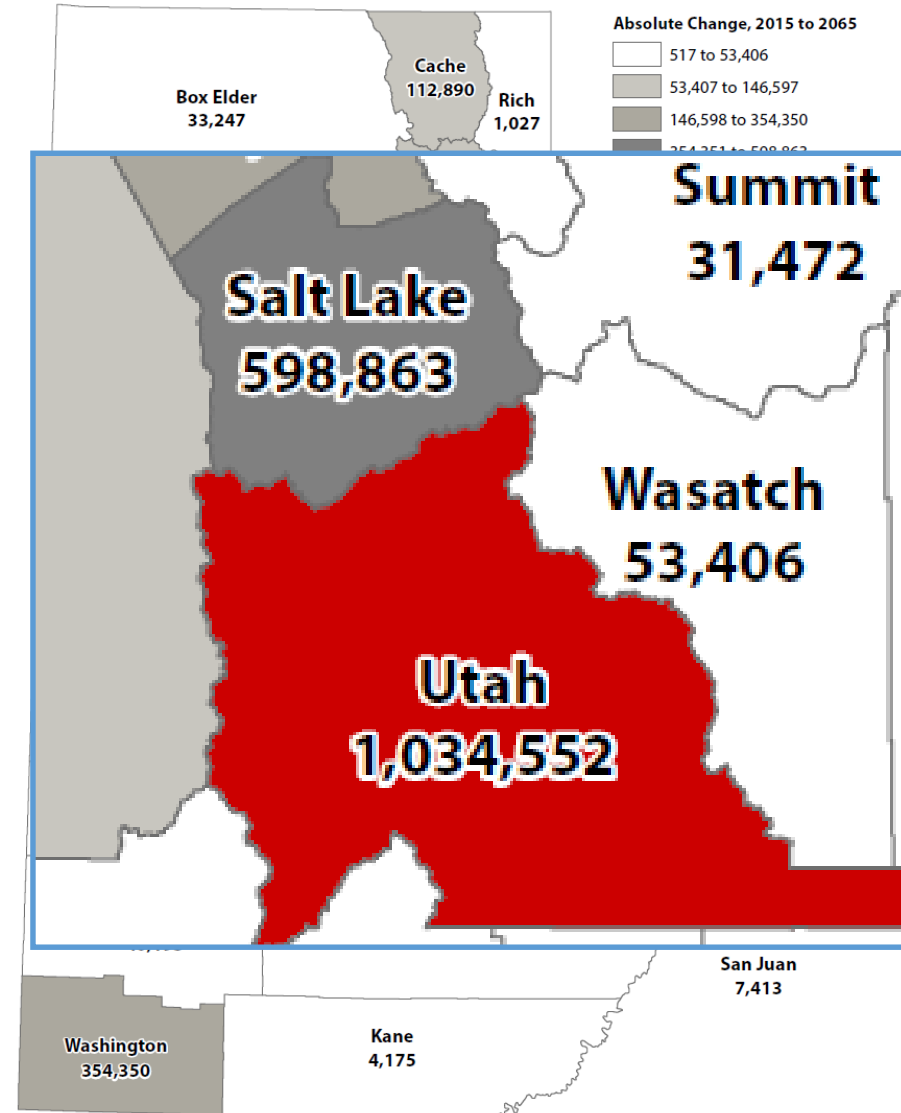


Figure 1:  
Utah Population by County  
2065



Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections.

Figure 2:  
Absolute Change in Utah Population by County  
2015-2065



Sources: Kem C. Gardner Policy Institute 2015-2065 State and County Projections; DemographyUTAH Population Committee 2010-2016 Population Estimates.

