



**JORDAN VALLEY WATER**  
CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021

# JVWCD Board of Trustees



Corey L. Rushton  
Chair

Karen D. Lang  
Vice Chair

Gregory R. Christensen

A. Reed Gibby

Sherrie L. Ohrn

Dawn R. Ramsey

Lyle C. Summers  
Conservation Committee Chair

John H. Taylor  
Finance Committee Chair

Barbara L. Townsend

# JVWCD Mission and Strategy to Fulfill Mission

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*Our Mission:*

Delivering quality water and services every day

# JVWCD's Strategy to Fulfill its Mission

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- ❖ Protect what we have
- ❖ Use it wisely
- ❖ Provide for the future

# ATTRIBUTES FOR AN EFFECTIVELY MANAGED DISTRICT



## FEBRUARY 2021 PERFORMANCE INDICATORS

### 1. Product Quality

- Drinking water compliance rate
- Perceived/aesthetic water quality

### 2. Water Resource Adequacy

- Source water quality management
- Short-term water supply adequacy (annual)
- Short-term water source capacity
- Long-term water supply adequacy (annual)
- Water demand management (annual)

### 3. Customer Satisfaction

- Customer Response System

### 4. Infrastructure Stability

- Pipeline breaks (12-month running total)
- On-time maintenance (% of time)

### 5. Long-term Financial Viability

- Repair and Replacement funding from rate revenue (annual)
- Debt service coverage (annual)
- Long-term debt to equity (annual)

### 6. Employee & Leadership Development

- Employee Training Hours (12-month rolling average)

### 7. Operational Resiliency

- Workforce resiliency (reportable injuries & illnesses)
- Employee safety & business risk mgmt (vehicle & equip. incidents)
- Emergency Response Preparedness
- Power resiliency

### 8. Operational Optimization

- Water Quality Improvements beyond regulatory standards (12-month rolling avg)
- Non-revenue water management
- Efficient use of electricity

### 9. Community Sustainability

- Centralized conjunctive management of groundwater and surface water

### 10. Stakeholder Understanding & Support

- Media/press coverage tone
- Member Agency Survey
- Employee Survey
- Retail Customer Survey

Details for each reporting item can be seen on the following pages. The background photo was taken by Steve Schmidt.

# Annual Member Agency Meeting Agenda

April 21, 2021

1. Welcome and introductions (Bart Forsyth)
2. JWCD Board of Trustees (Bart Forsyth)
3. JWCD mission and strategy to fulfill its mission (Bart Forsyth)
  - a. Protect what we have (Shazelle Terry)
    - i. Water supply outlook for FY 2021/2022
    - ii. Maintaining high quality water
  - b. Use it wisely (Matt Olsen)
    - i. Report on water conservation progress
    - ii. Water efficiency standards, water conservation programs and future direction
  - c. Provide for the future (Alan Packard)
    - i. Long-term water supply planning and 10-year Capital Projects Plan
    - ii. JWCD Drought contingency plan
4. JWCD new logo (Bart Forsyth)
5. Financial plan, water rates and methodology (Dave Martin)
  - a. New wholesale bill
6. Legislative issues and Prep60 report (Bart Forsyth)
7. Member Agency Outreach Plan (Bart Forsyth)
8. Questions, and discussions (Bart Forsyth)



# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021



# WATER SUPPLY OUTLOOK

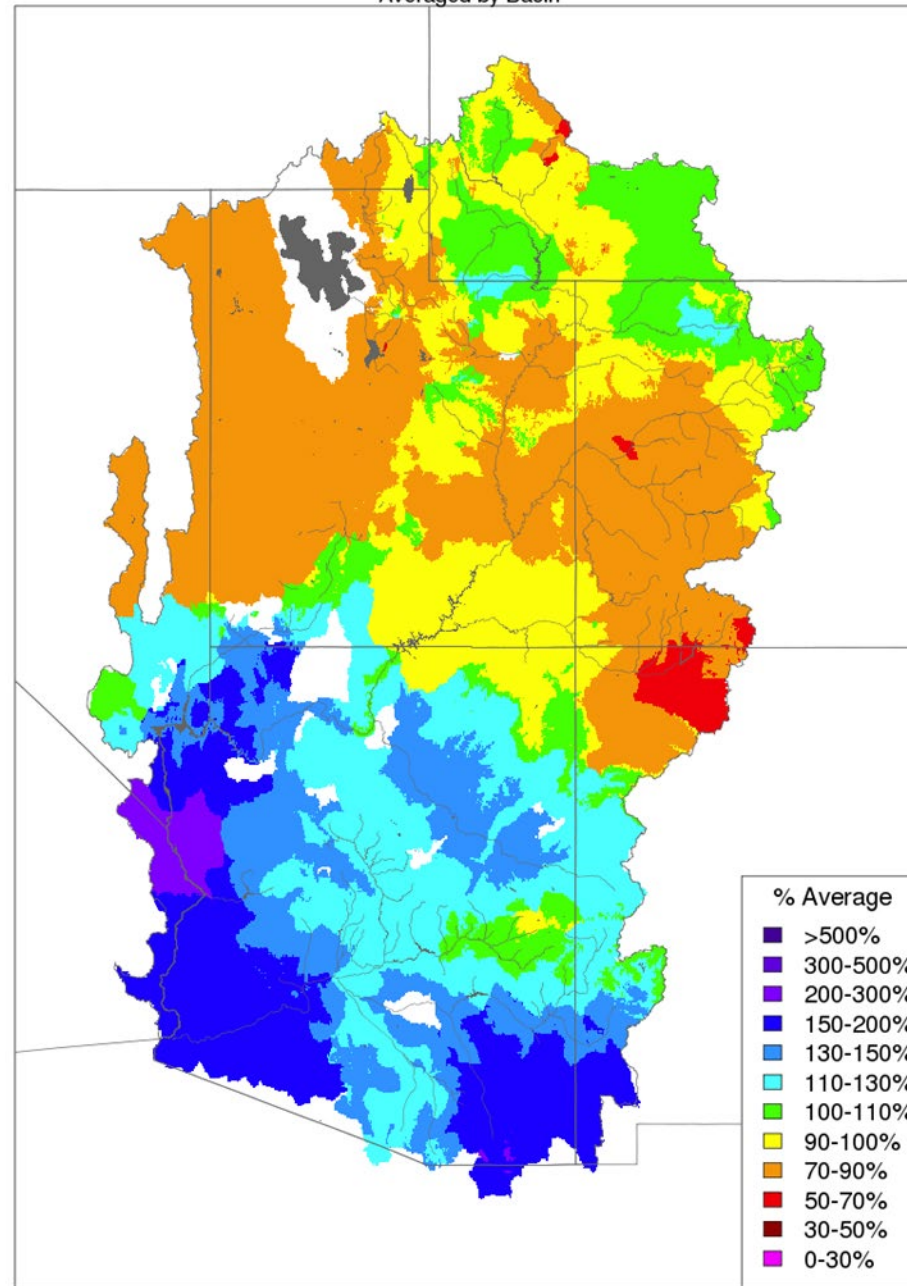
JVWCD MEMBER AGENCY ANNUAL MEETING

APRIL 21 , 2021



# Water Year Precipitation, October 2019 - March 2020

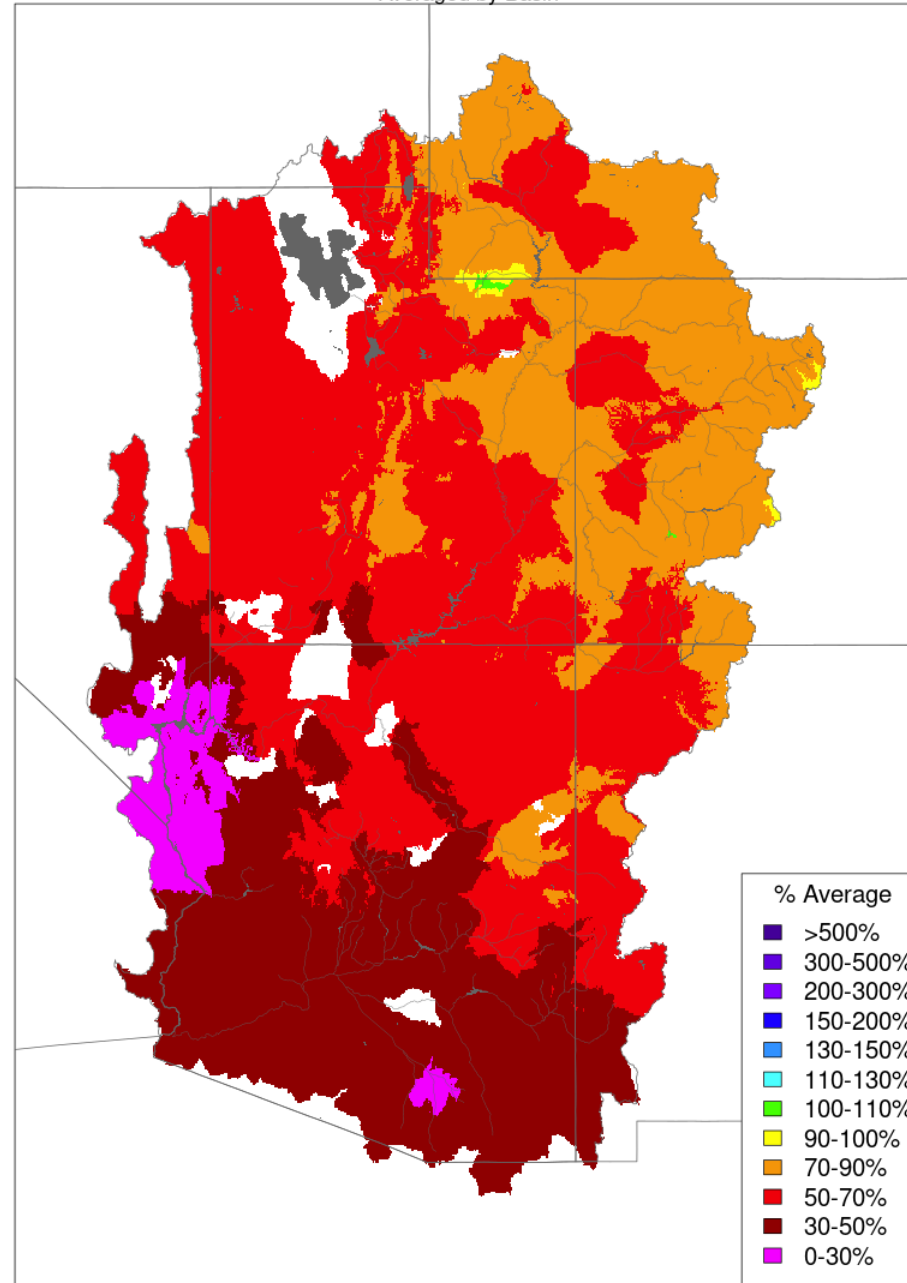
Averaged by Basin



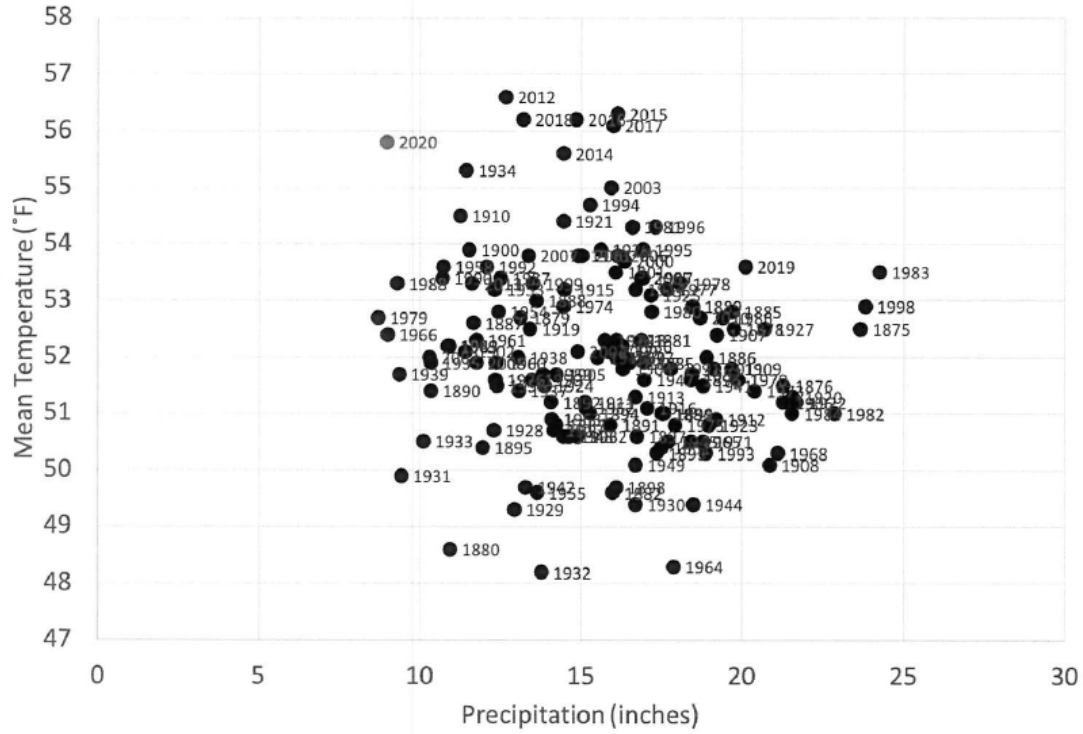
Prepared by NOAA, Colorado Basin River Forecast Center  
Salt Lake City, Utah, [www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

# Water Year Precipitation, October 2020 - March 2021

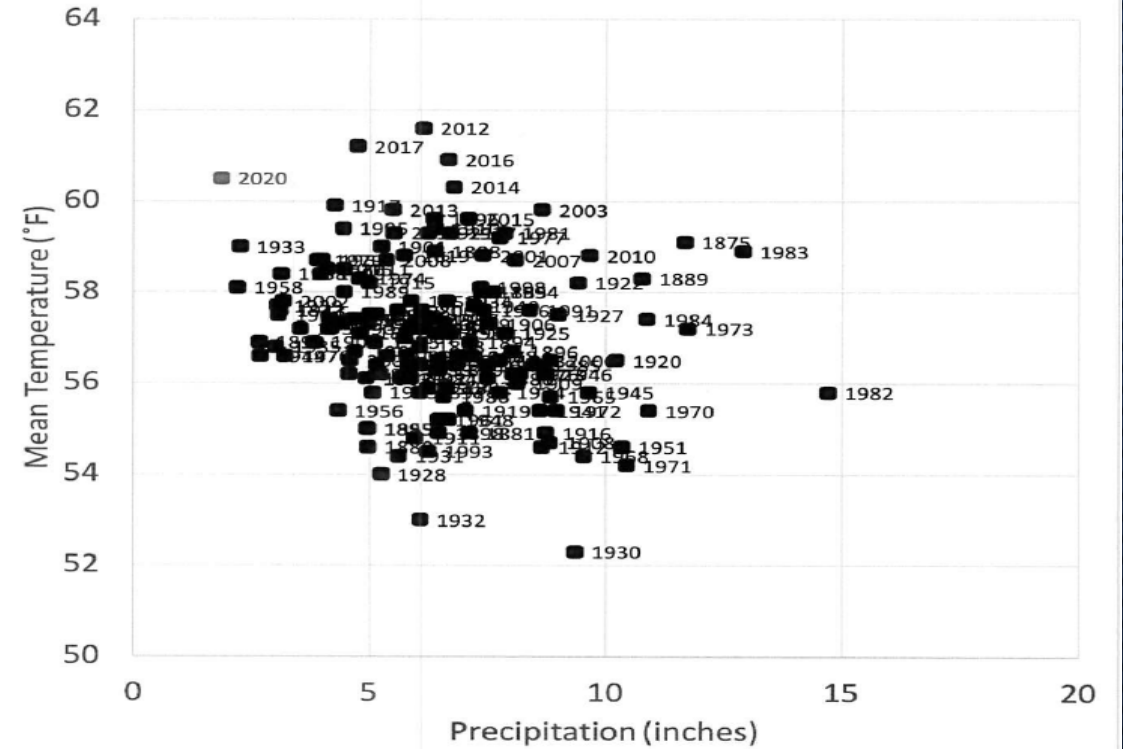
Averaged by Basin



Salt Lake City Annual Temperature and Precipitation

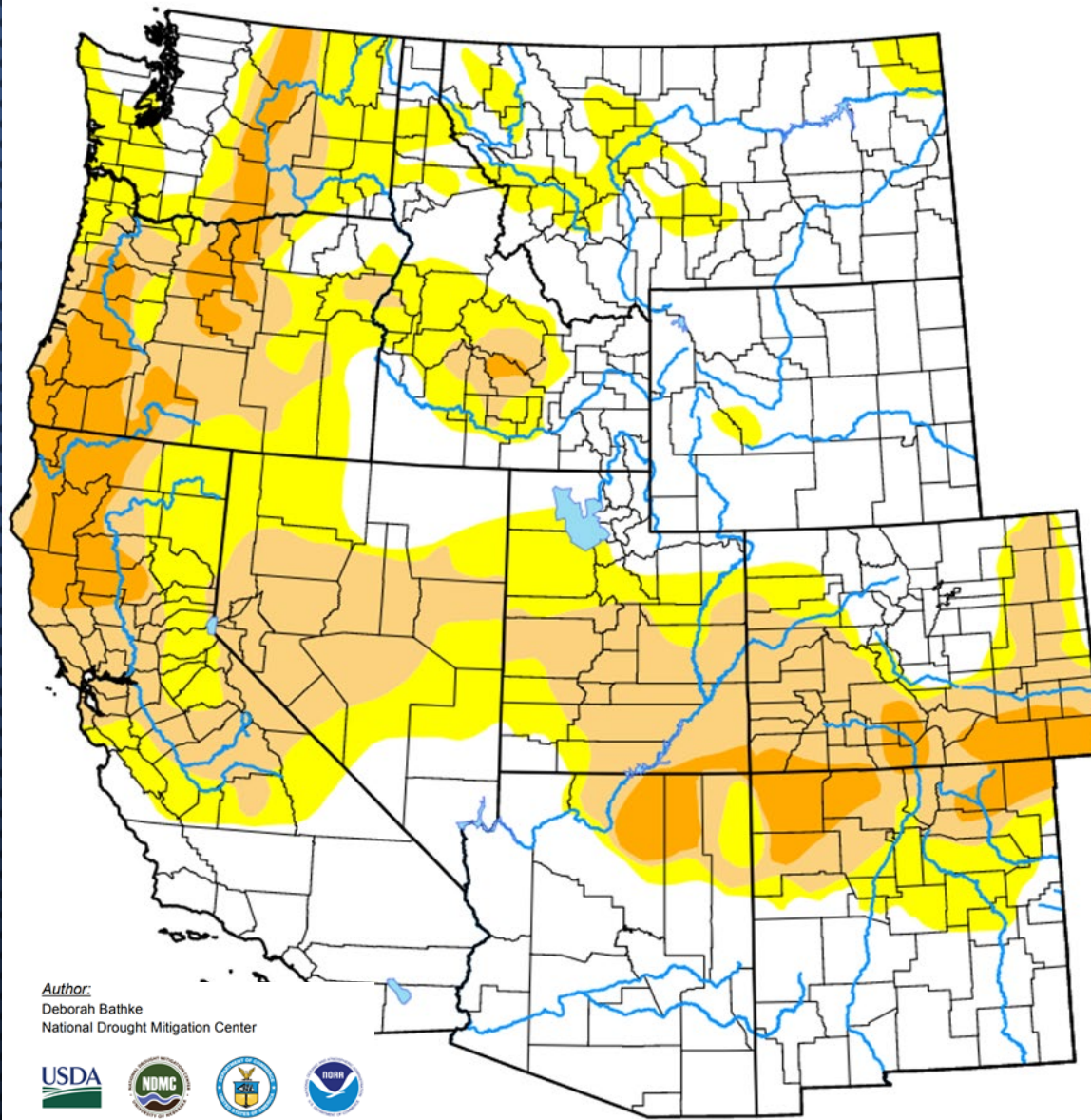


Salt Lake City July-December Temperature and Precipitation



# U.S. DROUGHT MONITOR

# U.S. Drought Monitor – West April 14, 2020



Author:  
Deborah Bathke  
National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

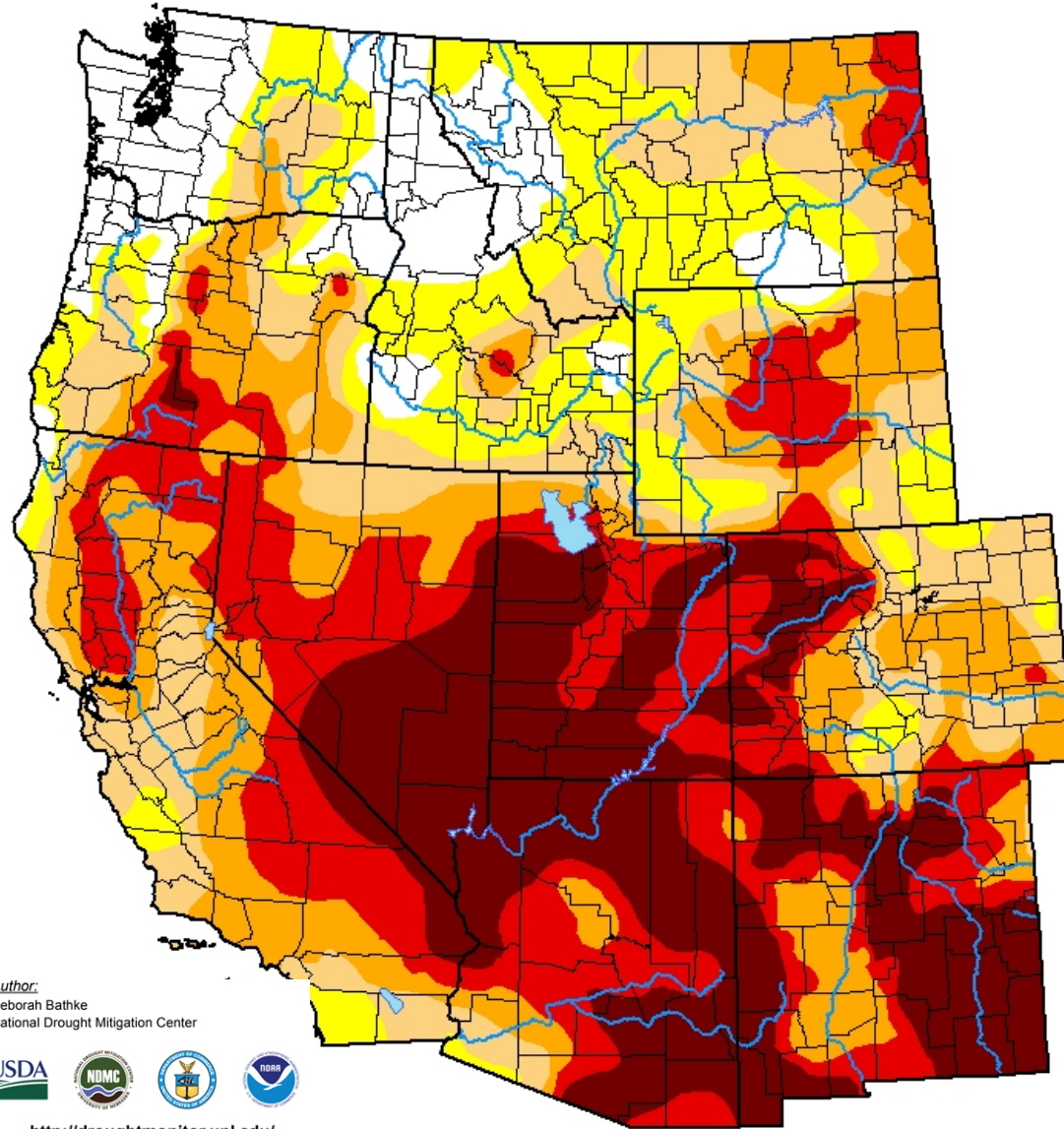
## Drought Intensities

None: No Drought  
D0: Abnormally Dry

D1: Moderate Drought  
D2: Severe Drought

D3: Extreme Drought  
D4: Exceptional Drought

# U.S. Drought Monitor – West April 14, 2021



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None: No Drought  
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# SNOWPACK CONDITIONS



# UTAH SNOTEL

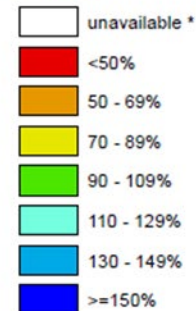
## SNOW WATER EQUIVALENT (SWE)