## ***How do we handle it?***

***“Conservation must be our first water project.”***

***“Aging infrastructure must be replaced to maintain current water supply.”***

***“New water supply must be developed for future growth.”***



### Understanding Utah's Water **Municipal Manual**

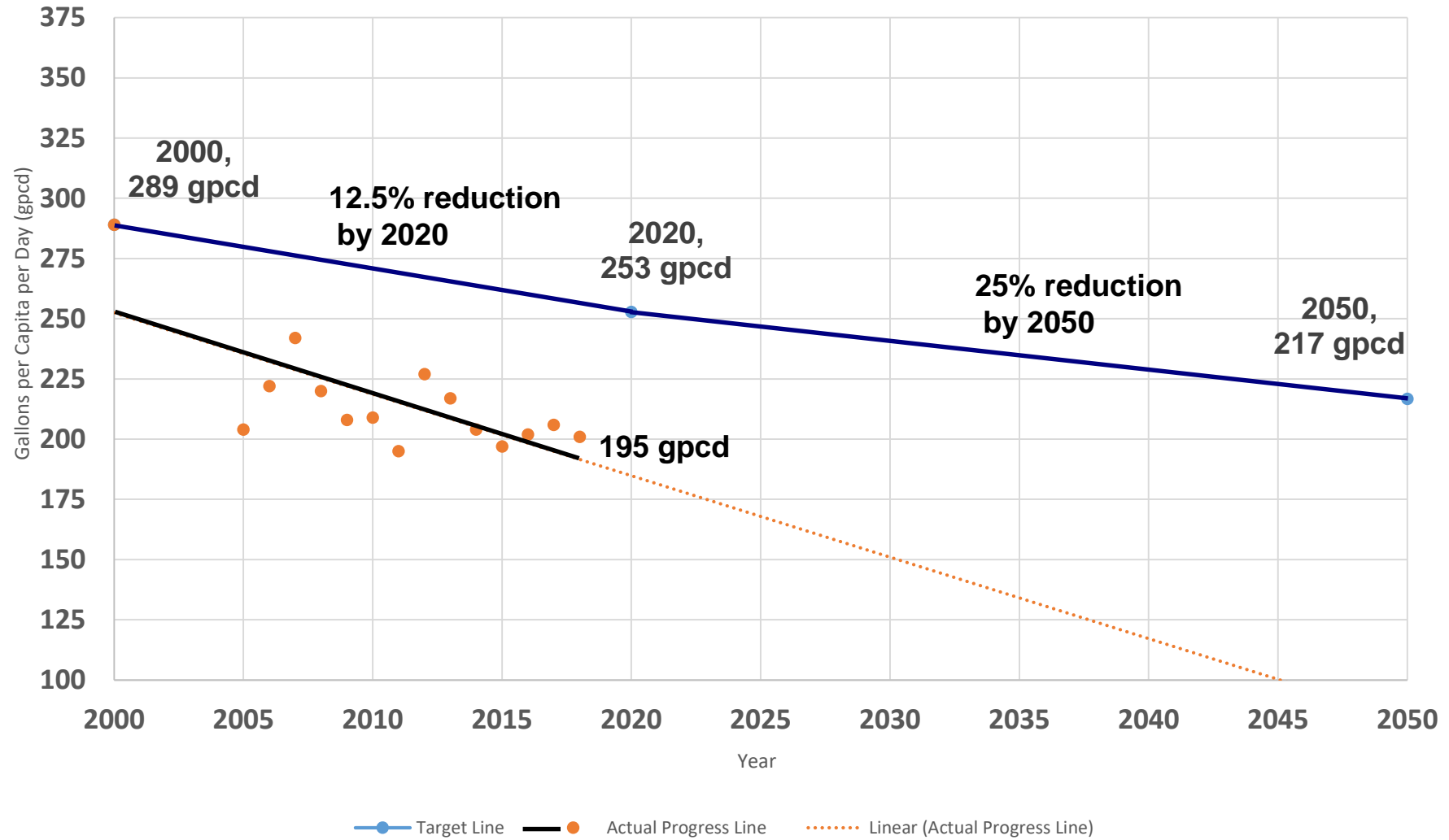
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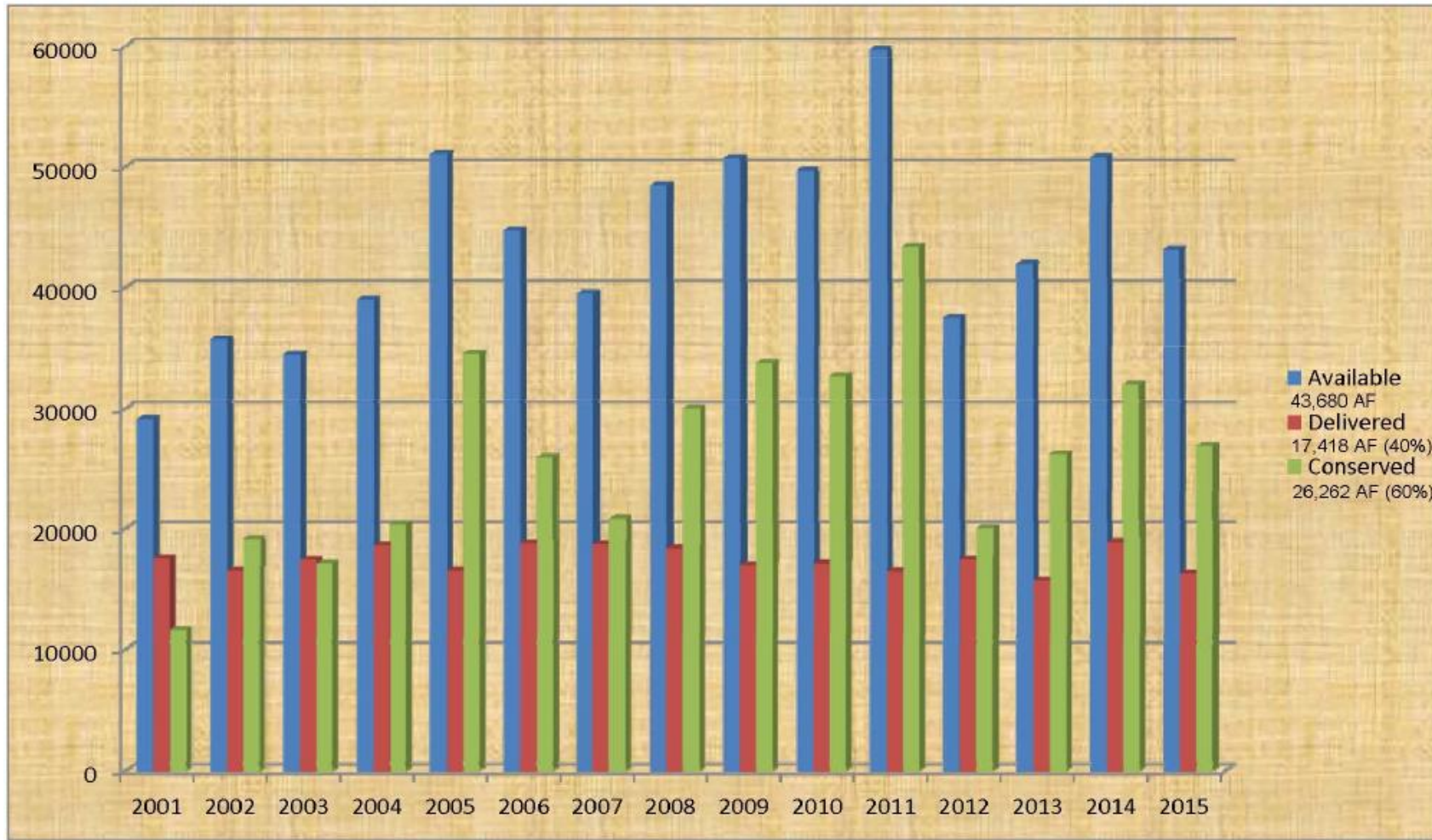