APRIL 17, 2020

### Utah SNOTEL Current Snow Water Equivalent (SWE) % of Normal

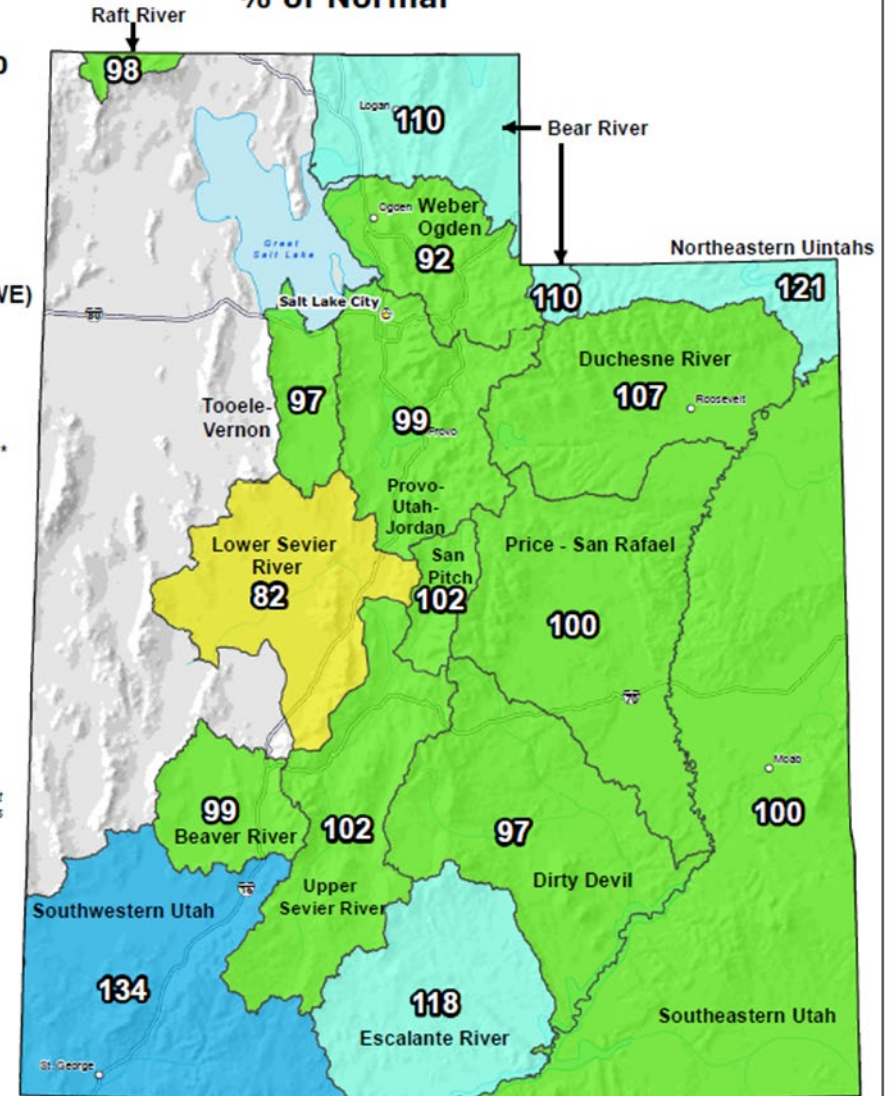
Apr 14, 2020

Snow Water  
Equivalent (SWE)  
Basin-wide  
Percent of  
1981-2010  
Median



\* Data unavailable at time of posting or measurement is not representative at this time of year

Provisional Data  
Subject to Revision



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:  
USDA/NRCS National Water and Climate Center  
Portland, Oregon  
<http://www.wcc.nrcs.usda.gov>

# UTAH SNOTEL

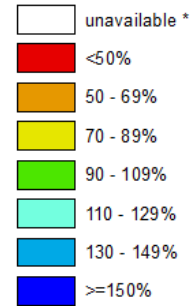
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APRIL 21, 2021

### Utah SNOTEL Current Snow Water Equivalent (SWE) % of Normal

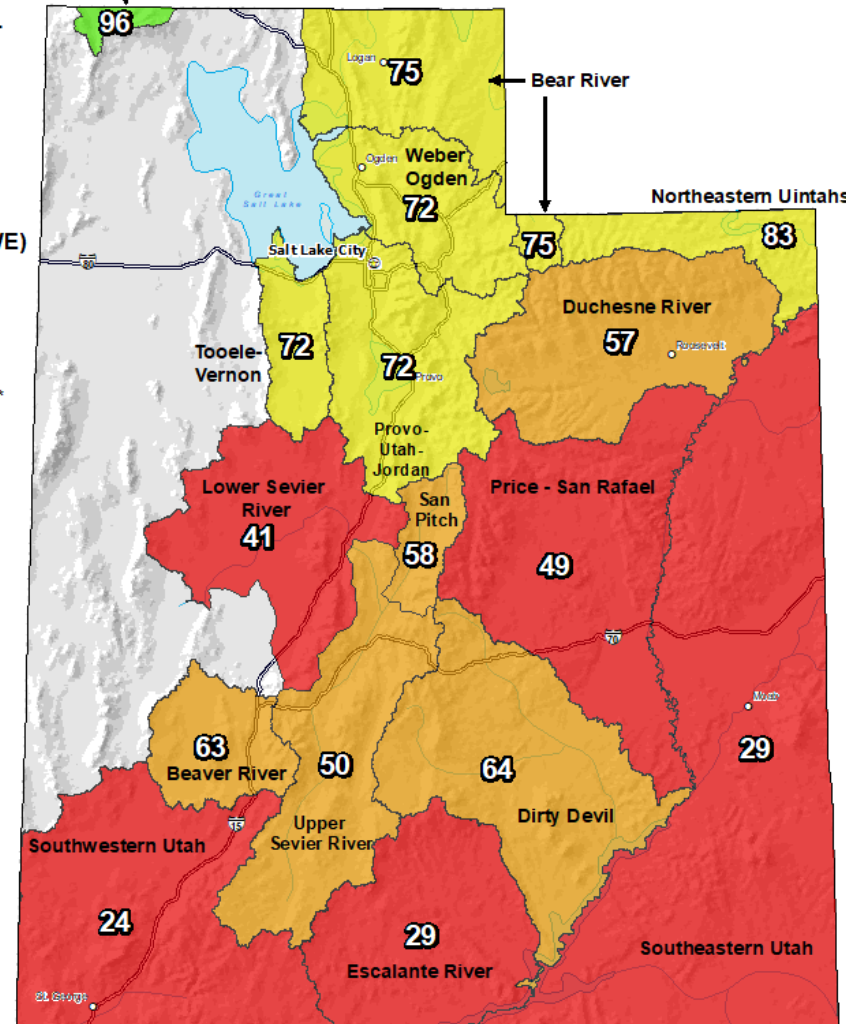
Apr 21, 2021

Snow Water  
Equivalent (SWE)  
Basin-wide  
Percent of  
1981-2010  
Median



\* Data unavailable at time of posting or measurement is not representative at this time of year

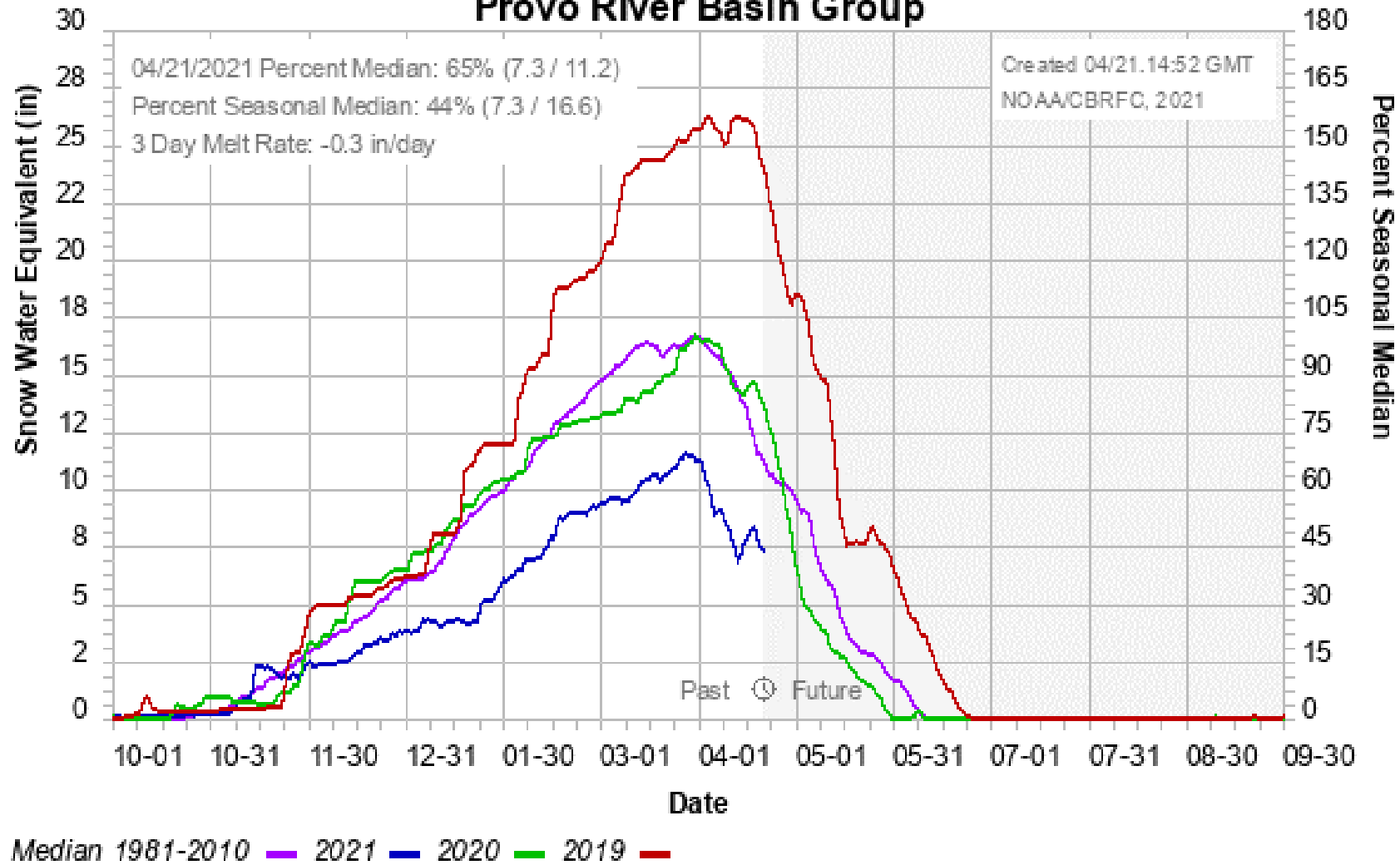
*Provisional Data  
Subject to Revision*



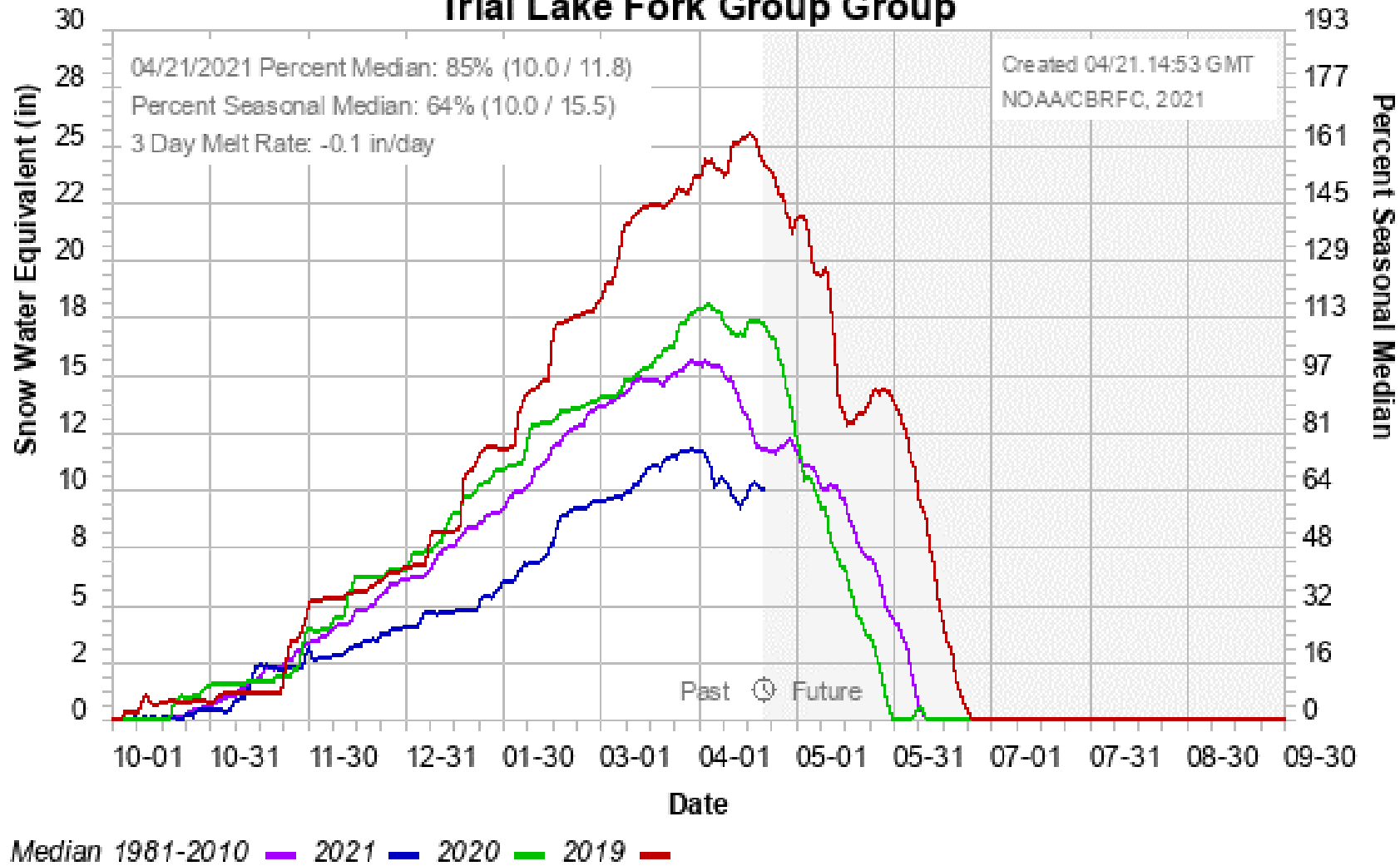
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Prepared by:  
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<http://www.wcc.nrcs.usda.gov>

# Colorado Basin River Forecast Center Provo River Basin Group



# Colorado Basin River Forecast Center Trial Lake Fork Group Group



# TRIAL LAKE SNOTEL SITE

LAST YEAR – MARCH 20, 2020

21.9 INCHES SNOW WATER EQUIVALENT

111% OF MEDIAN



THIS YEAR – MARCH 31, 2031

17.3 INCHES SNOW WATER EQUIVALENT

81% OF MEDIAN



# TRIAL LAKE CAMPGROUND

LAST YEAR



March 20, 2020

THIS YEAR



March 31, 2021

# RESTROOM AT BALD PASS

LAST YEAR



THIS YEAR





# RUNOFF CONDITIONS



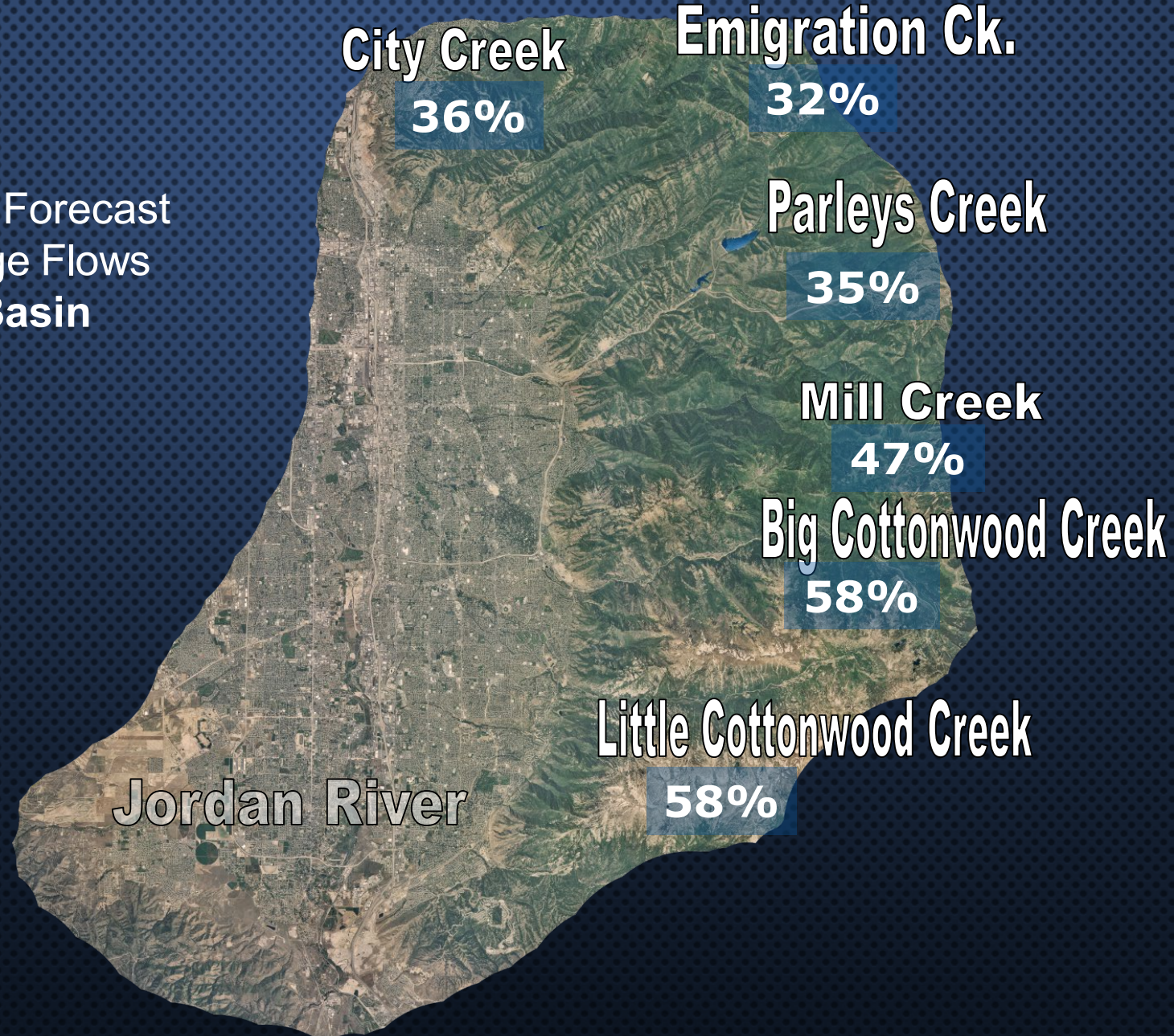


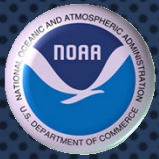
# Forecasted Utah Spring Snowmelt Runoff Volume



April 1, 2021

April-Through-July Volume Forecast  
Percent of 30-Year Average Flows  
**Six Creeks River Basin**

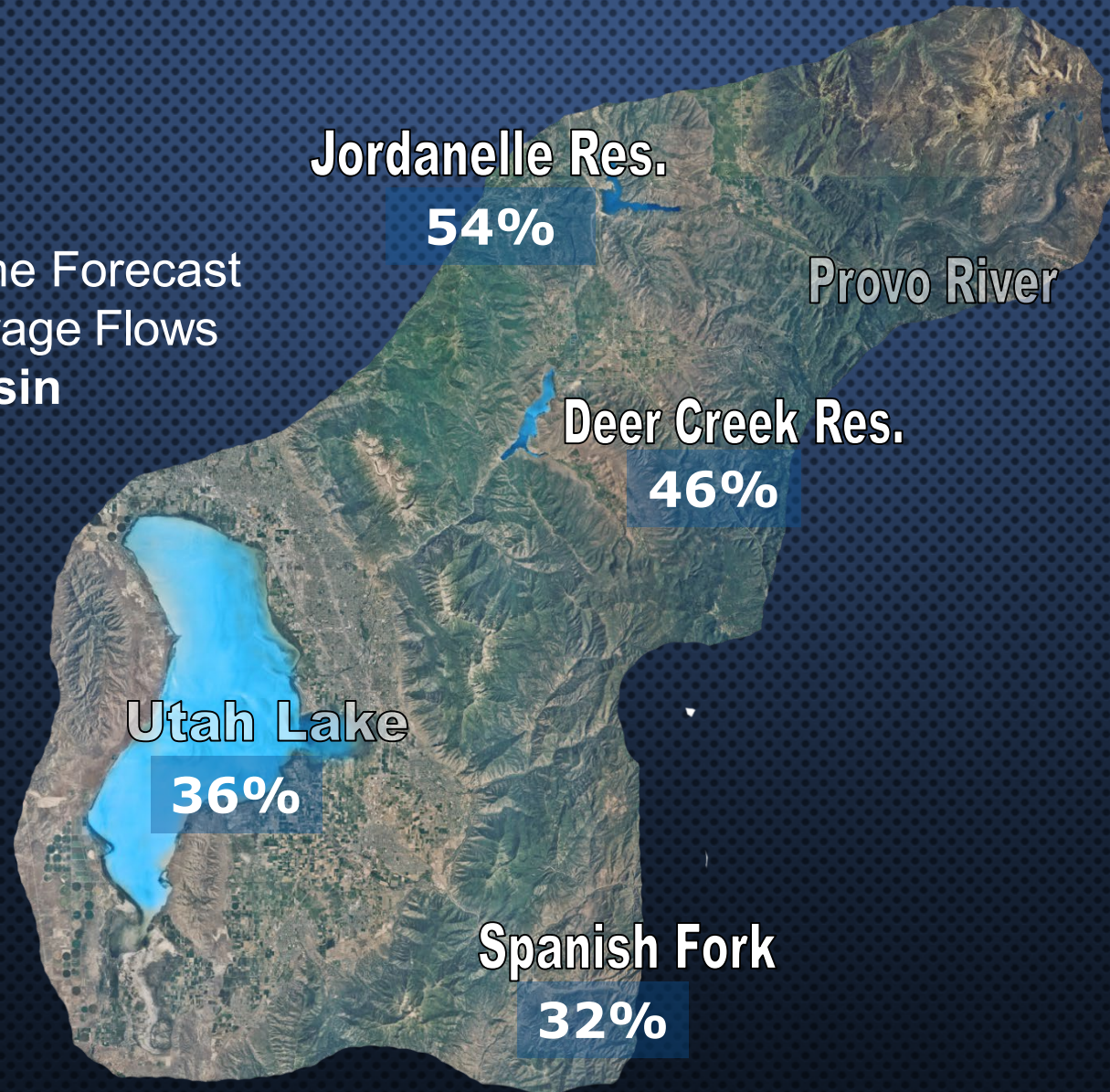




# Forecasted Utah Spring Snowmelt Runoff Volume



April 1, 2021  
April-Through-July Volume Forecast  
Percent of 30-Year Average Flows  
**Provo River Basin**





# RESERVOIR STORAGE

February 21, 2020  
85% Full (March 20, 2020)



April 1, 2021  
67% Full (April 1, 2021)

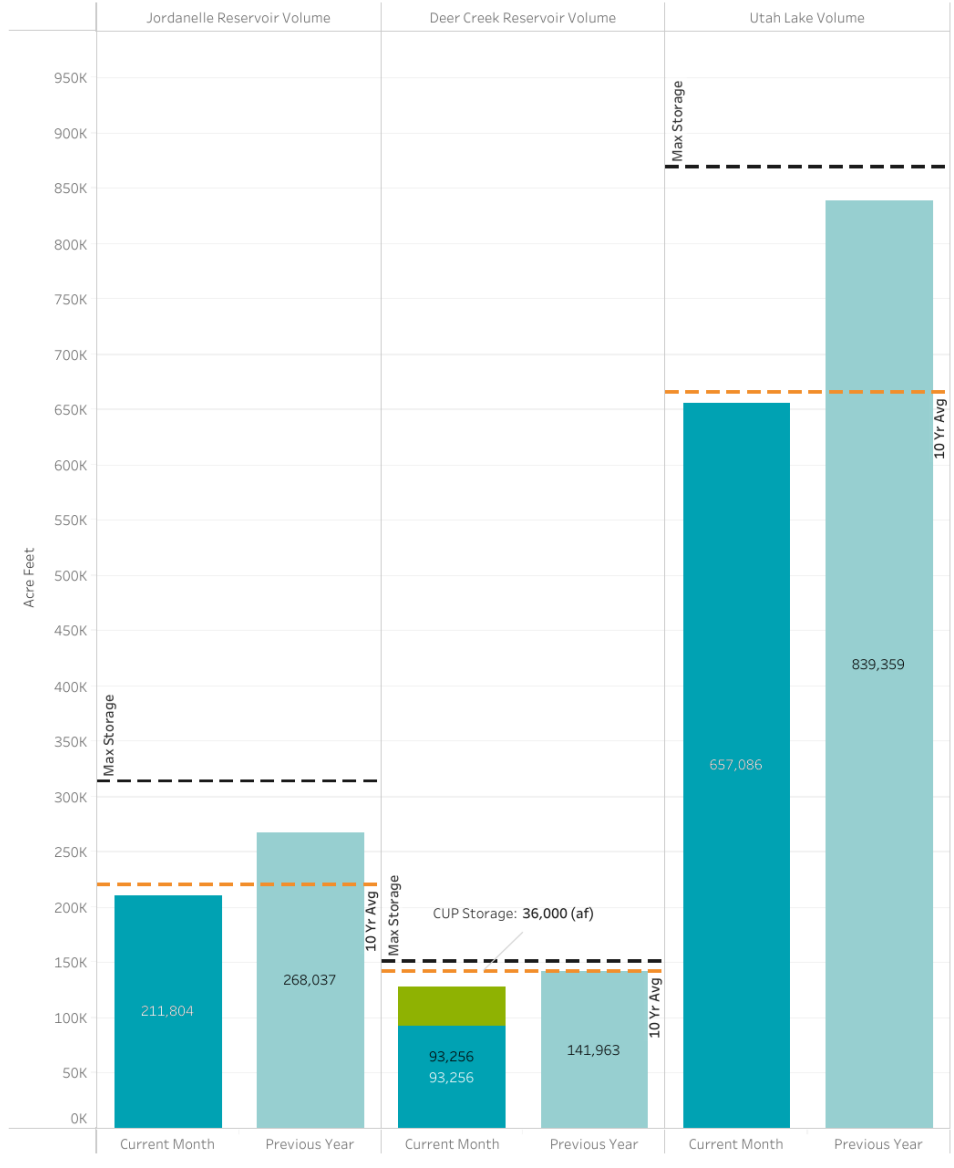


# JORDANELLE RESERVOIR

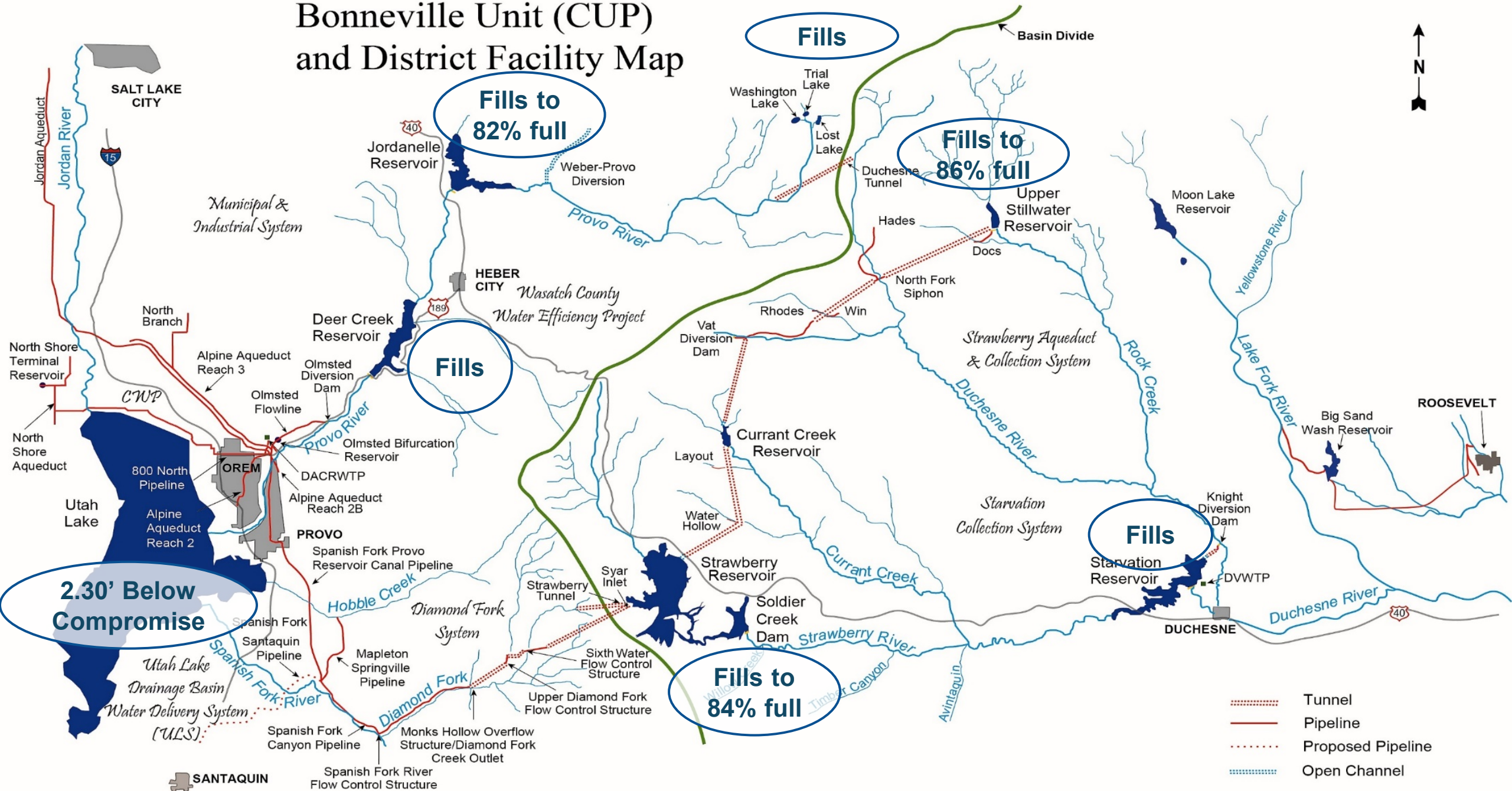
# Provo River Reservoirs Update

April 12, 2021

- Current Month
- CUP Storage
- Previous Year



# Bonneville Unit (CUP) and District Facility Map

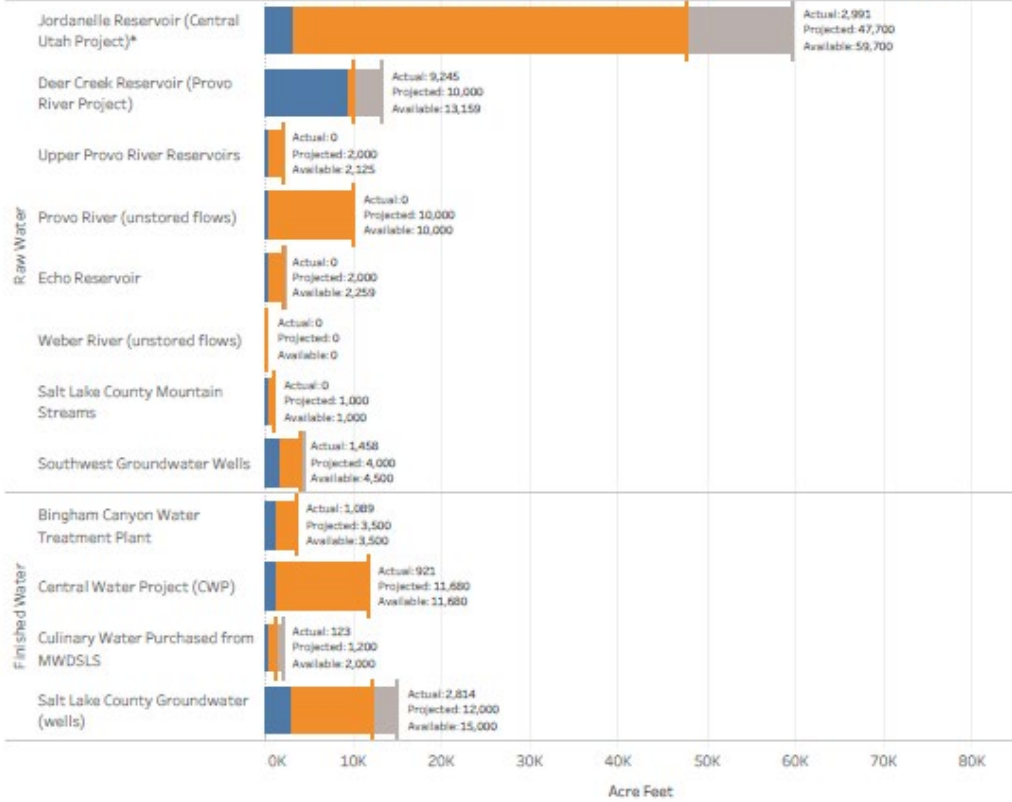


2021 Peak Reservoir Forecasts

# Jordan Valley Water Conservancy District

M&I Water Sources (February 28, 2021)  
Water Year 2021 (November 1, 2020 - October 31, 2021)

Actual  
Projected  
Available



Irrigation Water Sources (February 28, 2021)  
Irrigation Season 2021 (April 15, 2020 - October 31, 2021)



\*Central Utah Project may include holdover water from the previous year.



**QUESTIONS**





# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

MAINTAINING & IMPROVING HIGH  
QUALITY WATER



Source Water Protection



Water Treatment Optimization



High Quality Deliveries





# ATTRIBUTES FOR AN EFFECTIVELY MANAGED DISTRICT



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# SOURCE WATER PROTECTION



## **Challenges:**

- Multiple Uses and Stakeholder Demands
- No Land Jurisdiction
- Population Growth Pressures
- Climate Changes

## **Current Efforts:**

- Drinking Water Source Protection Plans
- Provo River Watershed Council Funding and Participation
- Partnering with the USFS under Shared Stewardship to prevent fires in critical areas

## **Future Priorities:**

- Continue work with Stakeholders
- Work with Counties and Developers



# OPTIMIZED WATER TREATMENT



## **Challenges:**

- Source Water Degradation
- Aging Facilities
- Tighter Regulations
- Increasing Demands/Customer Expectations

## **Current Efforts:**

- Pilot Plant Studies
- Operator Training
- Data Analysis

## **Future Priorities:**

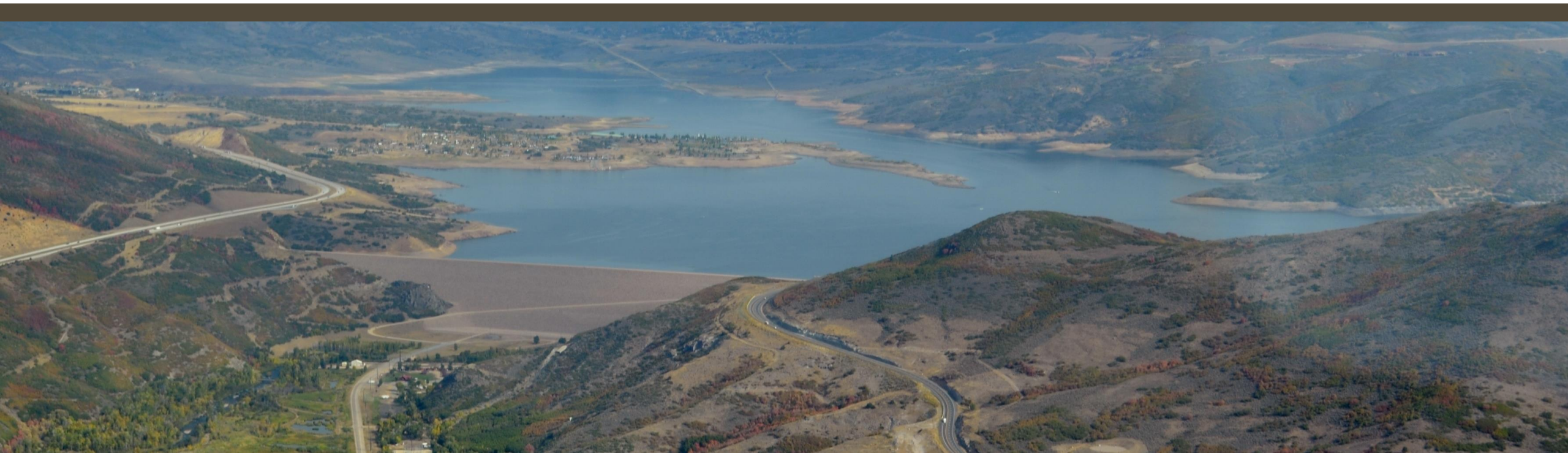
- Chemical/Filter Optimization
- Plant expansion and Major Capital Improvements at the JWTP
- Improved Solids Handling at JWTP
- Increase WQ Goal Attainment Rate

WATER QUALITY TRACKING												
	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
<b>Overall Met Goal %</b>	83.53%	84.49%	82.00%	81.66%	83.15%	83.46%	88.97%	88.56%	88.50%	88.64%	90.06%	89.66%
<b>JVWTP</b>												
Turbidity less than 0.08 NTU (hourly max)	99.82%	99.82%	99.84%	99.70%	96.69%	95.85%	95.82%	95.81%	95.69%	95.77%	96.07%	96.46%
Turbidity less than 0.08 NTU (hourly max)	95.55%	95.55%	95.52%	94.78%	89.09%	87.37%	87.94%	88.12%	88.34%	88.43%	88.77%	89.22%
Maximum total particle counts < 50/mL (hourly max)	87.62%	87.62%	87.90%	87.86%	84.13%	45.31%	84.71%	85.83%	85.77%	84.85%	84.42%	89.62%
Effluent chlorine residual between 0.50 and 1.00 mg/L (hourly max/min)	95.02%	95.02%	96.25%	96.59%	96.19%	95.97%	94.98%	94.87%	91.42%	90.26%	90.07%	87.11%
Effluent fluoride concentration between 0.65 and 0.80 mg/L (hourly min/max)	45.97%	45.97%	43.43%	43.41%	36.93%	95.97%	87.71%	87.71%	93.91%	83.88%	84.02%	84.00%
Effluent TOC < 2.0 mg/L (weekly) use data from LIMS	72.73%	72.73%	75.00%	70.27%	58.33%	20.26%	50.00%	44.44%	37.84%	33.33%	78.95%	45.45%
Langlier greater than -0.10 and less than 0.50	80.83%	80.83%	78.55%	75.17%	69.43%	66.92%	60.65%	55.29%	49.79%	47.53%	49.24%	54.41%
Geosmin concentration < 5 ng/L or >70% removal	100.00%	100.00%	100.00%	100.00%	94.44%	94.74%	89.47%	89.47%	90.00%	89.47%	89.47%	90.91%
<b>SERWTP</b>												
Turbidity less than 0.08 NTU (hourly max)	94.98%	95.48%	95.62%	95.62%	96.68%	96.68%	96.40%	96.86%	96.73%	99.53%	99.53%	99.43%
Total particle count < 20/mL (hourly max)	90.62%	91.08%	84.21%	84.21%	75.76%	82.11%	76.34%	67.41%	58.97%	56.90%	79.24%	50.38%
Turbidity less than 0.08 NTU (hourly max)	89.14%	90.11%	90.93%	90.93%	91.62%	91.73%	91.12%	91.13%	91.44%	91.99%	92.46%	92.01%
Maximum total particle counts < 30/mL (hourly max)	78.87%	80.82%	82.30%	82.30%	84.37%	84.30%	85.21%	85.60%	83.76%	84.80%	86.85%	85.99%
Effluent chlorine residual less than .90 mg/L (hourly max)	99.61%	99.65%	99.69%	99.69%	98.69%	98.52%	98.51%	98.56%	98.57%	98.63%	98.70%	98.44%
CT ratio greater than 1.25 but less 5.0 (hourly AVG)	99.85%	99.87%	99.90%	99.90%	99.68%	99.96%	99.96%	99.96%	99.89%	99.58%	99.58%	99.50%
Effluent fluoride concentration between 0.65 and 0.85 mg/L (hourly min/max)	70.02%	73.10%	73.10%	73.10%	73.80%	73.80%	75.60%	73.20%	78.10%	79.50%	81.90%	81.50%
Effluent TOC < 2.0 mg/L (weekly) use lab data from LIMS	53.66%	48.78%	45.24%	44.68%	46.94%	46.94%	36.73%	30.61%	28.00%	28.00%	29.79%	32.56%
Langlier greater than -1.5 and less than 0.40 (Daily Average)	75.09%	75.81%	76.55%	76.55%	79.29%	78.70%	80.06%	88.06%	88.40%	90.88%	92.42%	91.64%
Geosmin concentration < 5 ng/L or >70% removal	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>SWGWTP</b>												
Turbidity less than or equal to 0.035 NTU (hourly max)	89.25%	89.25%	90.84%	90.84%	91.85%	91.66%	99.76%	99.66%	99.54%	99.58%	99.64%	99.66%
TDS > 205 ppm and < 262 ppm (Daily Minimum / Maximum)	96.59%	95.83%	95.45%	95.45%	95.77%	95.67%	97.44%	96.15%	96.15%	96.02%	96.11%	96.17%
By-Pass Turbidity < 0.065 NTU (hourly max)	98.57%	98.57%	98.57%	98.57%	96.86%	96.51%	99.17%	99.26%	99.23%	99.26%	99.34%	99.40%
Effluent chlorine residual between 0.65 and 0.85 mg/L (hourly min/max)	87.86%	87.86%	96.66%	96.66%	96.86%	95.61%	99.17%	99.26%	99.26%	77.40%	79.42%	82.15%
Effluent fluoride concentration between 0.65 and 0.80 mg/L (hourly min/max)	90.53%	90.53%	94.16%	94.16%	95.79%	96.33%	95.03%	93.79%	94.93%	94.78%	95.11%	95.32%
Langlier greater than .05 and less than 0.25 (Daily Average)	91.97%	91.29%	87.88%	87.88%	87.86%	87.40%	87.18%	87.61%	89.13%	90.04%	90.66%	91.64%
<b>DISTRIBUTION SYSTEM</b>												
All chlorine residual grab samples > 0.05 mg/L (grab samples only)	99.93%	99.93%	99.93%	99.93%	99.93%	99.87%	99.80%	99.80%	99.80%	99.73%	99.80%	99.80%
All HPC samples with a count < 150 mpn/100ml (confirmed samples)	100.00%	100.00%	100.00%	100.00%	100.00%	50.00%	66.67%	66.67%	66.67%	75.00%	100.00%	100.00%
Chlorine residual at 2100 S between 0.3 and 0.7 mg/L (min/max hourly)	73.59%	91.83%	92.33%	92.33%	91.51%	91.48%	92.87%	92.87%	91.66%	91.69%	97.51%	95.41%
70% Feed location fluoride concentration 0.60 and 1.0 mg/L	74.52%	75.62%	78.08%	78.63%	81.92%	81.64%	83.01%	80.55%	82.74%	83.84%	86.58%	86.30%
Non-feed fluoride concentration monitoring sites between 0.60 and 0.90 mg/L	69.04%	69.04%	69.04%	69.04%	69.04%	69.04%	69.04%	69.04%	69.04%	70.41%	69.04%	70.41%
Geosmin concentration < 5 ng/L or >70% removal	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	95.24%	95.24%	95.24%	95.24%	95.45%	95.83%



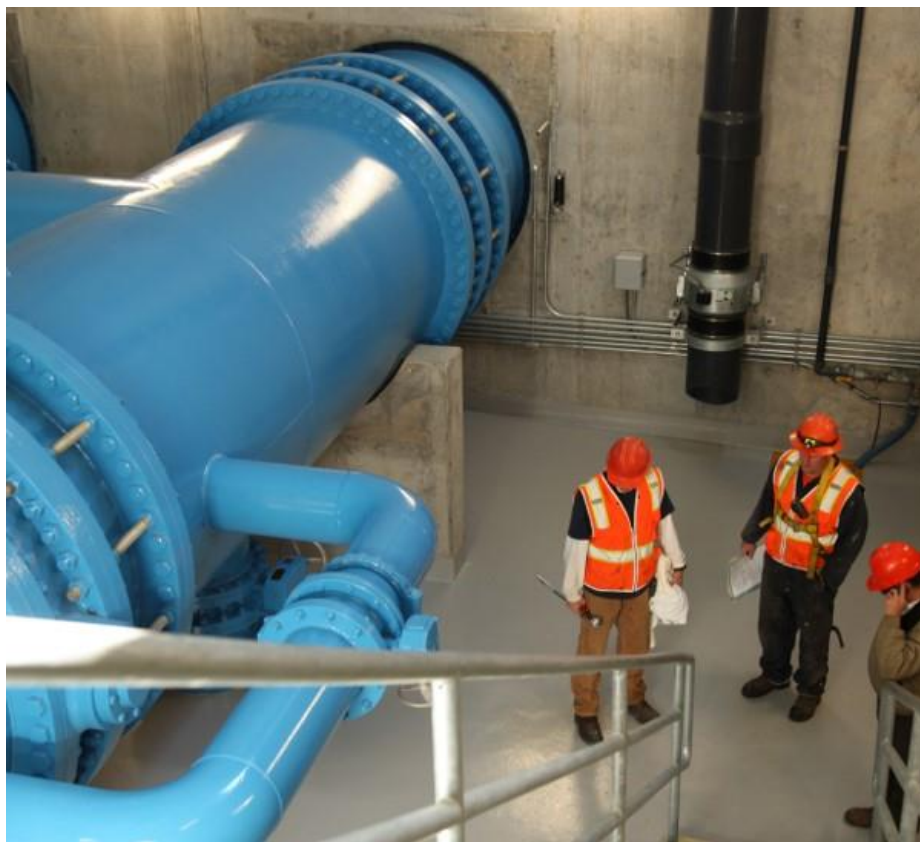


# Laboratory Services





# HIGH QUALITY WATER DELIVERIES



## **Challenges:**

- Increasing Demands
- Blending Various Sources
- Increasing Regulations
- Increasing Customer Expectations

## **Current Efforts:**

- System-Wide Water Quality Study
- Better Long-Term Data Analysis
- Hydraulic/WQ Modeling
- Preparing for the LCRR

## **Future Priorities:**

- Metals Precipitation
- Consistent Aesthetics

# JORDAN VALLEY LABORATORY SERVICES



## **Analyses:**

- Total Coliform and E.coli (Presence/Absence and Quantitative)
- Heterotrophic Plate Count
- Water Quality Parameters (Chlorine Residual, pH, Turbidity, and Conductivity)
- Alkalinity
- Hardness (Total and Calcium)



# JORDAN VALLEY LABORATORY SERVICES



## **Analyses Continued:**

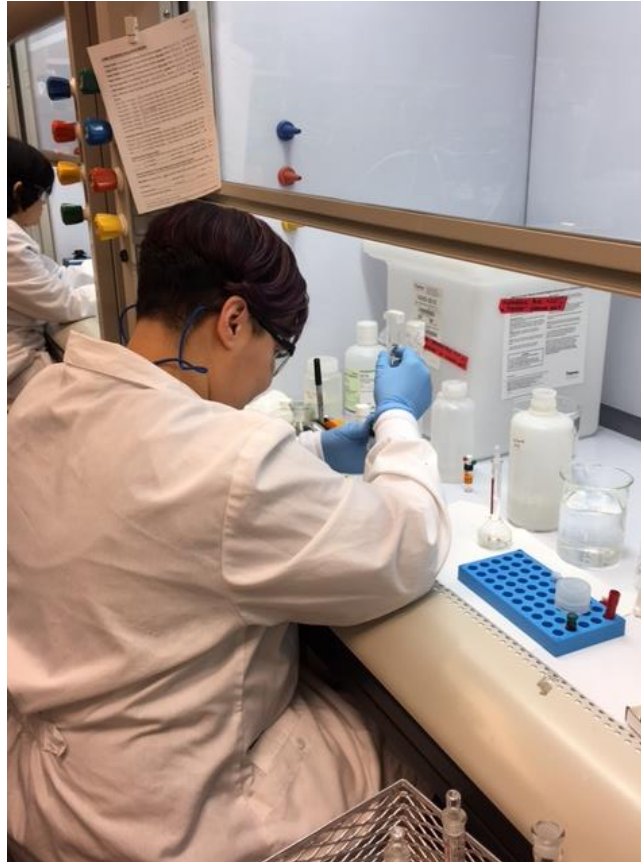
- Disinfection By-Products (Trihalomethanes & Haloacetic Acids)
- Anions (Fluoride, Nitrate, Nitrite, Chloride, Bromide, Phosphate, and Sulphate)
- Organic Carbon (Total and Dissolved)
- Common Metals (Arsenic, Barium, Cadmium, Copper, Iron, Lead, Manganese, Mercury, Selenium, Silica, Uranium, Zinc, etc.)





# CALCULATING ADJUSTED LABORATORY PRICING

- Use the most recent three years data to calculate what percentage of the total water delivered by each member agency is purchased from JWVCD.
- The remaining percentage is multiplied by the base price of the analysis to get the adjusted price.



- Member Agency 1 purchases 100% of the total water they deliver from JWVCD they pay no additional cost for analyses.
- Member Agency 2 purchases 40% of the total water they deliver from JWVCD they pay 60% of the base price for analyses.



				(1) Presence/Absence Bacteriological		(2) Quantitative Bacteriological		(3) Heterotrophic Plate Count (HPC)		(4) Trihalomethanes (THMs)	
				Current Year Base Price → \$21.0		\$31		\$42		\$138	
Member Agency	% District Water (2017-19 average)	% District Water (2018-20 average)	Currently Using Lab Services	Previous Year Adjusted	Current Year Adjusted	Previous Year Adjusted	Current Year Adjusted	Previous Year Adjusted	Current Year Adjusted	Previous Year Adjusted	Current Year Adjusted
Bluffdale	100%	100%	Y	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
City of South Jordan	100%	100%	Y	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
City of South Salt Lake	45%	44%	N	\$11.00	\$11.76	\$17.05	\$17.08	\$23.10	\$23.52	\$79.75	\$77.14
City of West Jordan	89%	92%	Y	\$2.20	\$1.68	\$3.41	\$2.44	\$4.62	\$3.36	\$15.95	\$11.02
Draper City	100%	100%	Y	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Granger Hunter Improvement District	79%	77%	Y	\$4.20	\$4.83	\$6.51	\$7.02	\$8.82	\$9.66	\$30.45	\$31.68
Herriman City	58%	60%	Y	\$8.40	\$8.40	\$13.02	\$12.20	\$17.64	\$16.80	\$60.90	\$55.10
Hexcel Corporation	98%	98%	N	\$0.40	\$0.42	\$0.62	\$0.61	\$0.84	\$0.84	\$2.90	\$2.76
Keams Improvement District	93%	93%	Y	\$1.40	\$1.47	\$2.17	\$2.14	\$2.94	\$2.94	\$10.15	\$9.64
Magna Water District	14%	14%	Y	\$17.20	\$18.06	\$26.66	\$26.23	\$36.12	\$36.12	\$124.70	\$118.47
Midvale City	19%	35%	N	\$16.20	\$13.65	\$25.11	\$19.83	\$34.02	\$27.30	\$117.45	\$89.54
Riverton City	100%	100%	Y	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Taylorsville Bennion Improvement District	35%	33%	N	\$13.00	\$14.07	\$20.15	\$20.44	\$27.30	\$28.14	\$94.25	\$92.29
Utah Department of Corrections	100%	100%	Y	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Pro	15%	16%	N	\$17.00	\$17.64	\$26.35	\$25.62	\$35.70	\$35.28	\$123.25	\$115.71
White City Water Improvement District	0%	0%	N	\$20.00	\$21.00	\$31.00	\$30.50	\$42.00	\$42.00	\$145.00	\$137.75

(12) Total or Calcium Hardness \$25	
Previous Year Adjusted	Current Year Adjusted
\$0.00	\$0.00
\$0.00	\$0.00
\$13.75	\$14.00
\$2.75	\$2.00
\$0.00	\$0.00
\$5.25	\$5.75
\$10.50	\$10.00
\$0.50	\$0.50
\$1.75	\$1.75
\$21.50	\$21.50
\$20.25	\$16.25
\$0.00	\$0.00
\$16.25	\$16.75
\$0.00	\$0.00
\$21.25	\$21.00
\$25.00	\$25.00



# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

# Water Conservation: Update, Progress, and Direction

**Annual Member Agency Meeting**  
April 21, 2021

Matt Olsen, Assistant General Manager



## 2019 Conservation Plan Update

-Adopted by JVWCD's Board in November 2019.

-Defines a new water conservation goal and outlines the costs, strategies, and programs needed to achieve that goal.

-Chief among the priorities is the wide-scale adoption of indoor and outdoor water efficiency standards for all new construction.

- These measures will hedge against future drought periods, water shortages, water supply costs, and conservation expenses.