# Conservation:

## MWDSLS Water Conservation



# WCWEP Conservation 2001 thru 2015



**15 Year Conservation Totals**  
**393,936 AF over 15 years**

**Available: 43,680 AF/Yr**  
**Delivered: 17,418 AF/Yr (40%)**  
**Conserved: 26,262 AF/Yr (60%)**





## ***Ageing Infrastructure:***

***Project Name: North Fork Siphon Replacement Project  
Cost: \$26.4M (Design & Construction)***



***This project represents the first major replacement of a Central Utah Project facility. As facilities continue to age, the District's asset management program will help to identify future rehabilitation and replacement needs.***





***Project Name: Olmsted Hydroelectric Power Plant Replacement Project***

***Cost: \$41.0M (Design & Construction)***



***The project develops approximately 11.5MW of renewable, hydroelectric power—enough energy to power approximately 3,000 homes. It is the 4<sup>th</sup> largest hydroelectric power plant in Utah.***



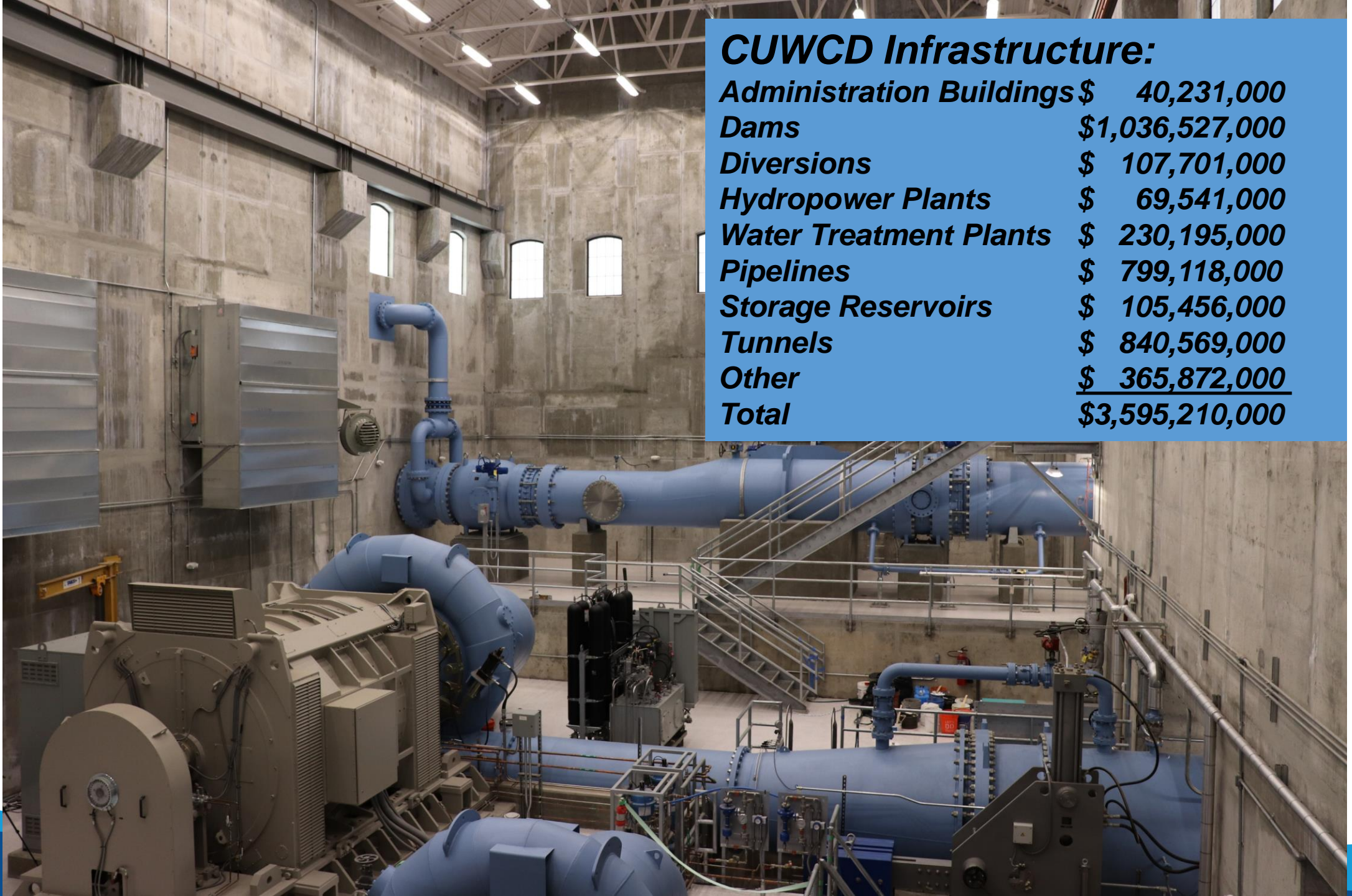






## ***CUWCD Infrastructure:***

|  |                               |
|--|-------------------------------|
| <b><i>Administration Buildings</i></b> | <b>\$ 40,231,000</b>          |
| <b><i>Dams</i></b>                     | <b>\$1,036,527,000</b>        |
| <b><i>Diversions</i></b>               | <b>\$ 107,701,000</b>         |
| <b><i>Hydropower Plants</i></b>        | <b>\$ 69,541,000</b>          |
| <b><i>Water Treatment Plants</i></b>   | <b>\$ 230,195,000</b>         |
| <b><i>Pipelines</i></b>                | <b>\$ 799,118,000</b>         |
| <b><i>Storage Reservoirs</i></b>       | <b>\$ 105,456,000</b>         |
| <b><i>Tunnels</i></b>                  | <b>\$ 840,569,000</b>         |
| <b><i>Other</i></b>                    | <b>\$ 365,872,000</b>         |
| <b><i>Total</i></b>                    | <b><u>\$3,595,210,000</u></b> |





## ***New Water Supply and Infrastructure:***

***Project Name: Utah Lake System – Spanish Fork Santaquin Pipeline Project – Spanish Fork Reach  
Cost: \$15.0M (Construction)***



***This is the first reach of 60-inch, welded-steel pipe to bring M&I water to south Utah County.***



2018.07.20

***Project Name: Central Water Project – High-Head Well Drilling Project – Wells 8-10***  
***Cost: \$7.7M (Construction)***



***These wells continue to develop the water rights purchased for the Central Water Project in Utah and Salt Lake counties.***