**2019  
CONSERVATION  
PLAN UPDATE**

JORDAN VALLEY WATER CONSERVANCY DISTRICT

**JORDAN VALLEY WATER  
CONSERVANCY DISTRICT**

8215 SOUTH 1300 WEST  
WEST JORDAN, UT 84088  
801-565-4300

[WWW.JVWCD.ORG](http://WWW.JVWCD.ORG)

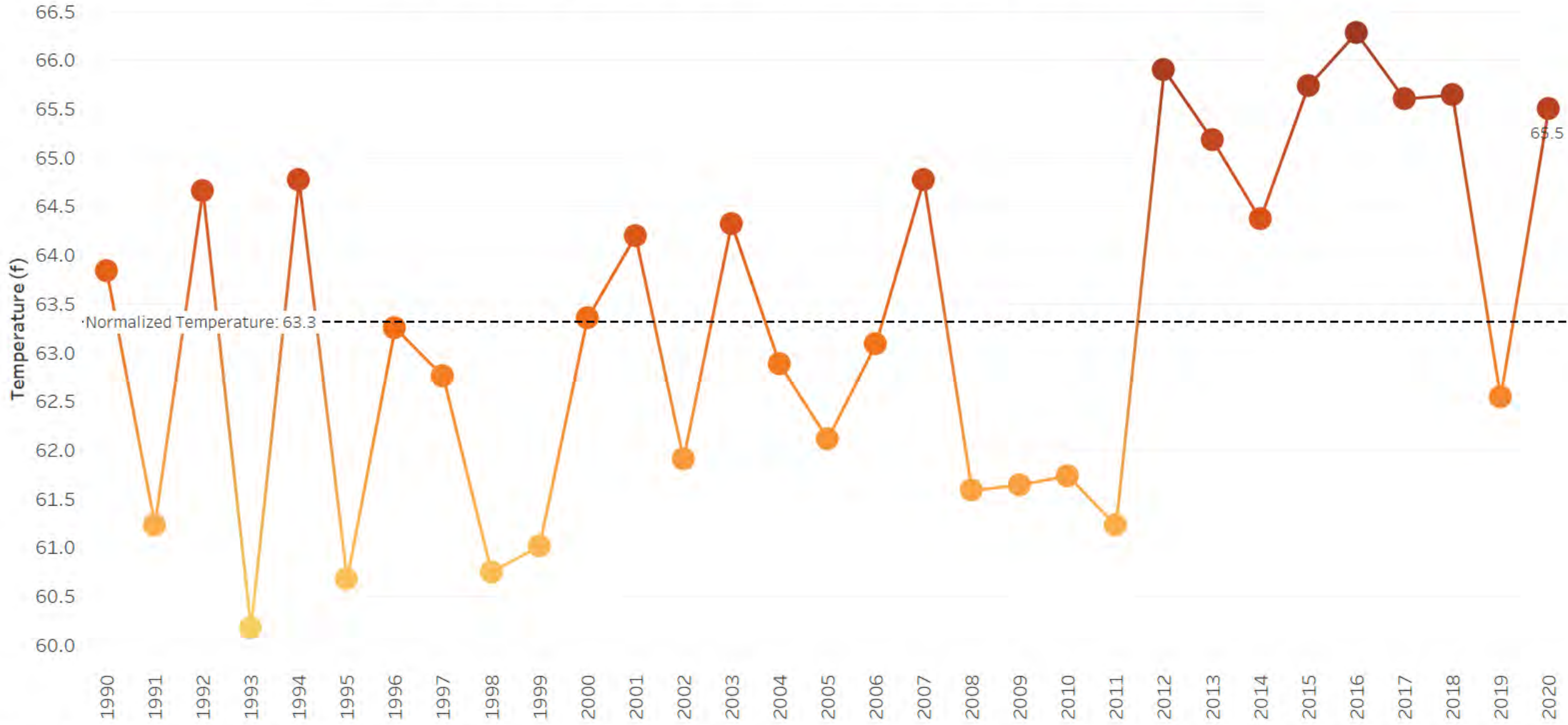
Jordan Valley Water Conservancy District (JVWCD) was created in 1951 to provide water to residents of a growing Salt Lake County. Primarily a wholesaler of water to cities and improvement districts, JVWCD also has a retail service area in parts of Salt Lake County, including unincorporated areas.

# WATER USE RESULTS

2019 combined water use results from JWCD and all  
Member Agencies

# Jordan Valley Water Conservancy District

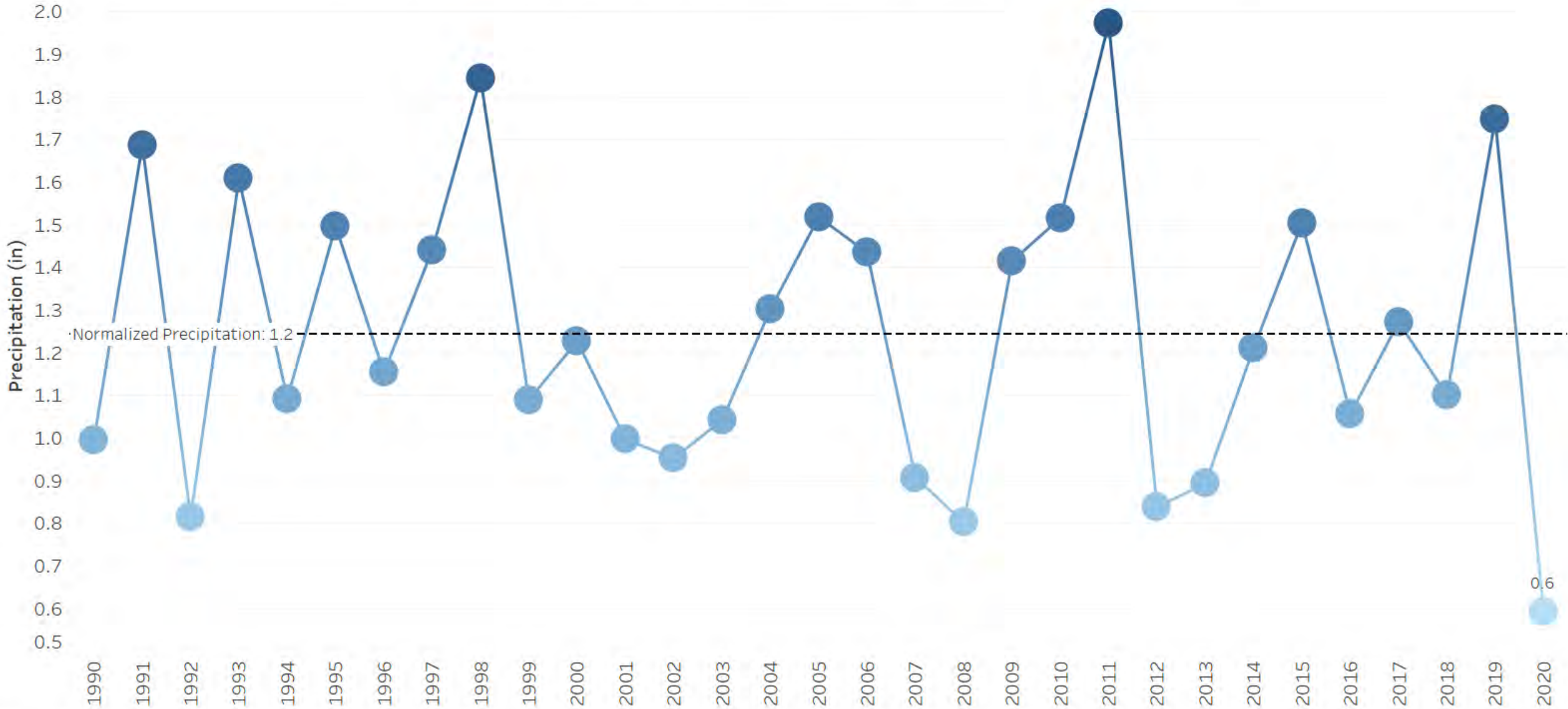
## Summer Month Average Temperature by Year - Salt Lake City International Airport



January, February, November, and December were removed from the analysis.

# Jordan Valley Water Conservancy District

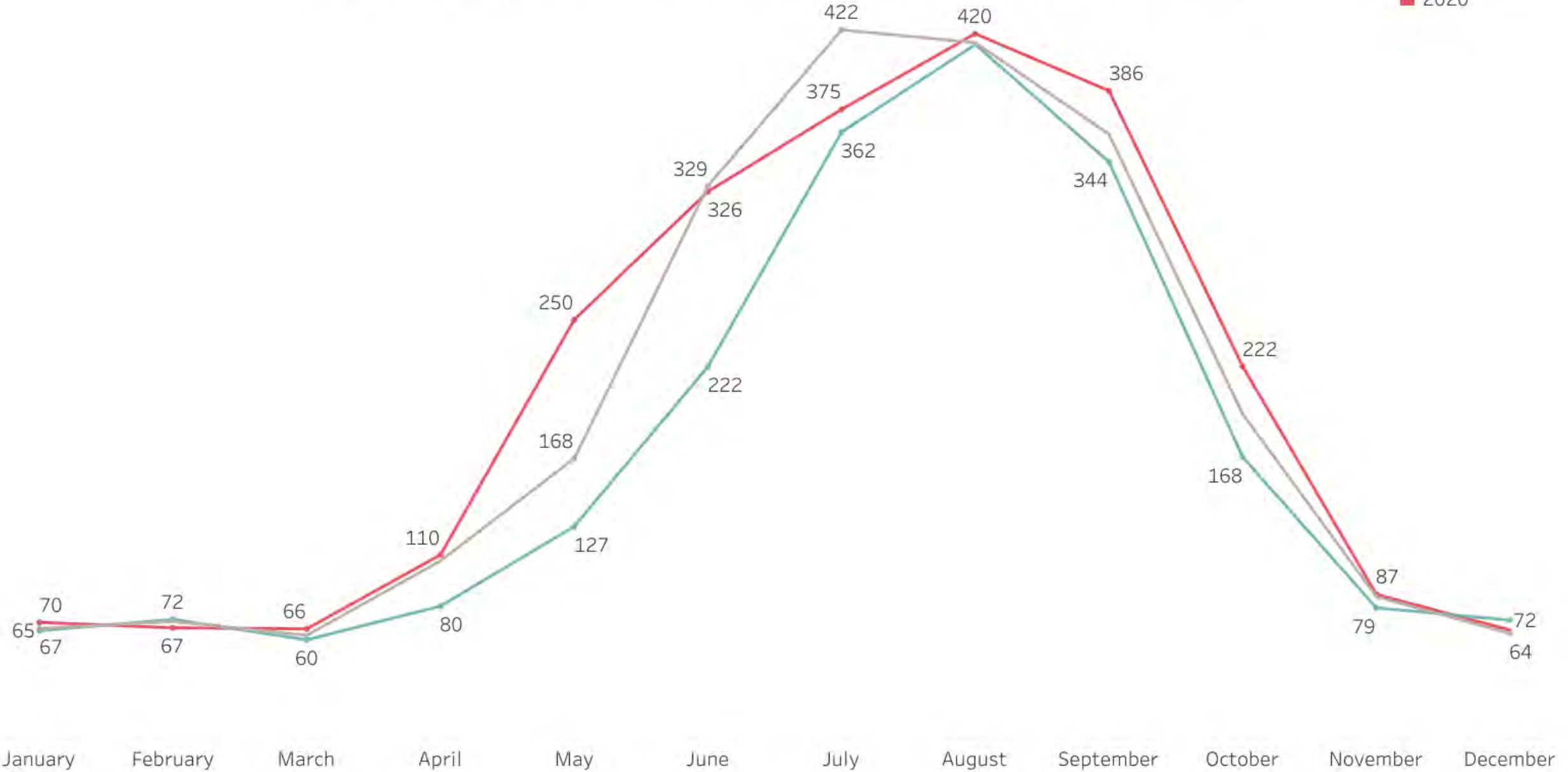
## Summer Month Average Precipitation by Year - Salt Lake City International Airport



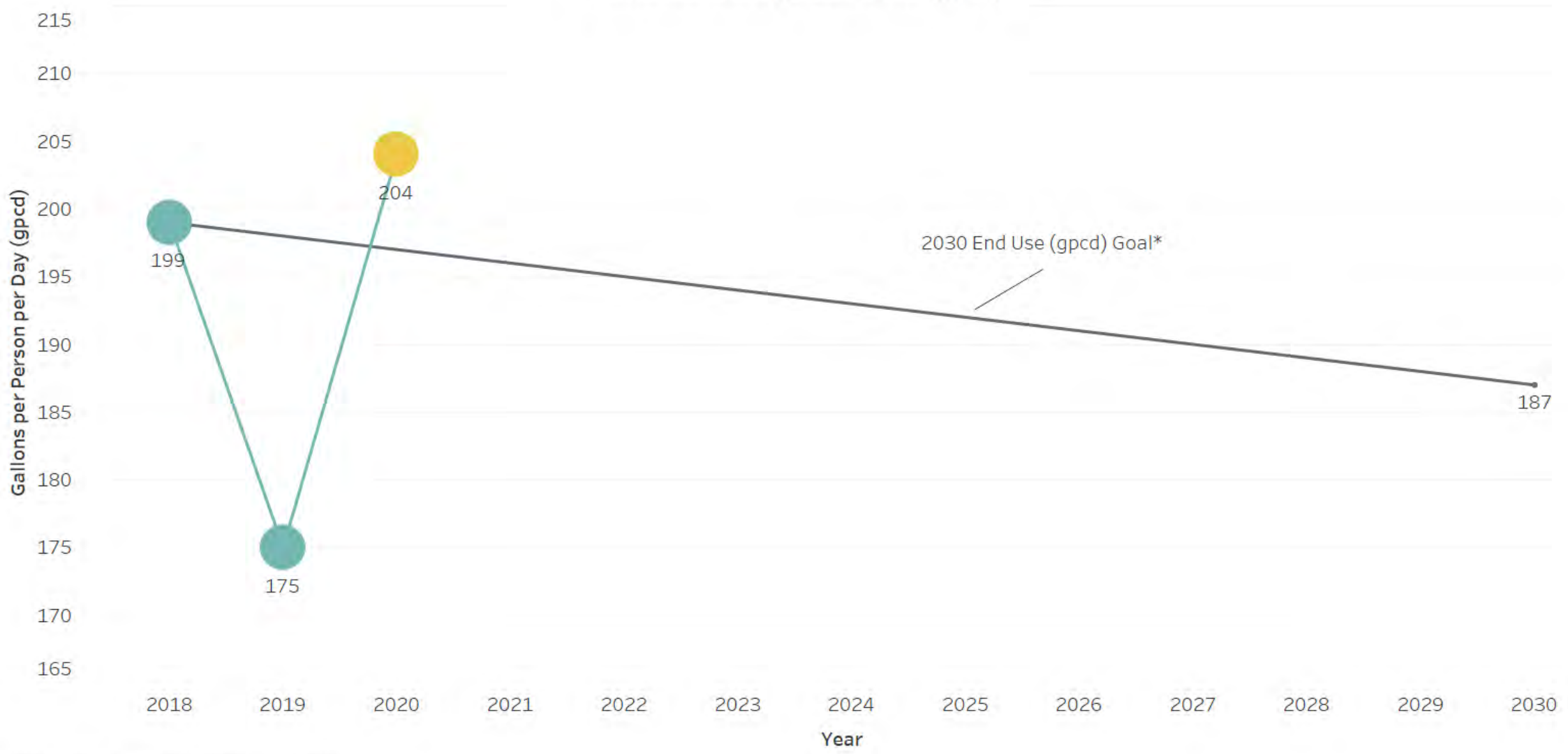
January, February, November, and December were removed from the analysis.

**Jordan Valley Water Conservancy District**  
2018, 2019, 2020 Comparison of Combined End Usage per Capita By Month (gpcd)

Year  
2018  
2019  
2020

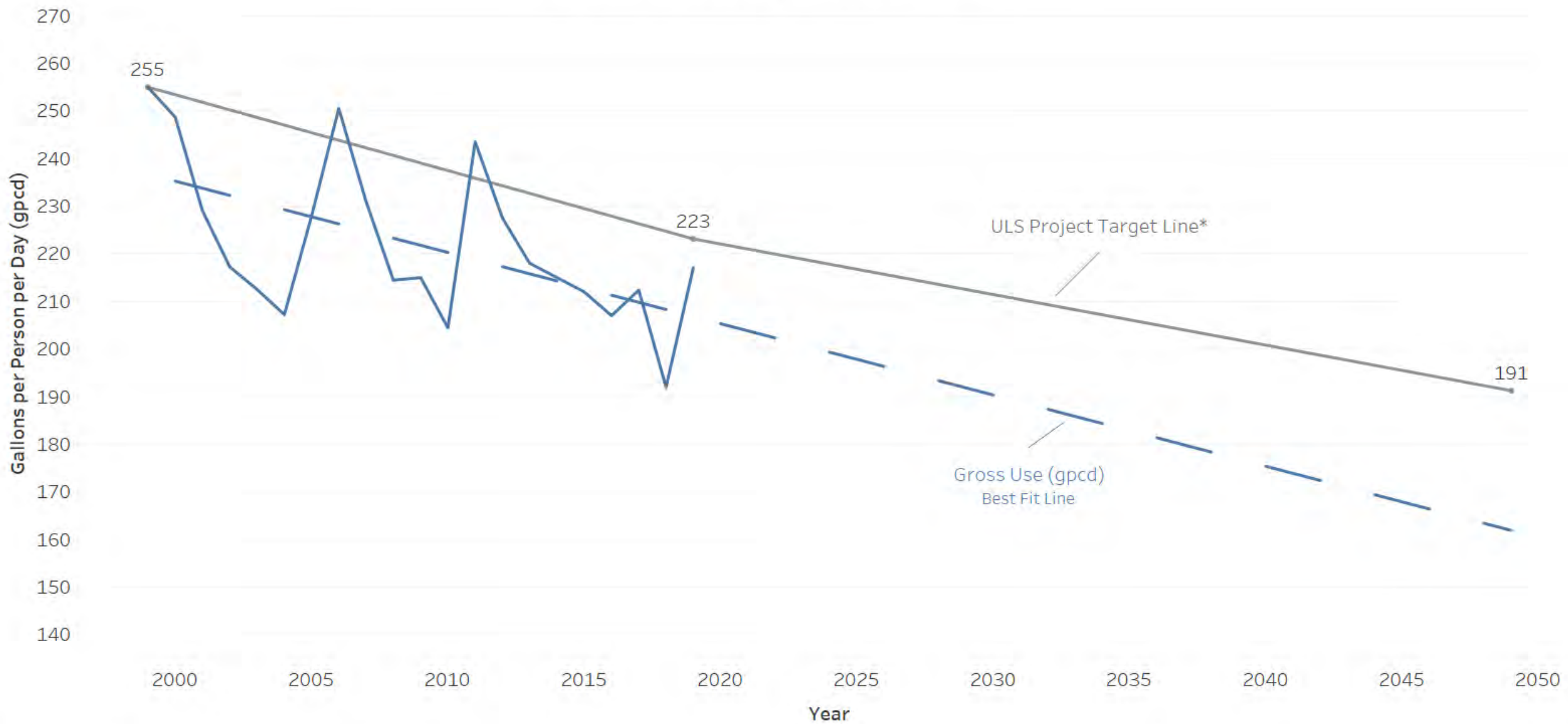


# Jordan Valley Water Conservancy District Annual End Usage per Capita (gpcd)



\*2030 End Use (gpcd) Goal is 187 gpcd by 2030

# Jordan Valley Water Conservancy District Annual Gross Usage per Capita (gpcd)



\*ULS Project Target Line is 12.5% by 2020 and 25% by 2050

# Water Efficiency Standards and Policy Considerations

Summary of the water efficiency standards and recent policy changes approved by JWWCD's Board of Trustees



# Key Benefits of Adopting Water Efficiency Standards

- Reductions in outdoor consumption will result in lower peaking factors, infrastructure costs, and water conservation expenses.
- The cost to retrofit a landscape to be water-efficient is 5 times higher than installing it to be water-efficient from the beginning.
- Adopting the standards now is a proactive step to minimize economic damage if water restrictions are required to respond to potentially more extreme droughts.
- Water-efficient landscapes are more compatible with Utah's arid climate, are more resilient to droughts, and can more easily adapt to the trending hotter and drier climate conditions in the future.

## Indoor Standards

It is recommended but not mandated that all indoor plumbing fixtures be WaterSense labeled (e.g. toilets, urinals, faucets, and showerheads).



# Residential Landscape Standards

- Applicable to front and side yards.
- Lawn is designed as an open space that does not exceed 35% of the total landscaped area.
- lawn is prohibited in park strips and other narrow areas less than 8' wide.
- Drip irrigation is used in planting beds.
- Exceptions to these standards can be made in certain small lot scenarios.



# Commercial Landscape Standards

- Lawn is less than 20% of the landscaped area (except for active recreation zones).
- Lawn is not used in areas narrower than 8 feet (park strips, parking lot islands, etc).
- Lawn is free from obstructions and is not used on steep slopes.
- Drip irrigation is used in planting beds.
- Plant materials create at least 50% living plant cover at maturity (recommended).
- New landscape projects are submitted to the municipality to ensure they meet water conservation requirements.
- Certain special purpose landscape areas may receive variances to the standards based on need (ex. stormwater management areas)



# Implementation Strategies

Based on a survey of states, cities, and agencies throughout the west, considerations for implementation on new construction:

1. Outdoor landscaping ordinances
  - Incorporate into residential and commercial zoning codes
  - Include as a condition of development agreements
  - Add as part of plan review process
2. Water service application process
  - Include as a condition in water service application and agreement
  - Add as part of a water availability letter

# Implementation Strategies (cont.)

Based on a survey of states, cities, and agencies throughout the west, considerations for implementation on new construction:

## 3. Impact fees

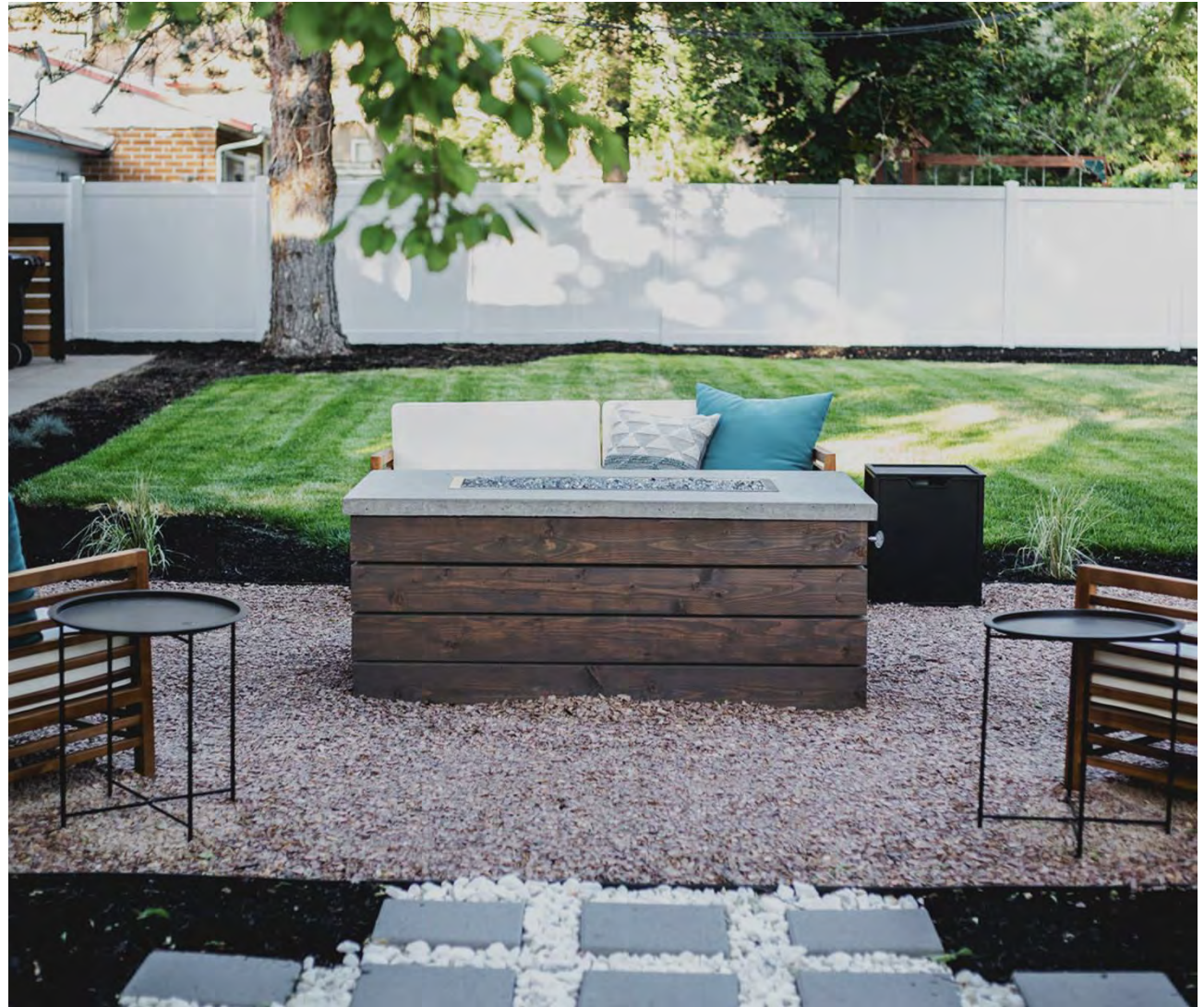
- Create a lower impact fee based on reduced water service needs
- Provide a credit for new construction that adopts standards

## 4. Water rates

- Provide water-efficiency credits on bills
- Align rate tiers with efficient use or to water use budgets

## Key Concepts for Adopting the Water Efficiency Standards in the **Retail Service Area**

- All new connections for all customer classes (residential, commercial, industrial, institutional) are expected to comply standards.
- Have applicants for new service connections submit a performance bond during the application process.
- Hold the bond until the applicable landscaping has been installed and inspected.
- Release bond upon compliance to the standards.
- Adjust water rate tiers to provide additional price signal for efficient use.
- Create a new meter size category that has lower tier thresholds and a lower impact fee.



# Conservation Programs and Initiatives

Effective water conservation programs are based on three primary building blocks: Education, Incentives, and Regulations



# Member Agency Grant Program

## Two Opportunities:

- Funding for Agency Water Conservation Programs
- Funding for Assistance in Adopting Water Efficiency Standards

**\$50,000 +**  
**\$1 per acre-foot of contract**

- To assist in funding and implementing water conservation measures, projects, and programs within the Member Agency retail service area.

**\$50,000 +**  
**\$1 per acre-foot of contract**

- To assist in funding the potential financial impacts of adopting the Water Efficiency Standards.
- Areas for consideration are staffing, consulting, training, software, equipment, etc. that may be needed as a result.

# Utah Water Savers

utahwatersavers.com



Apply today for a  
**FREE consultation or cash rebates!**

(Programs available throughout most of JWCD's service area)



Cash rebates for homeowners who purchase a smart controller for their irrigation system.



Cash rebates for homeowners who replace toilets that were installed before 1994.



Cash rebates for homeowners who convert grass park strips to water-efficient designs.



Free consultations for homeowners wanting to improve the water efficiency of their yard.



Cash rewards and landscape plan reviews for those who complete Localscapes projects.

## how do I **APPLY?**

Complete the online interest form at  
**JVWCD.ORG/LANDSCAPELEADERSHIPGRANT**

Or email the following information to  
**GRANTS@JVWCD.ORG:**

1. Applicant's contact information (name, phone, and email)
2. Project address and description
3. Estimated project start date and cost
4. Concept landscape plan (or detailed construction plans if available)
5. Estimated square footage (include breakdown of turf, planter bed, and hardscape areas)

### **APPLICANT REQUIREMENTS:**

- Recipient must be a commercial business, builder/developer, institution, or HOA.
- Project must be located within the JVWCD service area.
- Project must provide quantifiable water savings.
- Project must have high promotional, marketing, or press appeal.
- Landscape changes must be voluntary and not for the purpose of complying with a governmental code or policy.



**JORDAN VALLEY WATER  
CONSERVANCY DISTRICT**

8215 South 1300 West - West Jordan, UT 84088  
801-565-4300



*example projects*

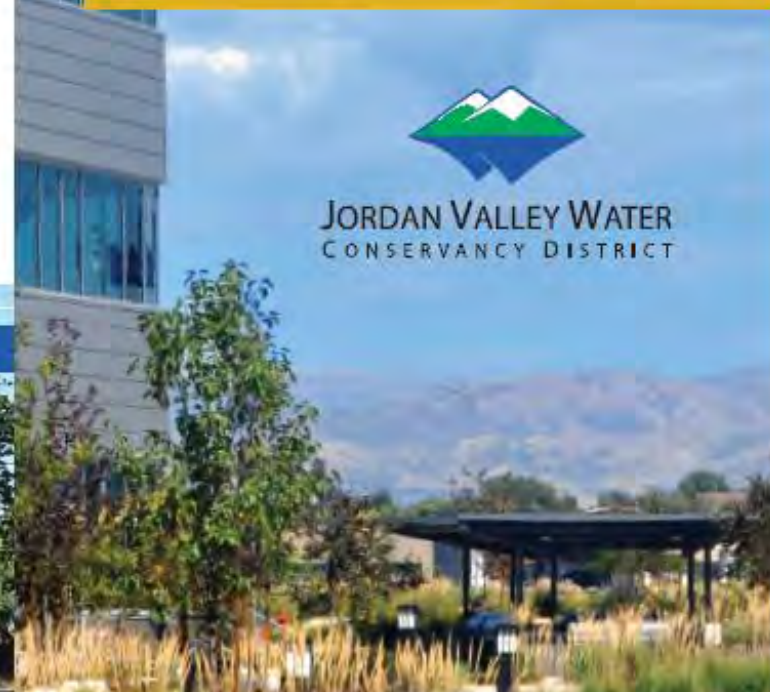
# Landscape LEADERSHIP grants

FOR BUILDERS · DEVELOPERS  
COMMERCIAL BUSINESSES AND INSTITUTIONS  
& HOMEOWNERS ASSOCIATIONS

*Funding for prominent,  
water-efficient landscaping projects.*



**JORDAN VALLEY WATER  
CONSERVANCY DISTRICT**



# Strategic WATER MANAGEMENT

Strategic Water Management is a joint effort between JWCD and eligible commercial, industrial, institutional, and multi-family water users to both save water and meet the unique needs of program participants.

The program offers:

- Water use assessments
- Custom incentives



- Irrigation system upgrades (ex. smart central irrigation controllers, drip conversions, zone adjustments)
- Indoor fixture replacement (ex. toilets, urinals, faucets, showerheads)
- Replacement of water-cooled equipment with new air-cooled equipment (ex. ice machines)
- Enhanced or added water reclamation systems
- Elimination of water intensive industrial processes
- Boiler and steam system upgrades
- Air conditioning condensate capture and reuse
- Cooling tower modifications
- Industrial laundry equipment upgrades
- More efficient reverse osmosis units
- Car wash system and equipment upgrades
- Laboratory and medical equipment upgrades

# Conservation Garden Park

(8275 S. 1300 W. West Jordan, UT)



- With more than nine acres of exhibits, pathways and Utah-friendly plants, Conservation Garden Park is Salt Lake County's premier destination for information about water-efficient landscaping. Owned and operated by JVVCD, the Garden is open year-round with free admission to all patrons.
- Classes, tours, educational exhibits, field trips, community events, plant database, and online education.



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

Discussion/Questions





# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021

**LONG-TERM  
WATER SUPPLY  
PLANNING AND  
10-YEAR  
CAPITAL  
PROJECTS  
PLAN**

**Annual Member  
Agency Meeting**

April 21, 2021



**JORDAN VALLEY WATER**  
CONSERVANCY DISTRICT

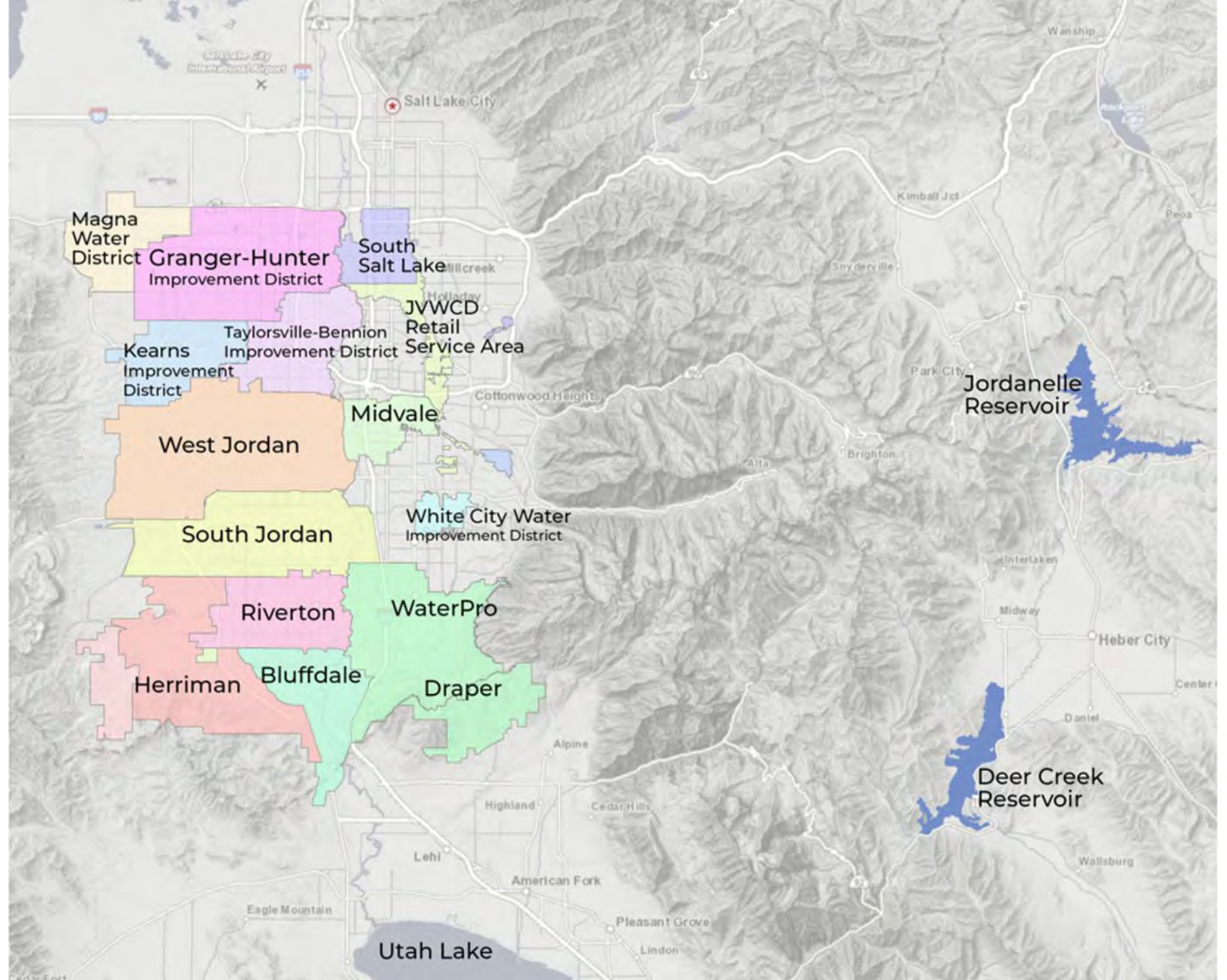


The highlighted areas on the map show JWCD's service area, which includes the following cities and water providers:

- Bluffdale City
- Draper City
- Granger-Hunter Improvement District
- Herriman City
- Kearns Improvement District
- Magna Water District
- Midvale City
- Riverton City
- City of South Jordan
- City of South Salt Lake
- Taylorsville-Bennion Improvement District
- Waterpro, Inc.
- City of West Jordan
- White City Water Improvement District

JWCD's retail service area also includes smaller portions of the following locations:

- City of Holladay
- Cottonwood Heights City
- Murray City
- Millcreek City
- Sandy City

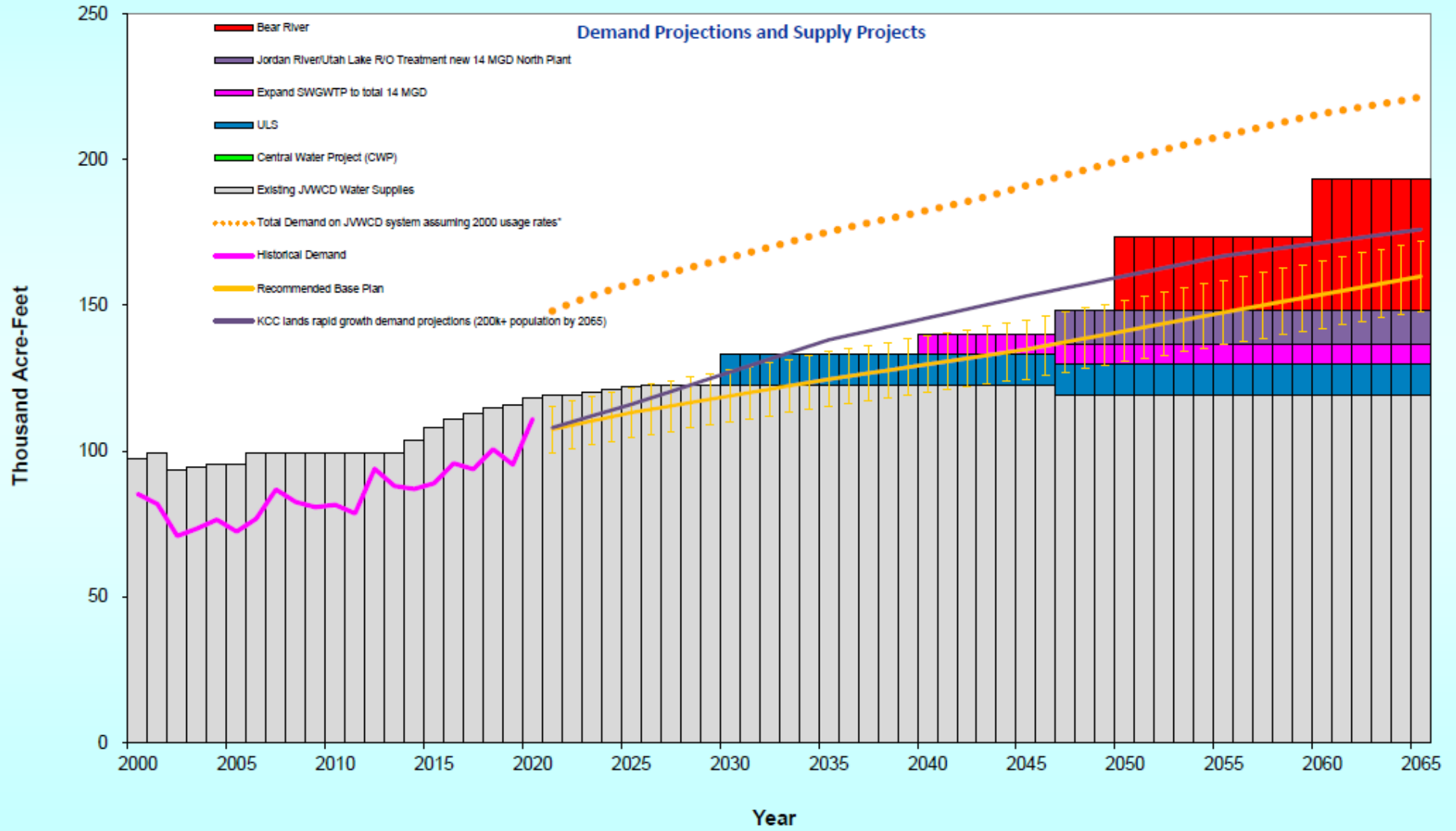


# Areas for Potential Service Area Expansion

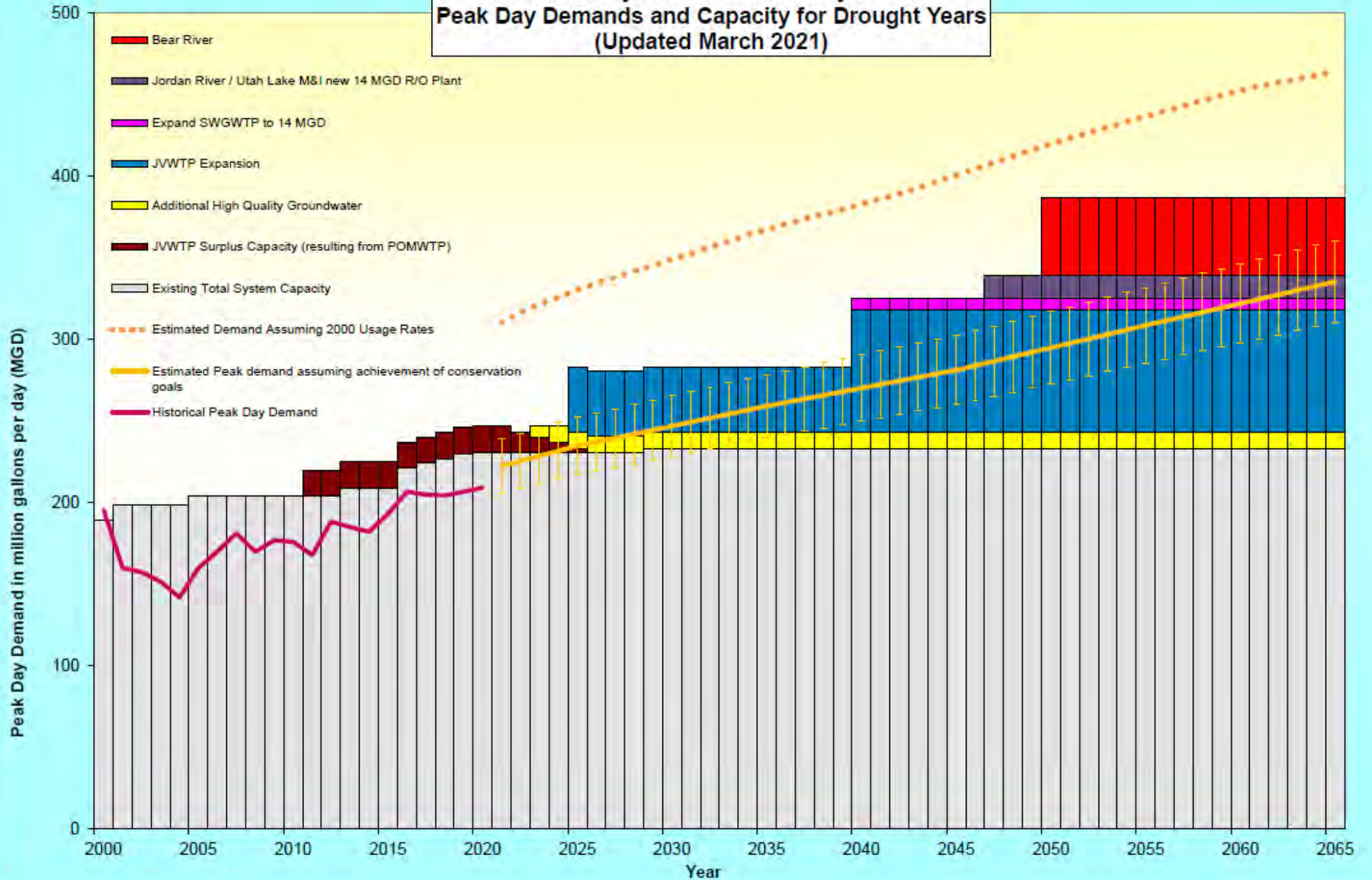
It is anticipated the western portion of this projection plan could be annexed into JWCD's service area.

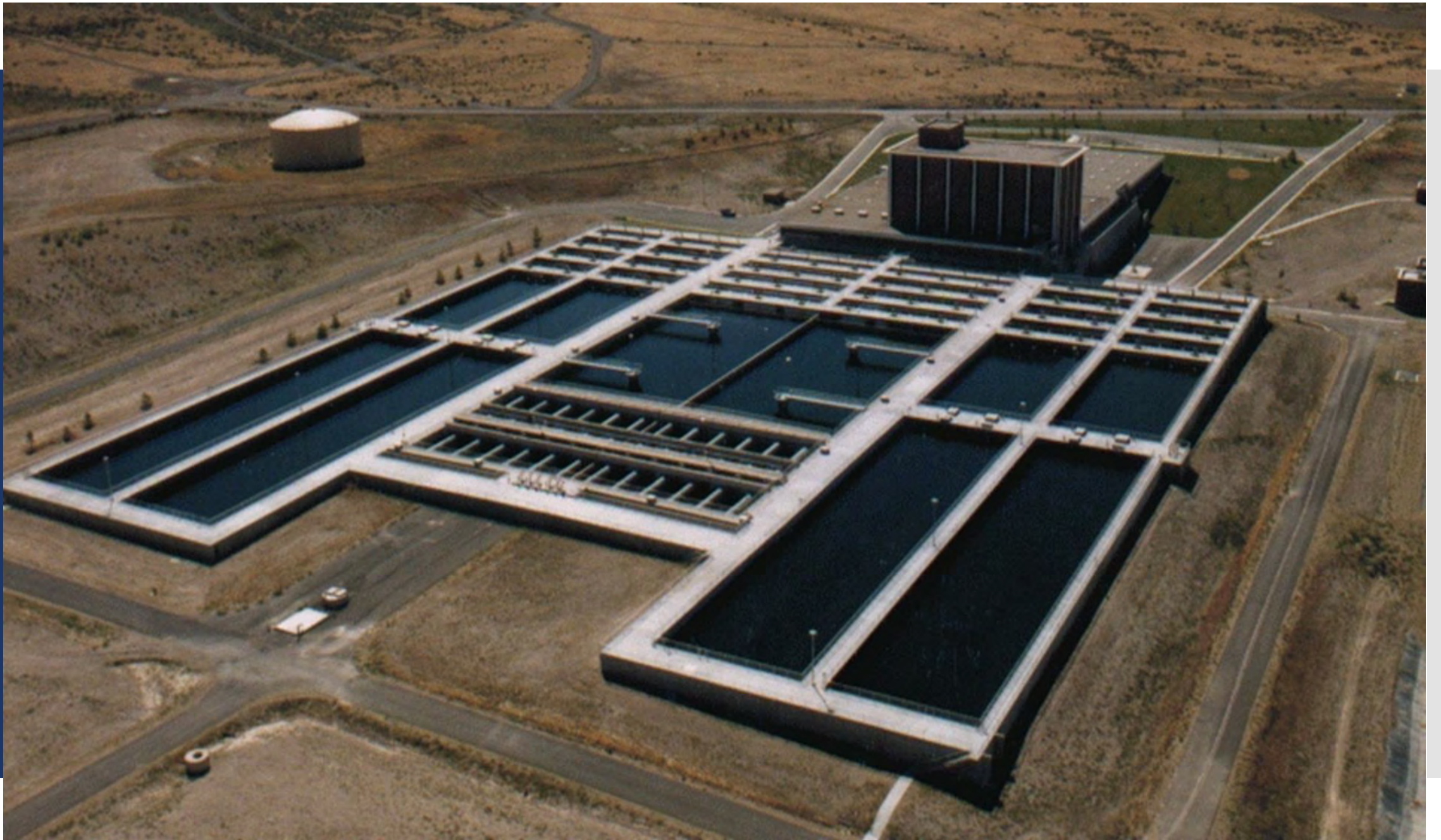


**Jordan Valley Water Conservancy District  
Drought Year Water Supply Plan using Paleo data  
(Updated March 2021)**

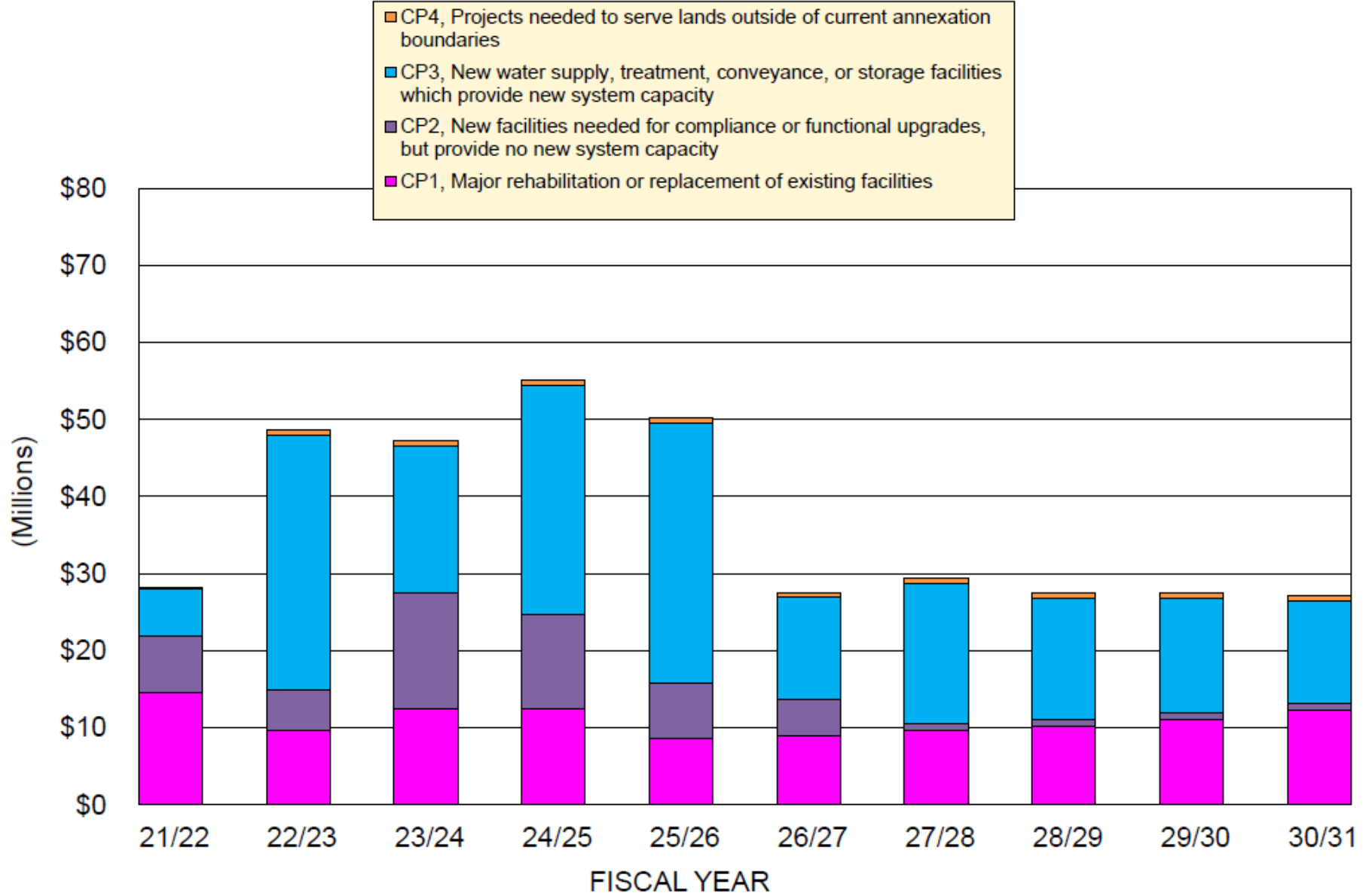


### Jordan Valley Water Conservancy District Peak Day Demands and Capacity for Drought Years (Updated March 2021)





## TEN YEAR CAPITAL PROJECTS PLAN SUMMARY (updated March 2021)



Total in 10 Year Plan: \$368,458,519

**JVWCD  
DROUGHT  
CONTINGENCY  
PLAN**

**Annual Member  
Agency Meeting**

April 21, 2021



**JORDAN VALLEY WATER**  
CONSERVANCY DISTRICT

## JVWCD Drought Contingency Plan

- Reduce vulnerability by implementing various mitigation measures
- Develop a framework to monitor conditions and determine level of necessary water restrictions
- Develop response actions to minimize economic damage



## **Drought Planning & Preparation Activities**

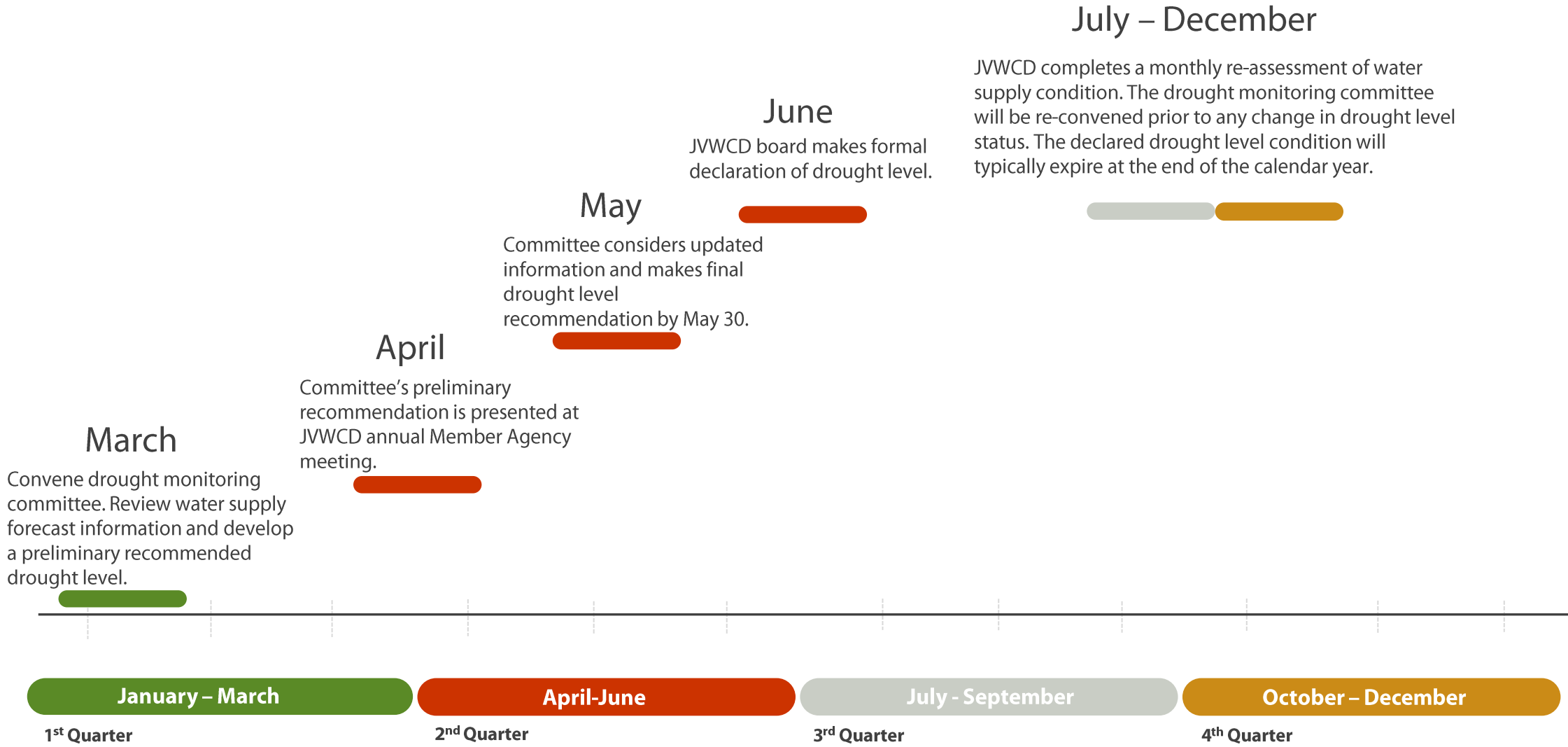
- Water Efficiency Standards
- Slow the Flow contributing stakeholder
- Continue rebate programs (Flip Your Strip, Localscapes Rewards, toilet rebates, etc.)
- Continue as a sponsor of Provo River Watershed Council
- Prepare information for water users and media campaign assets per Drought Contingency Plan
- Member Agency Grant Program

## Example Mitigation Measures

- Secondary water metering
- Encourage broader implementation of automated metering infrastructure (AMI)
- Establish additional stand-by or short-term supply contracts
- Expand operations of JWCD artificial groundwater recharge project

## Example Response Actions

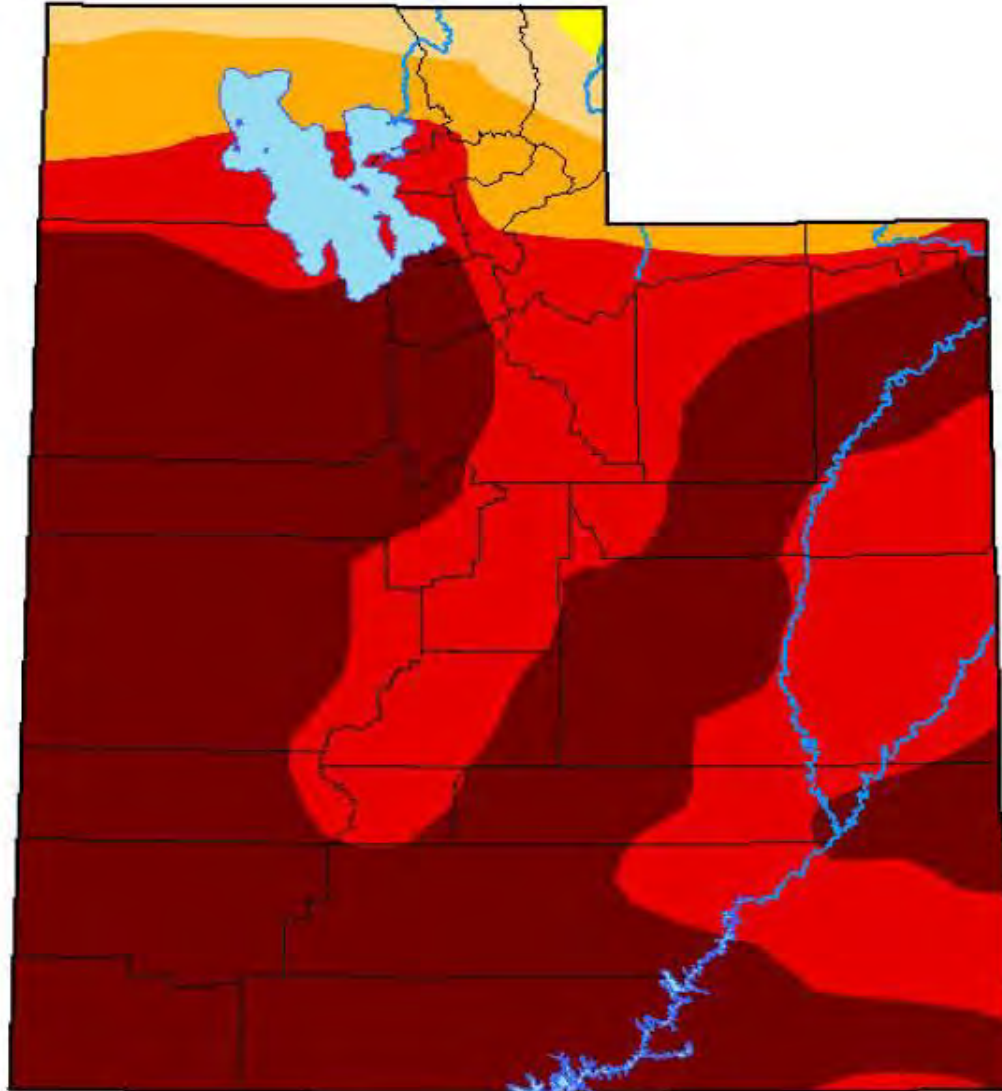
- Water supply restrictions communications
- Customer leak detection using AMI and billing software
- Customized planning for large water users (e.g. golf courses, parks, sports fields, etc.)
- Drought surcharge pricing for upper tiers



# U.S. Drought Monitor

## Utah

March 30, 2021  
(Released Thursday, Apr. 1, 2021)  
Valid 8 a.m. EDT



### *Intensity:*



*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

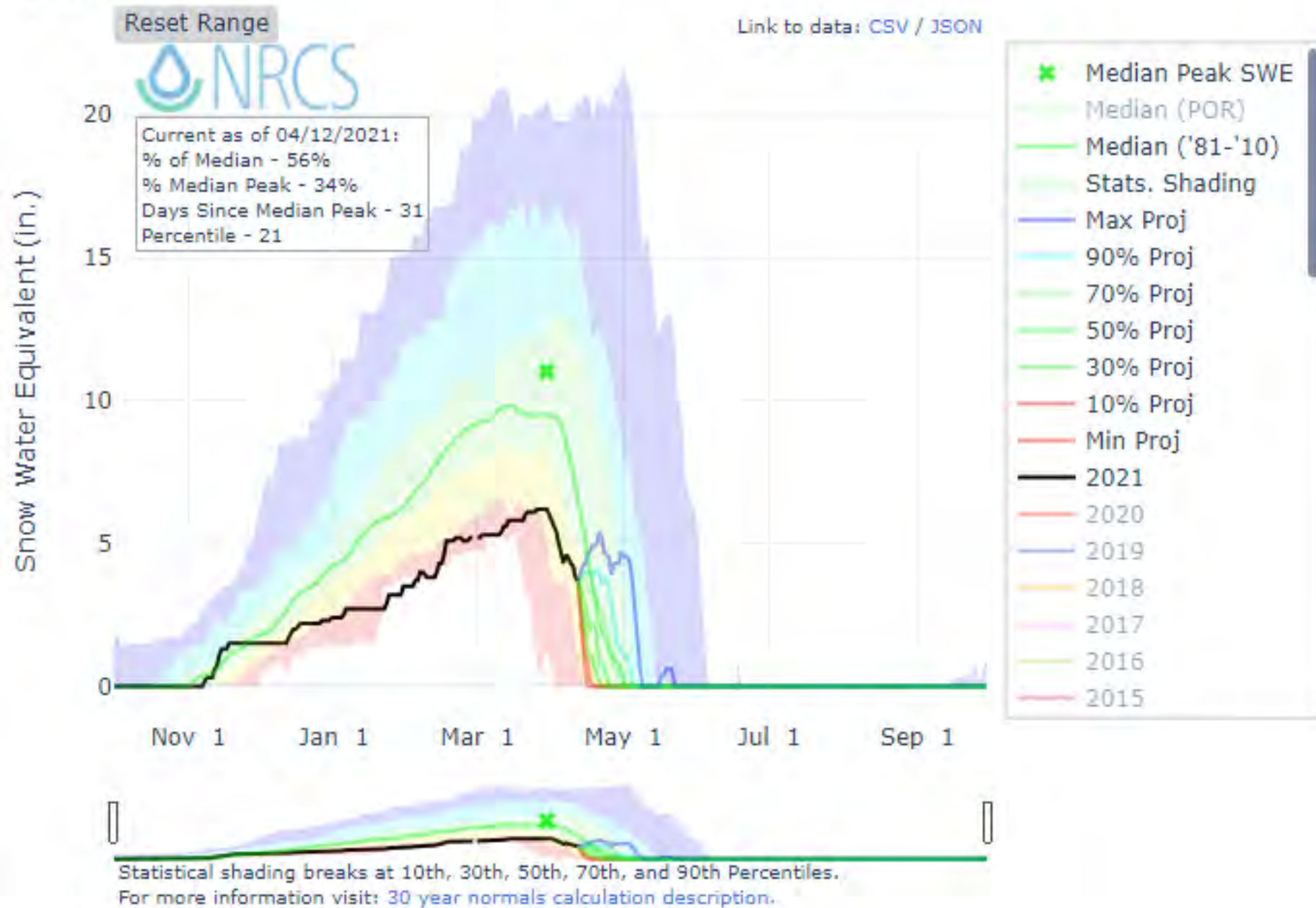
### *Author:*

Brad Pugh  
CPC/NOAA

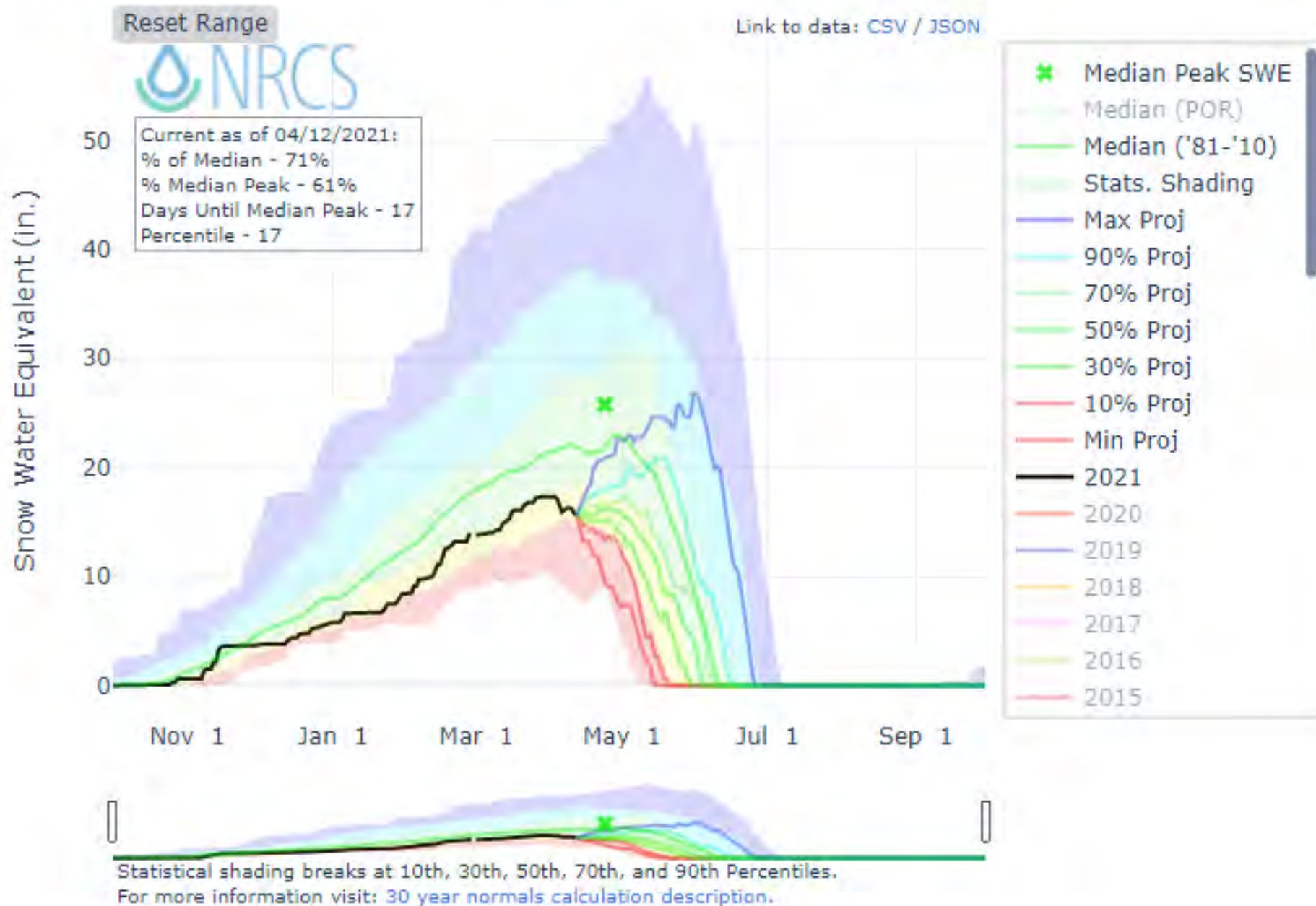


[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# SNOW WATER EQUIVALENT PROJECTIONS AT BEAVER DIVIDE



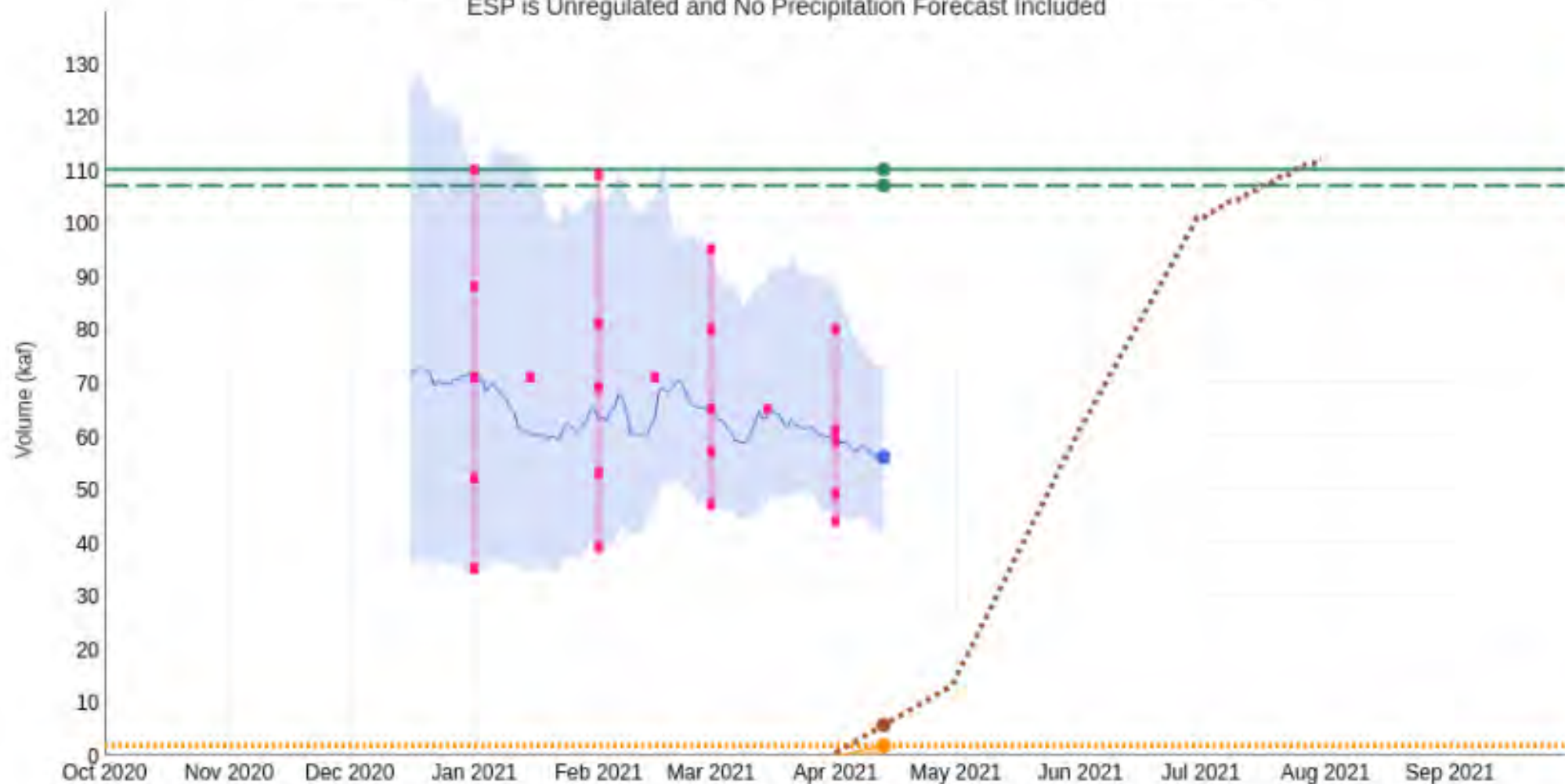
# SNOW WATER EQUIVALENT PROJECTIONS AT TRIAL LAKE



### Provo - Hailstone, Nr (PVHU1)

Period: Apr-Jul, Official 50% Forecast (2021-04-01): 59 kaf (54% Average, 55% Median)

ESP is Unregulated and No Precipitation Forecast Included



2021/04/13:

**Average:** 110

**Median:** 107

**Observed**

**Accumulation:** 1.79

**Observed Total:** 1.79

**Normal**

**Accumulation:** 5.66

**ESP:** 56



## JWCD Existing Water Supplies

Water Supply	Estimated Drought Year Yield (AF)	Recent Annual Utilization (AF)	Comments
Central Utah Project (Jordanelle Storage)	41,000	30,000 – 58,000	Variable yield so long as multi-year average utilization is less than design yield.
PRWUA (Deer Creek Storage) + PRWUC & other un-stored rights + local streams	34,000	29,000 – 50,000	Combination of storage rights in Deer Creek Reservoir and un-stored PRWUC and other direct flow rights and local streams in southeast Salt Lake County. Storage rights have “holdover” provisions which allow unused allocations to be used in subsequent year(s).
Salt Lake County high quality groundwater	20,000	6,000 – 25,000	Limited by safe yield per Salt Lake Valley Groundwater Management Plan.
CWP, SWJVGW	19,000	19,000 – 21,000	These two supplies are not significantly affected by drought conditions.

**Total estimated drought year yield: 114,000 AF**

**Total JWCD M&I supplies into system 2020: 120,255 AF**

**Total JWCD M&I supplies into system 2019: 99,580 AF**

## 2021 Water Supply Plan

Water Supply	Estimated Drought Year Yield (AF)	Comments
Central Utah Project (Jordanelle Storage)	47,400	Approximately 59,700 AF is available for 2021. Preserve ~12,000 AF as a hedge for 2022 and/or 2023.
PRWUA (Deer Creek Storage) + PRWUC & other un-stored rights + local streams	29,000	Assumes ~ 8,000 AF will be “held over” for use in 2022.
Salt Lake County high quality groundwater	12,000	Medium utilization to preserve option of heavier use in future.
CWP, SWJVGW	19,000	Utilization per contracts (relatively unaffected by drought).

**Total 2021 Water Supply Plan: 107,700 AF**

## 2022 Water Supply Plan (pessimistic snowpack assumption)

Water Supply	Estimated Drought Year Yield (AF)	Comments
Central Utah Project (Jordanelle Storage)	47,000	Approximately 53,000 AF is available for 2022. Preserve 6,000 AF as a hedge for 2023.
PRWUA (Deer Creek Storage) + PRWUC & other un-stored rights + local streams	29,000	Assumes full utilization of 8,000 AF held over from 2021.
Salt Lake County high quality groundwater	15,000	Increased utilization corresponds to Drought Level 1 trigger criteria. Preserves option for heavier use in future.
CWP, SWJVGW	19,000	Utilization per contracts (relatively unaffected by drought).

**Total 2022 Water Supply Plan: 110,000 AF**

# Drought Monitoring: establishing triggering criteria

Example of triggering criteria for drought levels: When reached, these could trigger response actions to reduce impact.

Drought Level	Advisory Code	Water Shortage Description	Triggering Criteria Applied to Drought Levels*		
			CUWCD Supply Availability (Jordanelle storage of Central Utah Project)	PRWUA Supply Allocation (in the Provo River Project)	Salt Lake Valley Groundwater Conditions
Level 0	Blue	Normal	at least 95% supply availability	at least an 80% supply allocation	3 yr. average diversions less than safe yield
Level 1	Yellow	Moderate	at least a 95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 12,000 AF, or 3 yr. average exceeds safe yield
Level 2	Orange	Severe	at least 90-95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 16,000 AF, or 3 yr. average exceeds safe yield
Level 3	Dark Orange	Extreme	at least 90-95% supply availability	<75% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 yr. average exceeds safe yield
Level 4	Red	Critical/Exceptional	less than 90% supply availability	less than 45% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 yr. average exceeds safe yield

- Questions/Comments



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

*Delivering Quality Every Day*



# JORDAN VALLEY WATER CONSERVANCY DISTRICT

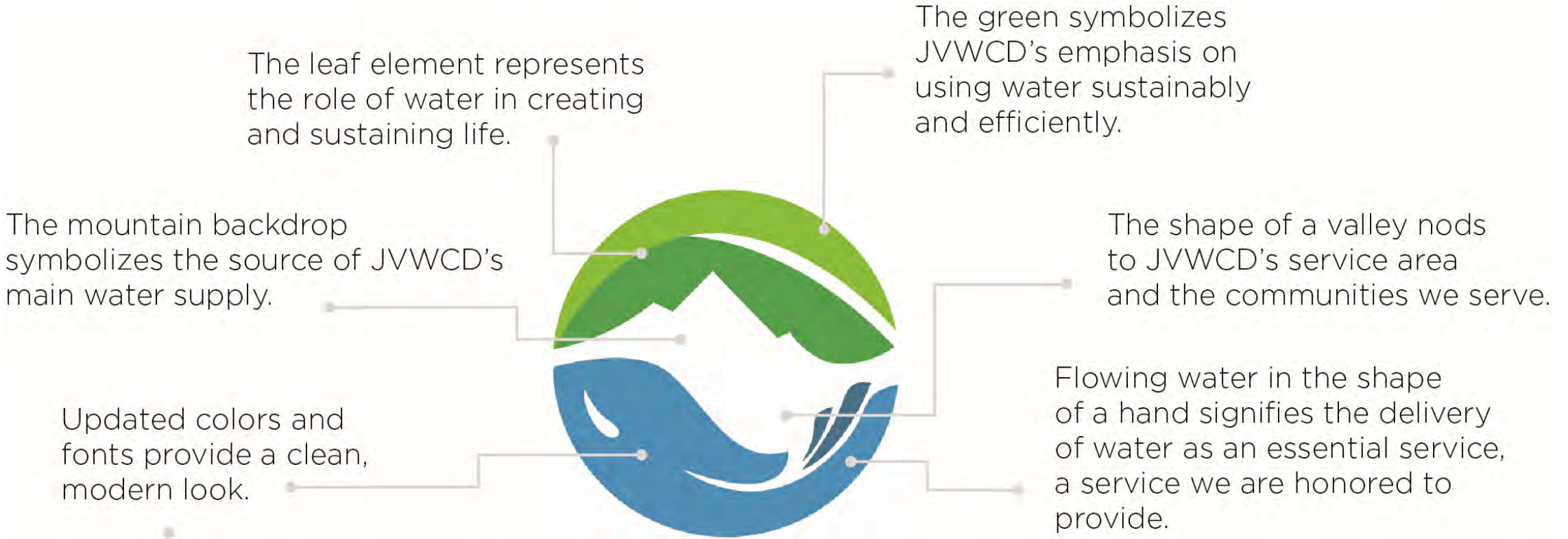
Annual Member Agency Meeting  
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JVWCD new logo to be unveiled July 1, 2021

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**JORDAN VALLEY WATER**  
CONSERVANCY DISTRICT



# JORDAN VALLEY WATER

## CONSERVANCY DISTRICT





# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

# FINANCIAL PLAN, WATER RATES AND METHODOLOGY

Member Agency Meeting – April 21, 2021



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

### FISCAL YEAR BUDGET

- Operating and maintenance level of service needs
- Debt payments due for fiscal year
- Funding capital replacement projects and reserves

### 10-YEAR CAPITAL PROJECTS PLAN

- Water supply and demand projections
- Prioritizing capital projects and estimated costs
- Updated annually

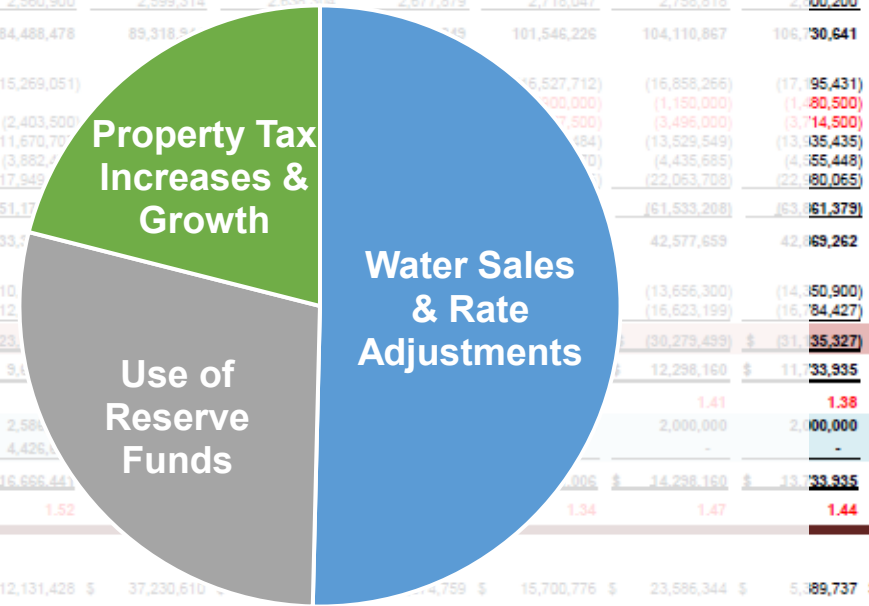
### 10-YEAR FINANCIAL PLAN

- Future revenue based on water demand projections
- Operating and maintenance expense projections
- Debt service based on current and anticipated debt
- Projected future bond issues

**10 YEAR FINANCIAL PROJECTIONS**  
(March 2021 Update w/ March 2021 Capital Projects Plan projections)  
Fiscal Years

	9-Apr-21 1.8% to 3.0% Proposed Rate Increases WITH MULTIPLE Tax Rate Increases	CURRENT FY BUDGETED 2020/2021	PROPOSED BUDGET 2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028
Water Delivery Percentage Increase (From the Water Supply Plan)		0.5%	4.5%	1.3%	1.0%	1.0%	1.5%	1.2%	1.2%
Budgeted Water Deliveries		99,500	104,500	105,373	107,939	109,706	110,372	111,737	113,101
Average Water Rate Increase		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
Average Water Rate		\$560.58	\$571.75	\$584.37	\$601.90	\$619.56	\$638.56	\$648.78	\$659.16
<b>REVENUES:</b>									
Water Sales	Vol*Rate	\$ 55,777,427	\$ 58,818,376	\$ 60,142,810	\$ 61,595,381	\$ 62,056,056	\$ 63,349,035	\$ 64,492,731	\$ 64,551,655
Property Taxes	1.8%	20,452,900	23,109,200	25,142,810	25,595,381	26,056,056	26,349,035	26,559,318	26,378,786
Other	1.5%	3,199,700	2,560,900	2,599,314	2,638,704	2,677,879	2,718,047	2,758,818	2,800,200
<b>TOTAL REVENUES</b>		<b>79,430,027</b>	<b>84,488,476</b>	<b>88,318,514</b>	<b>89,829,466</b>	<b>90,789,991</b>	<b>92,416,117</b>	<b>93,810,867</b>	<b>93,730,641</b>
<b>OPERATING EXPENSES:</b>									
Water Purchased	2.0%	(14,689,092)	(15,269,051)	(15,849,010)	(16,429,010)	(17,009,010)	(17,589,010)	(18,169,010)	(18,749,010)
Additional 6,300 AF CUP Water CUP OM&R Reserves		(2,185,000)	(2,403,500)	(2,622,000)	(2,840,500)	(3,059,000)	(3,277,500)	(3,496,000)	(3,714,500)
Operating & Maintenance	3.0%	(10,806,832)	(11,670,732)	(12,534,632)	(13,398,532)	(14,262,432)	(15,126,332)	(15,990,232)	(16,854,132)
General & Administrative	2.7%	(3,616,030)	(3,882,430)	(4,148,830)	(4,415,230)	(4,681,630)	(4,948,030)	(5,214,430)	(5,480,830)
Personnel	3.7%	(17,247,776)	(17,949,176)	(18,650,576)	(19,351,976)	(20,053,376)	(20,754,776)	(21,456,176)	(22,157,576)
<b>TOTAL OPERATING EXPENSES</b>		<b>(48,544,730)</b>	<b>(51,174,889)</b>	<b>(53,805,048)</b>	<b>(56,435,207)</b>	<b>(59,065,366)</b>	<b>(61,695,525)</b>	<b>(64,325,684)</b>	<b>(66,955,843)</b>
<b>INCOME BEFORE DEBT SERVICE</b>		<b>30,885,297</b>	<b>33,313,587</b>	<b>34,513,466</b>	<b>35,394,259</b>	<b>35,724,625</b>	<b>36,720,592</b>	<b>37,485,183</b>	<b>36,774,798</b>
<b>DEBT SERVICE PAID:</b>									
Principal		(10,914,000)	(10,914,000)	(10,914,000)	(10,914,000)	(10,914,000)	(10,914,000)	(10,914,000)	(10,914,000)
Interest		(11,673,923)	(12,187,587)	(12,701,251)	(13,214,915)	(13,728,579)	(14,242,243)	(14,755,907)	(15,269,571)
<b>TOTAL DEBT SERVICE</b>		<b>(22,587,923)</b>	<b>(23,101,587)</b>	<b>(23,614,251)</b>	<b>(24,127,915)</b>	<b>(24,641,579)</b>	<b>(25,155,243)</b>	<b>(25,668,907)</b>	<b>(26,182,571)</b>
<b>PAYGO FROM OPERATIONS</b>		<b>8,297,374</b>	<b>9,211,999</b>	<b>10,899,215</b>	<b>12,266,344</b>	<b>13,633,473</b>	<b>15,000,602</b>	<b>16,367,731</b>	<b>17,734,860</b>
<b>DEBT SERVICE COVERAGE</b>		<b>1.37</b>	<b>1.32</b>	<b>1.37</b>	<b>1.42</b>	<b>1.47</b>	<b>1.52</b>	<b>1.57</b>	<b>1.62</b>
<b>FROM REVENUE STABILIZATION FUND (RATES)</b>		<b>3,636,547</b>	<b>2,581,172</b>	<b>1,525,800</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>
<b>ADDITIONAL AMOUNT FROM REV STAB FUND</b>		<b>-</b>	<b>4,425,827</b>	<b>9,373,415</b>	<b>14,321,003</b>	<b>19,268,591</b>	<b>24,216,179</b>	<b>29,163,767</b>	<b>34,111,355</b>
<b>AVAILABLE FOR PAYGO TRANSFER</b>		<b>\$ 11,933,921</b>	<b>\$ 16,666,441</b>	<b>\$ 21,407,430</b>	<b>\$ 26,151,422</b>	<b>\$ 30,895,414</b>	<b>\$ 35,639,406</b>	<b>\$ 40,383,398</b>	<b>\$ 45,127,390</b>
<b>DEBT SERVICE COVERAGE w/ REV STAB TRAN</b>		<b>1.53</b>	<b>1.52</b>	<b>1.57</b>	<b>1.62</b>	<b>1.67</b>	<b>1.72</b>	<b>1.77</b>	<b>1.82</b>
<b>CAPITAL FUNDS BALANCE</b>									
<b>CASH BASIS (FROM BOARD REPORT)</b>									
Beginning of Year Capital Funds Balance:		\$ 17,834,666	\$ 12,131,428	\$ 37,230,610	\$ 41,979,569	\$ 46,728,528	\$ 51,477,487	\$ 56,226,446	\$ 60,975,405
(Capital Funds & Available Bond Proceeds)									
Interest Income	1.5%	300,000	181,971	558,459	62,604	856,121	235,512	353,795	80,846
Transfers of Impact Fees		474,389	341,000	407,000	407,000	407,000	407,000	407,000	407,000
Transfers from Operations		7,840,572	8,840,572	9,840,572	10,840,572	11,840,572	12,840,572	13,840,572	14,840,572
Bond Proceeds		-	-	-	-	-	-	-	-
<b>Total Funds Available for Capital Projects</b>		<b>25,035,317</b>	<b>65,465,300</b>	<b>52,736,610</b>	<b>104,308,669</b>	<b>70,748,410</b>	<b>73,769,861</b>	<b>32,904,439</b>	<b>49,926,305</b>
CP1 Capital Expenditures		(7,810,572)	(14,540,541)	(21,270,510)	(28,000,479)	(34,730,448)	(41,460,417)	(48,190,386)	(54,920,355)
CP2-CP4 Capital Expenditures		(5,092,645)	(1,940,541)	(8,959,399)	(12,000,530)	(12,406,572)	(12,812,614)	(13,218,656)	(13,624,698)
<b>TOTAL NET CAPITAL EXPENDITURES</b>		<b>(12,903,217)</b>	<b>(16,481,082)</b>	<b>(30,229,909)</b>	<b>(40,001,009)</b>	<b>(47,137,020)</b>	<b>(54,273,031)</b>	<b>(61,409,042)</b>	<b>(68,545,053)</b>
<b>End of Year Capital Funds Balance:</b>		<b>\$ 12,131,428</b>	<b>\$ 37,230,610</b>	<b>\$ 41,733,709</b>	<b>\$ 57,074,759</b>	<b>\$ 15,700,776</b>	<b>\$ 23,586,344</b>	<b>\$ 5,389,737</b>	<b>\$ 20,524,402</b>

Funding the 10-Year Financial Plan  
(Operating Budgets)

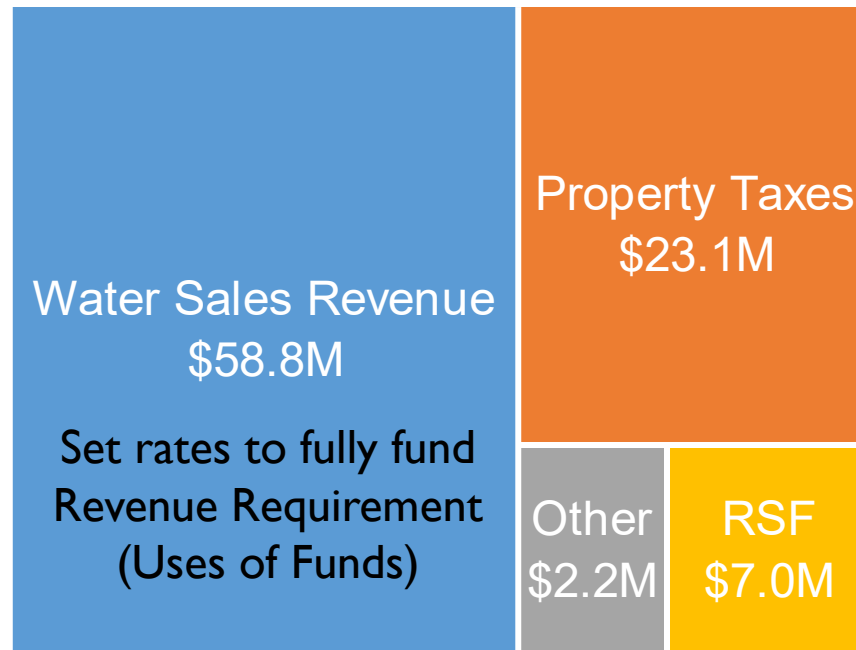


New bond issues will fund most (70%) of the projected future capital projects

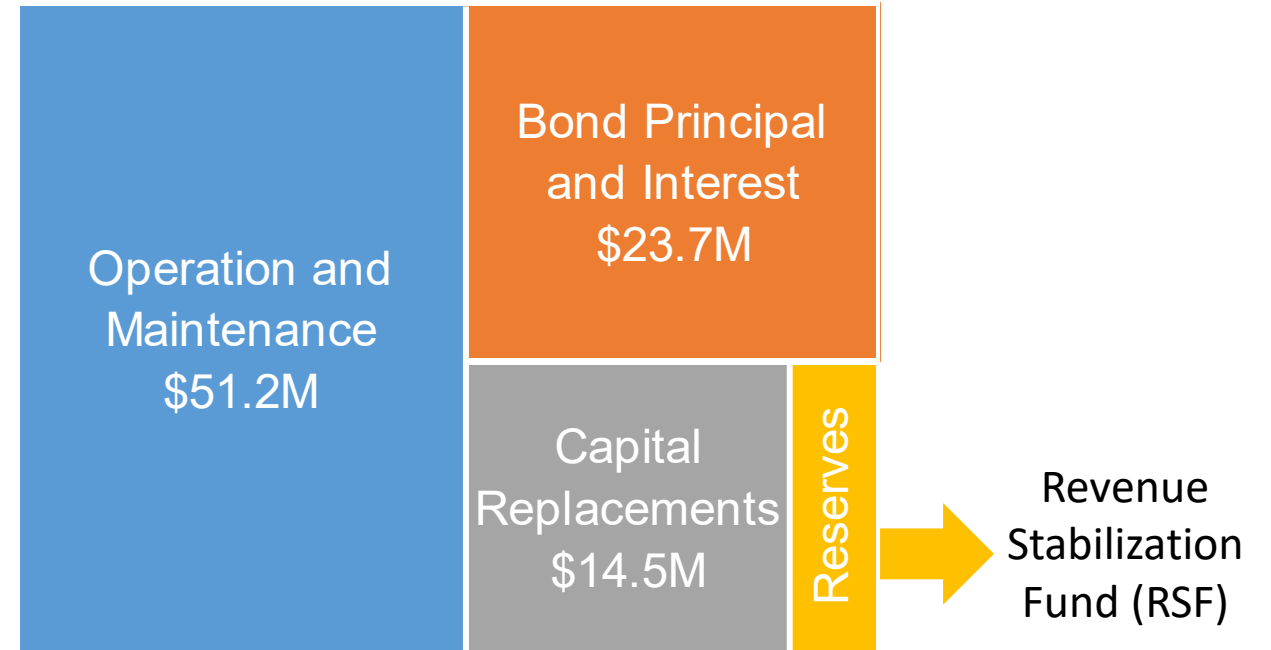
### Budget Process

#### Revenue Stabilization Fund (RSF)

##### SOURCES OF FUNDS



##### USES OF FUNDS



Revenues from higher water sales and/or unspent Uses of Funds can be used to offset future water rate adjustments

### Water Rate Methodology – Big Picture

#### WATER SYSTEM

- Jordan Valley has developed an extensive water system
- Over \$750 million invested in infrastructure and water sources
- Delivers over 100,000 acre-feet of water per year

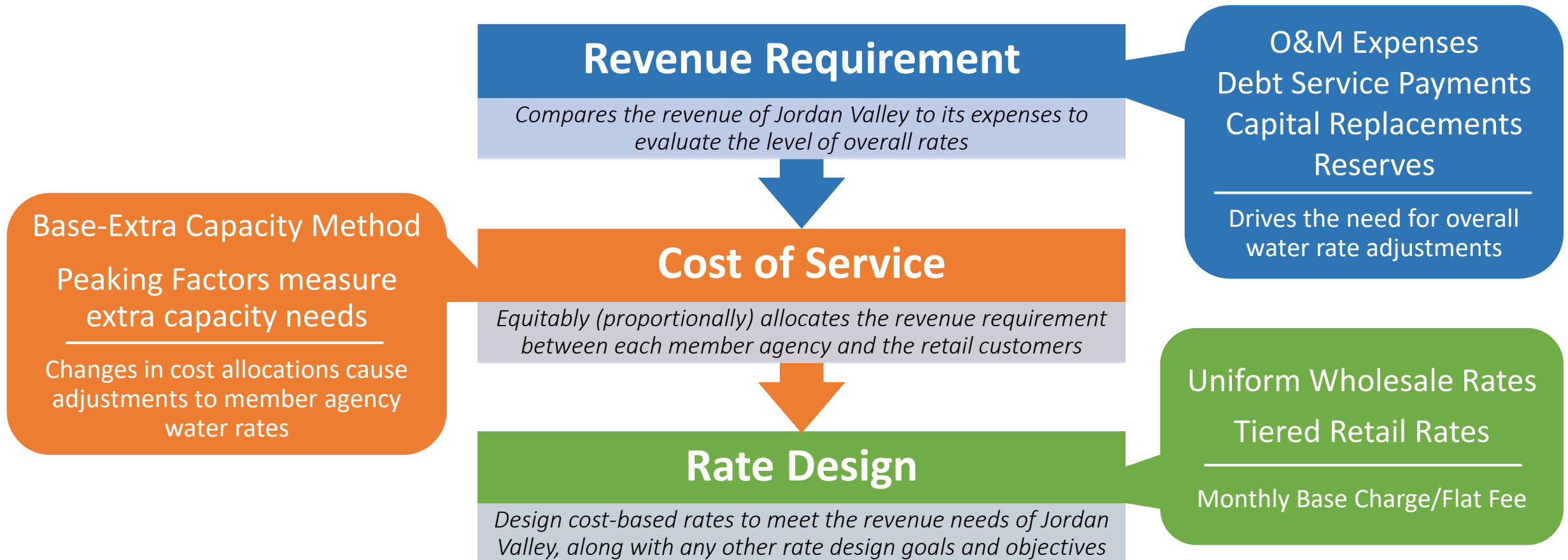
#### USERS

- 17 member agencies and retail system of approx. 8,400 customers
- Use of the system differs – small to large wholesale contracts
- Summer extra-capacity usage ranges from 1 to 4 times average use

#### WATER RATES

- Water rate study performed each year by a consultant
- Costs fairly allocated to users, based on how the system is used
- Water rates developed to generate sufficient revenues

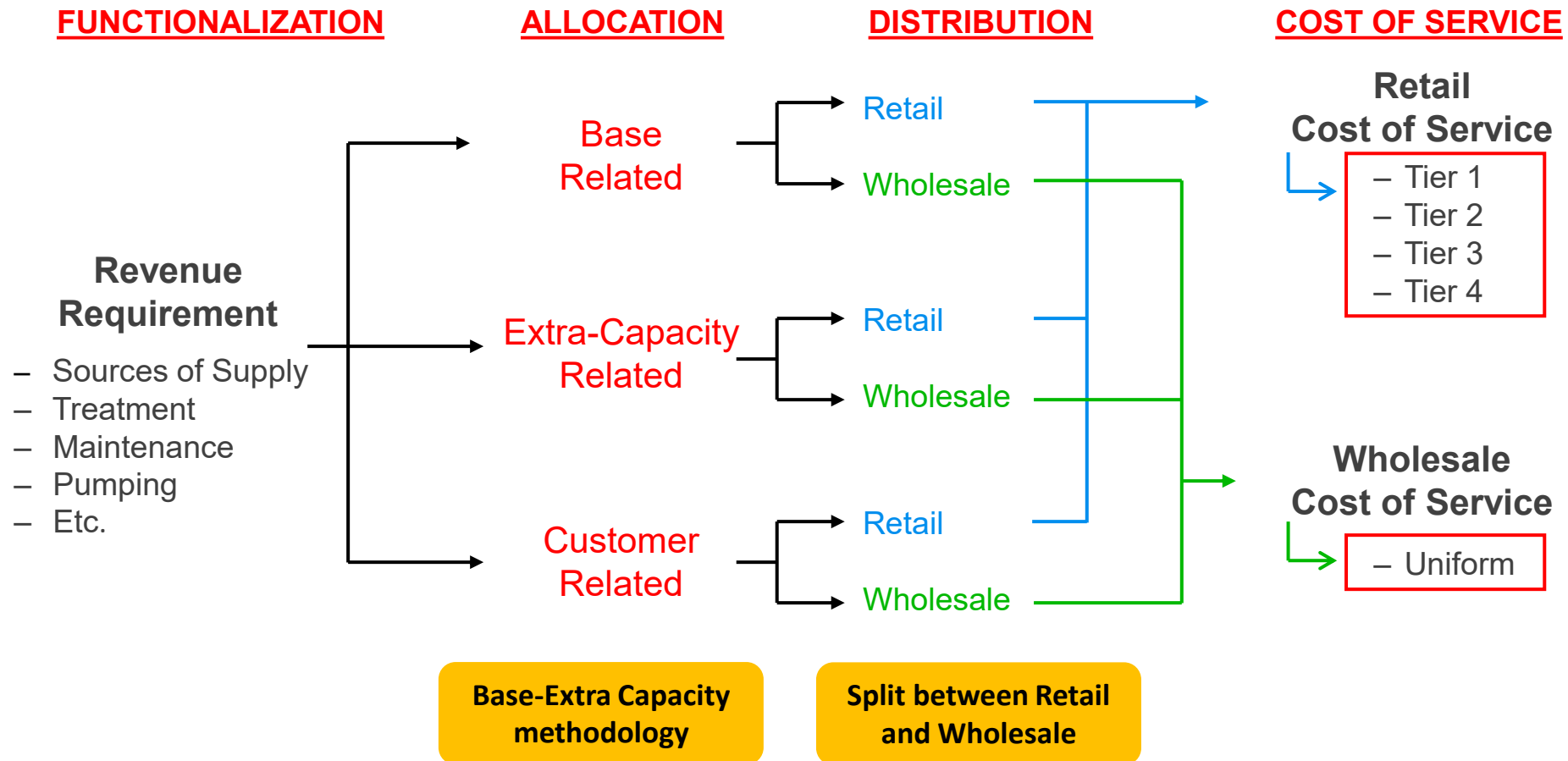
### Overview of the Rate Setting Process





### Simplified Overview of a Cost of Service Analysis

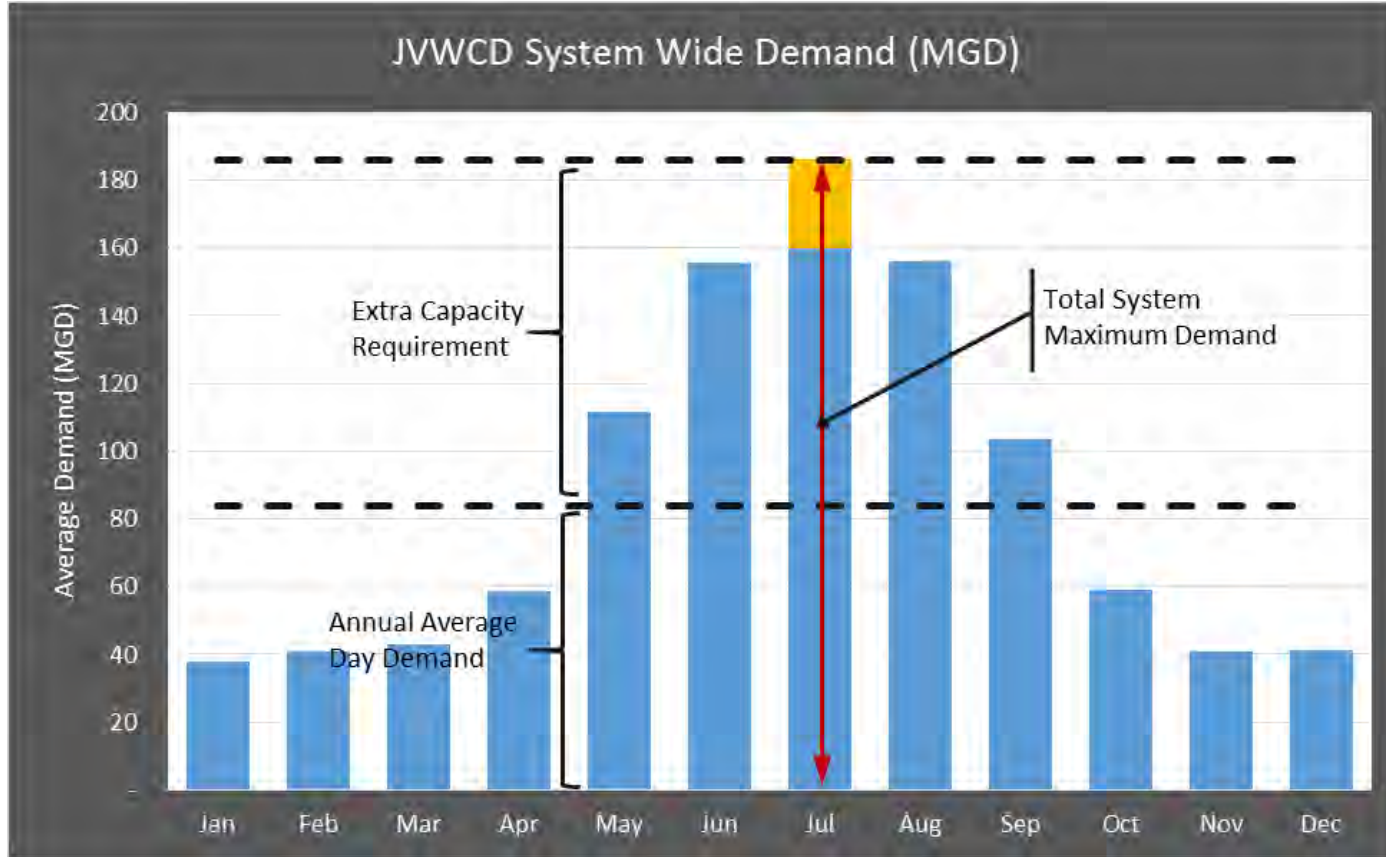
COST OF SERVICE ANALYSIS



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

**BASE-EXTRA CAPACITY METHOD**



### BASE-EXTRA CAPACITY METHOD

	NET REVENUE REQUIREMENT	RATE PER ACRE FOOT
CUST. RELATED & DIRECT ASGN	\$1.1 million	Varies
EXTRA HOUR CAPACITY	\$3.0 million	\$0 - \$76
EXTRA DAY CAPACITY	\$12.4 million	\$0 - \$339
BASE	\$40.5 million	\$383
<b>TOTAL REVENUE REQUIREMENT</b>	<b>\$57.0 million</b>	



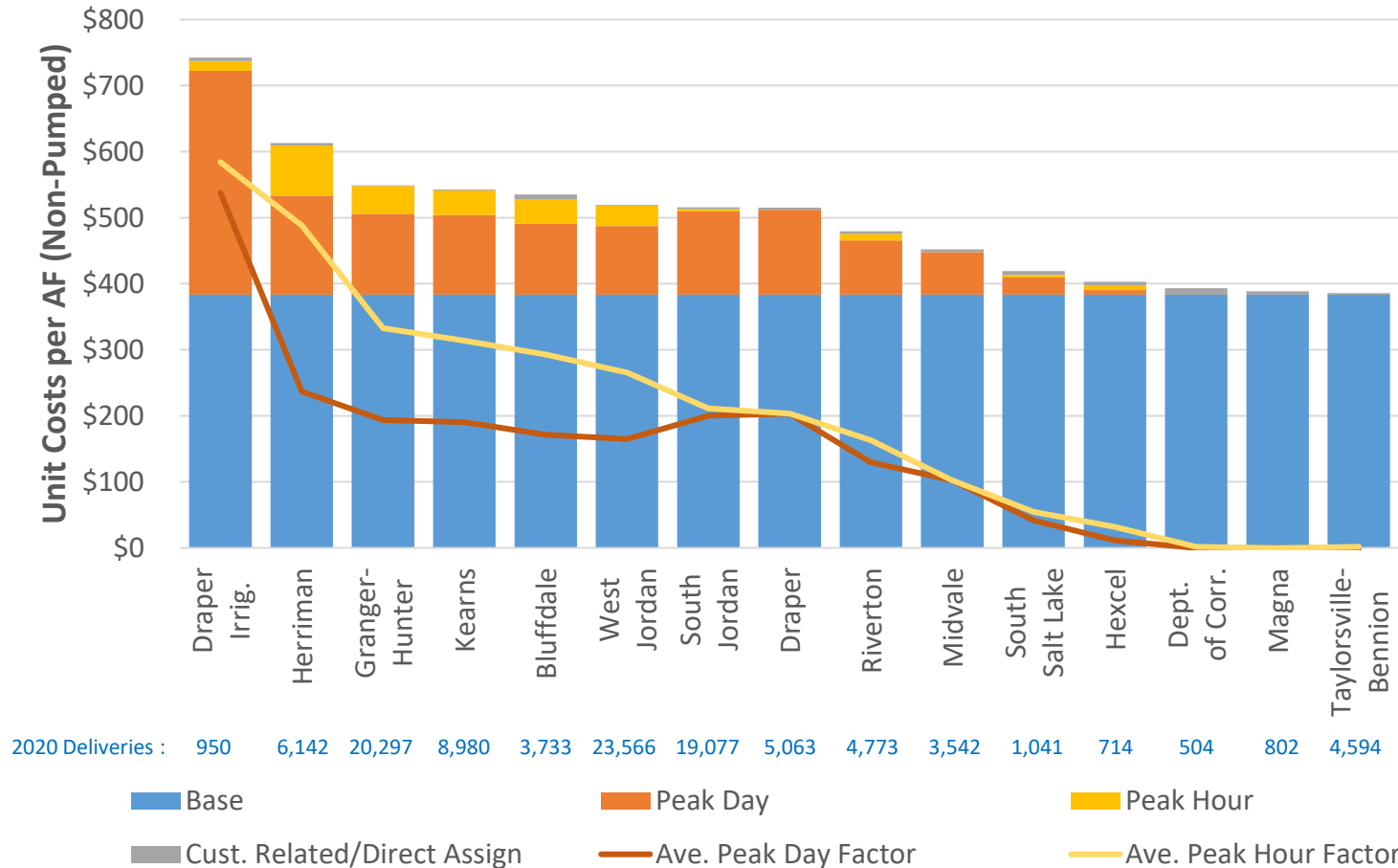


# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

**BASE-EXTRA CAPACITY METHOD**

**Allocation of the Revenue Requirement (Unit Costs per AF)**



	NET REVENUE REQUIREMENT	RATE PER ACRE FOOT
CUST. RELATED & DIRECT ASGN	\$1.1 million	Varies
EXTRA HOUR CAPACITY	\$3.0 million	\$0 - \$76
EXTRA DAY CAPACITY	\$12.4 million	\$0 - \$339
BASE	\$40.5 million	\$383
<b>TOTAL REVENUE REQUIREMENT</b>	<b>\$57.0 million</b>	

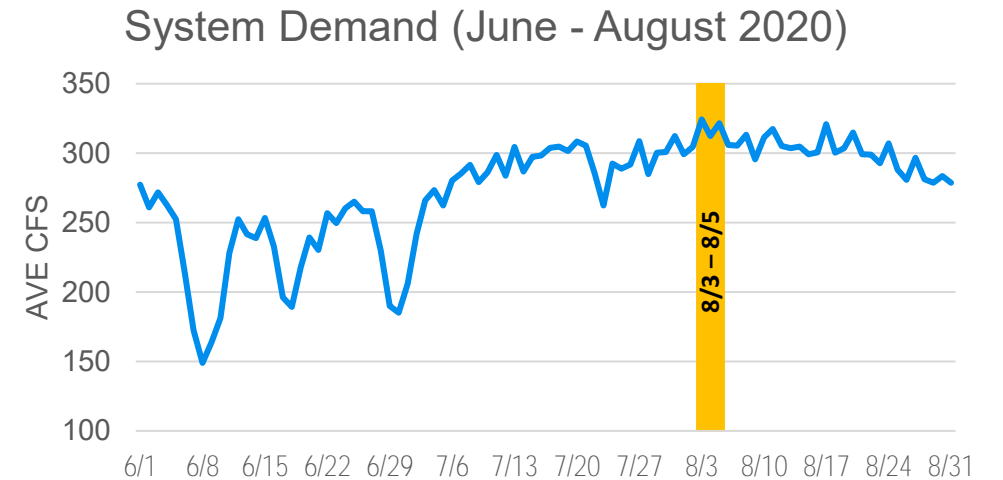
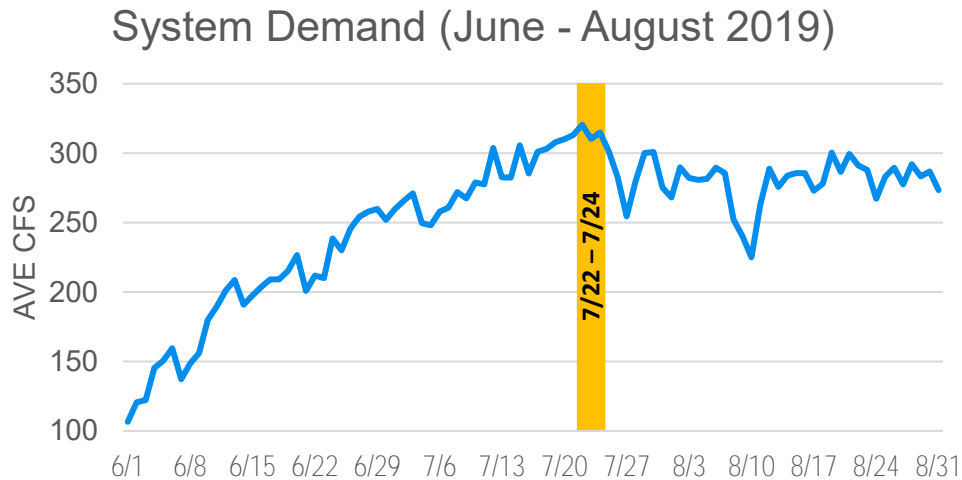
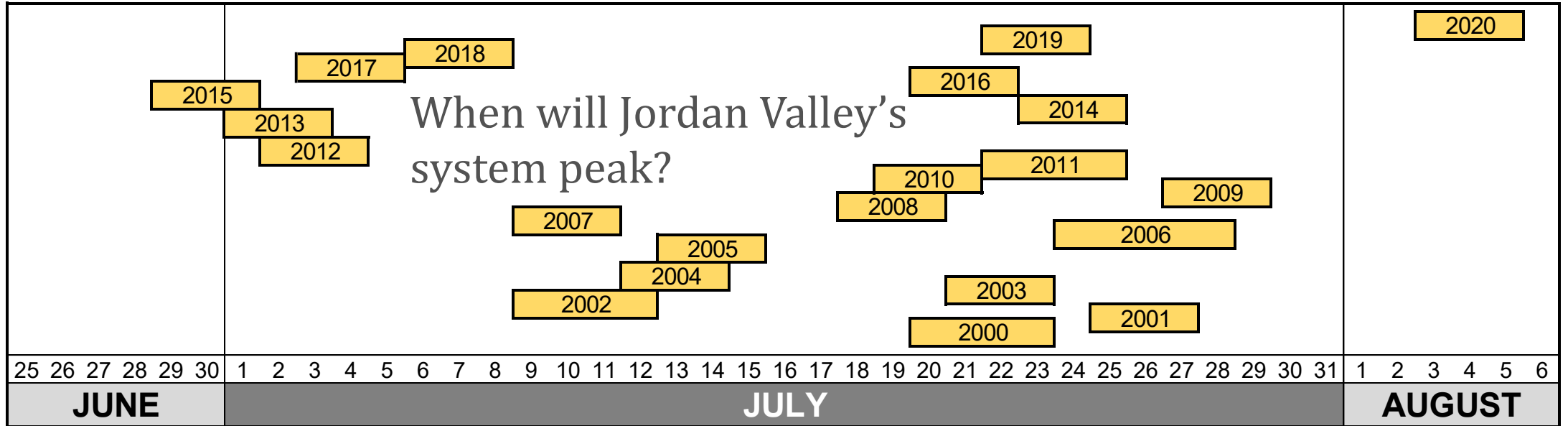
**Peaking Factor**



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

PEAKING FACTORS





# 2021 ANNUAL MEMBER AGENCY MEETING

## 2021/2022 Tentative Water Rates

2021/2022 WATER RATES

MONTHLY METER BASE CHARGE				
METER SIZE	20/21 RATES	21/22 RATES	\$ CHANGE	% CHANGE
4"	\$25	\$25	\$0	0.0%
6"	50	50	0	0.0%
8"	78	78	0	0.0%
10"	114	114	0	0.0%
12"	168	168	0	0.0%
14"	228	228	0	0.0%
16"	300	300	0	0.0%
18"	378	378	0	0.0%
20"	462	462	0	0.0%
24"	672	672	0	0.0%
30"	1,050	1,050	0	0.0%

PUMP ZONE SURCHARGE				
PUMP ZONE	20/21 RATES	21/22 RATES	\$ CHANGE	% CHANGE
B North	\$22.55	\$22.62	\$0.07	0.3%
B South	43.67	41.98	(1.69)	-3.9%
C South	59.22	60.43	1.21	2.0%
D South	103.64	105.76	2.12	2.0%
JVWTP	30.58	29.96	(0.62)	-2.0%

MEMBER AGENCY (Rate per Acre Foot)	PUMP ZONES	2020/2021 RATES	2021/2022 RATES	\$ CHANGE	% CHANGE
Bluffdale	JVWTP	\$518.59	\$529.86	\$11.27	2.2%
Draper City		502.19	513.17	10.98	2.2%
Draper Irrigation		654.85	739.56	84.71	12.9%
Granger-Hunter	B North	543.20	548.23	5.03	0.9%
Herriman	C South, D South	600.53	610.70	10.17	1.7%
Hexcel Corp.	B North	397.23	401.51	4.28	1.1%
Kearns	B North	521.50	540.75	19.25	3.7%
Magna Water	B North	380.15	386.26	6.11	1.6%
Midvale		413.81	449.14	35.33	8.5%
Riverton	C South	476.46	476.79	0.33	0.1%
South Jordan	B North/South, C South, D South	508.86	513.83	4.97	1.0%
South Salt Lake		394.36	416.56	22.20	5.6%
Utah Dept. of Corr.		380.30	386.72	6.42	1.7%
Taylorville-Bennion	B North	378.92	384.34	5.42	1.4%
West Jordan	B North/South C South, D South	510.96	517.68	6.72	1.3%
BLOCK 2 WATER RATE	Plus Pumping	\$1,038.65	\$1,070.07	31.42	3.0%
BCWTP RATE		465.42	498.86	33.44	7.2%



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

Current Billing Format



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

### BILLING STATEMENT

Taylorville-Bennion Imp. Dist.  
P.O. Box 18579  
Taylorville, Utah 84118-8579

8215 South 1300 West  
West Jordan, UT 84088  
Ph: 801.565.4300  
www.jvwcd.org

ACCOUNT NUMBER	WATER SERVICE		STATEMENT DATE
WSR-TB120	From	To	March 31, 2021
	3/1/2021	3/31/2021	

BILLING SUMMARY		AMOUNT
Previous Balance Due:		\$173,403.66
Payment Received On: 3/15/21 Check #16458		(\$173,403.66)
Total Amount Past Due:		\$0.00
Total Current Billing:		\$198,017.75
<b>Total Amount Due:</b>		<b>\$198,017.75</b>

METER ADDRESS	METER NUMBER	READING - Gallons (000)		DELIVERIES		RATE PER ACRE FOOT	WATER DELIVERY CHARGES	FLAT RATE CHARGES
		Current	Previous	Gallons (000)	Acre Feet			
Zone A 1700 W. 4500 S.	TB010 (6" C)	17,993	17,993	0	0.00	\$378.92	\$0.00	\$0.00
	Low	96	96	0	0.00	\$378.92	\$0.00	\$0.00
	TB011 (6" C)	483,878	483,878	0	0.00	\$378.92	\$0.00	\$0.00
	Low	402	402	0	0.00	\$378.92	\$0.00	\$0.00
Zone A 2700 W. 4500 S.	TB020 (6")	79,850	79,850	0	0.00	\$378.92	\$0.00	\$0.00
	TB030 (12")	1,257,612	1,167,381	90,231	276.91	\$378.92	\$104,926.74	\$168.00
Zone A 2600 W. 6200 S.	TB030 (12")	377,660	377,660	0	0.00	\$378.92	\$0.00	\$0.00
	TB150 (6")	603,285	603,285	0	0.00	\$378.92	\$0.00	\$0.00
Zone A 6535 S. 1300 W.	TB160 (8" C)	1,636	1,636	0	0.00	\$378.92	\$0.00	\$0.00
	Low	1,636	1,636	0	0.00	\$378.92	\$0.00	\$0.00
Zone B North 3400 W. 6200 S.	TB040 (12")	1,687,349	1,612,202	75,147	230.62	\$401.47	\$92,587.01	\$168.00
	TB050 (12")	1,781,929	1,781,929	0	0.00	\$401.47	\$0.00	\$168.00
	TB140 (6")	97,123	97,123	0	0.00	\$401.47	\$0.00	\$0.00
	TB141 (6")	158,627	158,627	0	0.00	\$401.47	\$0.00	\$0.00
<b>TOTAL CONTRACT WATER DELIVERED &amp; FLAT RATE CHARGES:</b>				<b>165,378</b>	<b>507.53</b>		<b>\$197,513.75</b>	<b>\$504.00</b>
<b>TOTAL CURRENT BILLING:</b>								<b>\$198,017.75</b>

#### YEAR-TO-DATE BILLING COMPARISON

	AF Contracted	AF Used for Month	AF Used YTD	% of Contract Used YTD
Current Year	4,700	507.53	1,433.76	30.51%
Prior Year	4,700	490.56	1,334.47	28.39%

New Billing Format



JORDAN VALLEY WATER  
CONSERVANCY DISTRICT

### WHOLESALE INVOICE

8215 South 1300 West  
West Jordan, UT 84088  
Ph: 801.565.4300

Taylorville-Bennion Improvement District  
P.O. Box 18579  
Taylorville, Utah 84118-8579

ACCOUNT NO.	WATER SERVICE		INVOICE DATE
WSR-TB120	From	To	March 31, 2021
	3/1/2021	3/31/2021	

BILLING SUMMARY		AMOUNT
Previous Balance Due:		\$173,403.66
Payment Received On: 3/15/21 Check #16458		(\$173,403.66)
Total Amount Past Due:		\$0.00
Adjustment:		\$0.00
Total Current Invoice:		\$198,016.57
<b>Total Amount Due:</b>		<b>\$198,016.57</b>

WATER DELIVERED AND METER BASE CHARGES					
METER ADDRESS	METER NUMBER	METER SIZE (INCH)	ACRE FEET DELIVERED	METER BASE CHARGES	
Zone A	1700 W. 4500 S.	TB010	0	\$0.00	
	1700 W. 4500 S.	TB010 Low	0	\$0.00	
	1700 W. 4500 S.	TB011	0	\$0.00	
	1700 W. 4500 S.	TB011 Low	0	\$0.00	
	2700 W. 4500 S.	TB020	0	\$0.00	
	2600 W. 6200 S.	TB030	12	276.909	\$168.00
	3000 W. 6200 S.	TB150	6	0.000	\$0.00
	6535 S. 1300 W.	TB160	8	0.000	\$0.00
	6535 S. 1300 W.	TB160 Low	0	0.000	\$0.00
	Zone B North	3400 W. 6200 S.	TB040	230.618	\$168.00
5500 S. 4800 W.		TB050	12	0.000	
3200 W. 6200 S.		TB140	6	0.000	
3200 W. 6200 S.		TB141	6	0.000	
<b>TOTAL WATER DELIVERED AND METER BASE CHARGES:</b>			<b>507.527</b>	<b>\$504.00</b>	

WATER PURCHASE AND PUMPING CHARGES			
	RATE (ACRE FOOT)	ACRE FEET DELIVERED	AMOUNT
<b>Water Purchase Charges:</b>			
Minimum Purchase Contract	\$378.92	507.527	\$192,312.13
20% Over Minimum Purchase Contract	\$378.92	0.000	\$0.00
Block 2 Water	\$1,038.85	0.000	\$0.00
<b>Subtotal</b>		<b>507.527</b>	<b>\$192,312.13</b>
<b>Pumping Charges:</b>			
Zone A (Non-pumped)	\$0.00	276.909	\$0.00
Zone B North	\$22.55	230.618	\$5,200.44
<b>Subtotal</b>		<b>507.527</b>	<b>\$5,200.44</b>
<b>TOTAL METER BASE, WATER PURCHASE AND PUMPING CHARGES:</b>			<b>\$198,016.57</b>

MONTHLY AND YEAR-TO-DATE DELIVERIES (ACRE FEET)				
	Contracted	Monthly	YTD	YTD % of Contract
Minimum Purchase Contract	4,700	507.527	1,433.763	30.51%
Block 2 Water	0	0.000	0.000	0.00%
<b>Total</b>	<b>4,700</b>	<b>507.527</b>	<b>1,433.763</b>	



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

**Slides beyond this point are included to provide added explanation and updated information on the water rate setting process, methodology, and the 2021/2022 water rates.**

# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

### REVENUE REQUIREMENT – OVERVIEW

Compares revenues to expenses

- Determines the level of revenue adjustment necessary
- Revenues (rates) need to support operations and capital

Uses prudent financial planning criteria

- Adequate funding for renewal and replacement
- Maintain prudent reserve levels
- Meet debt service coverage ratios (legal requirement)

Reviews a specific time period

- Typically a 10-year period for the District

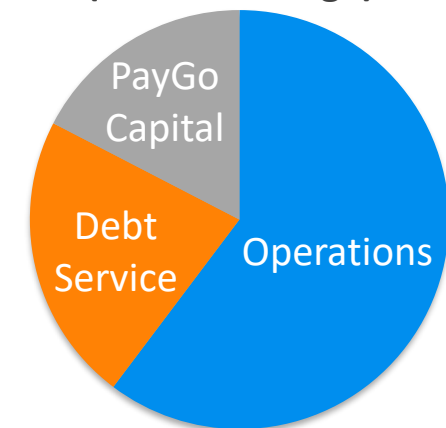
Utilizes the “cash basis” methodology

- Generally accepted method for municipal utilities
- Historical Jordan Valley approach to establish water rates

## Jordan Valley's Revenue Requirement – Summary

- Rate revenues projected to be deficient during the 10-year review period
  - Tentatively approved 2.0% overall adjustment to rates followed by 2-3% thereafter
  - Use of revenue stabilization fund is a one-time reduction to rates
  - Future revenue adjustments may vary depending on actual operational results
- Annual deficiencies are primarily the result of:
  - Inflationary increases to O&M expenses
  - Prudent funding of capital through rates
  - Annual debt service payments
  - Maintaining adequate debt service coverage ratios
- An annual adjustment to rates has been Jordan Valley's historical rate-setting philosophy

**USE OF RATE INCREASE**  
(4-Year Average)



### Cost of Service Analysis

#### COST OF SERVICE ANALYSIS

#### What is cost of service?

- Analysis to equitably allocate the revenue requirement to the various customers (Retail and individual wholesale Member Agencies)

#### Why cost of service?

- Generally accepted as “fair and equitable”
- Avoids subsidies
- Revenues track costs
- Provides an accurate price signal

#### Objectives of cost of service

- Determine if subsidies exist
- Develop average unit costs



### Jordan Valley's Cost of Service – Summary

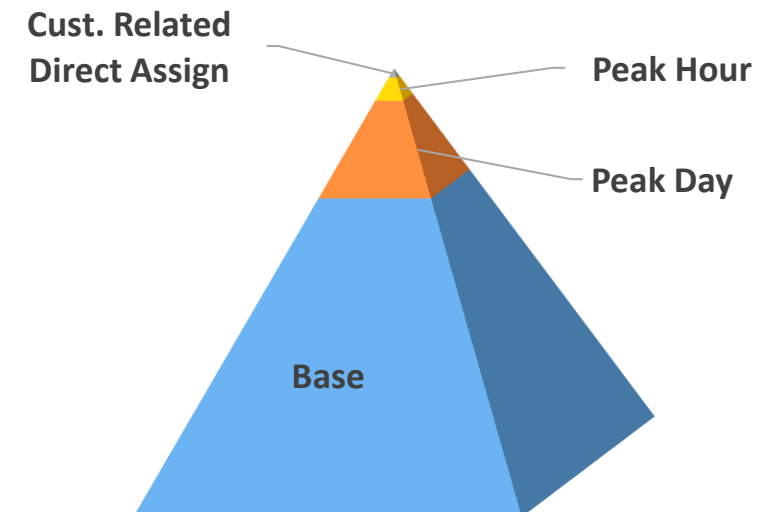
- Updated to reflect current customer characteristics and system operations
- Rate adjustments are within acceptable range based on a 2.0% overall revenue adjustment
  - +/- 5% of the system total
  - Few exceptions, based on changes in peaking factors
- Retail and Member Agency impacts reflect system use and peaking requirements
  - 2.0% adjustment for overall system
  - Wholesale – Member Agency range from 0.1% to 12.9%
  - Retail – retail customers receive 1.0% adjustment
- Pumping costs are directly assigned (zones)

### Base-Extra Capacity Method

BASE-EXTRA CAPACITY METHOD

Costs of service are separated into primary cost components:

1. **Base** – Costs associated with service to customers under average load conditions (to meet average demand)
2. **Extra capacity** (peak day, peak hour) – Costs associated with meeting rate of use requirements in excess of average
3. **Customer costs and direct assign** – Costs associated with serving customers, irrespective of the amount or rate of water use (allocated based on number of meters or directly assigned)



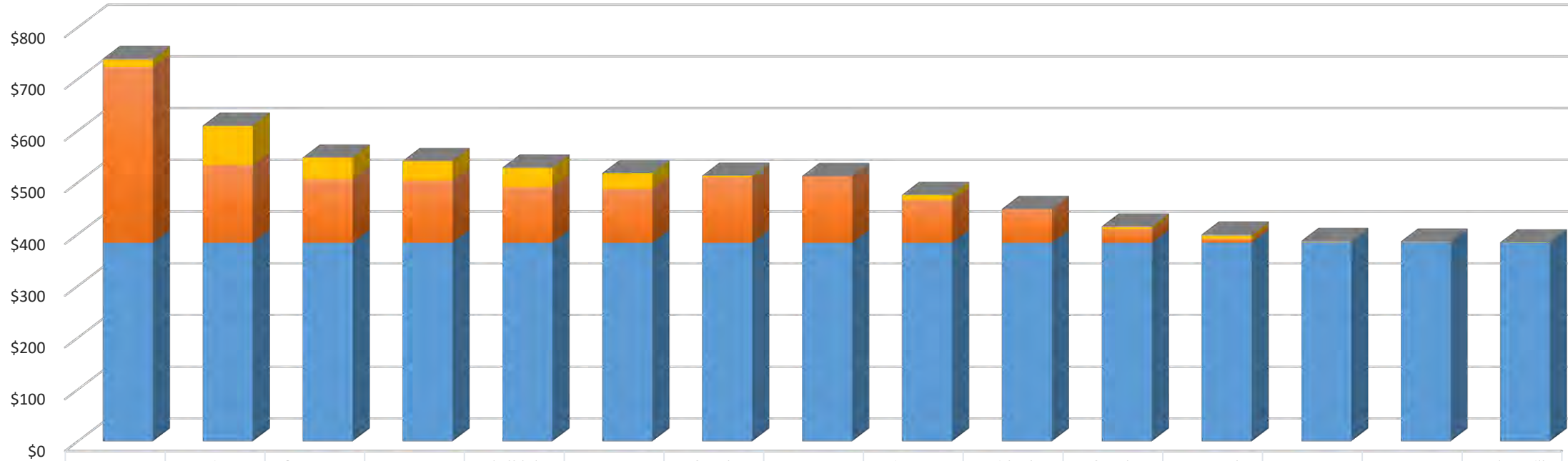


# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

### Wholesale Unit Cost by Component (\$/acre foot)

#### Consumption Charge - Wholesale



	Draper Irrigation	Herriman	Granger-Hunter	Kearns	Bluffdale	West Jordan	South Jordan	Draper City	Riverton	Midvale	South Salt Lake	Hexcel Corp.	Dept. of Corr.	Magna Water	Taylorsville -Bennion
■ Fire/Rev/DA	\$2.03	\$0.41	\$0.10	\$0.24	\$0.63	\$0.09	\$0.11	\$0.43	\$0.41	\$0.63	\$1.53	\$2.31	\$3.47	\$2.41	\$0.41
■ Extra Hour Capacity	\$14.43	\$76.28	\$42.18	\$37.23	\$37.02	\$30.74	\$3.26	\$0.00	\$9.98	\$0.00	\$3.89	\$6.49	\$0.32	\$0.00	\$0.34
■ Extra Day Capacity	\$339.36	\$149.78	\$122.42	\$120.60	\$107.73	\$103.92	\$126.37	\$128.67	\$82.22	\$64.73	\$26.15	\$7.08	\$0.00	\$0.00	\$0.00
■ Base	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31	\$383.31

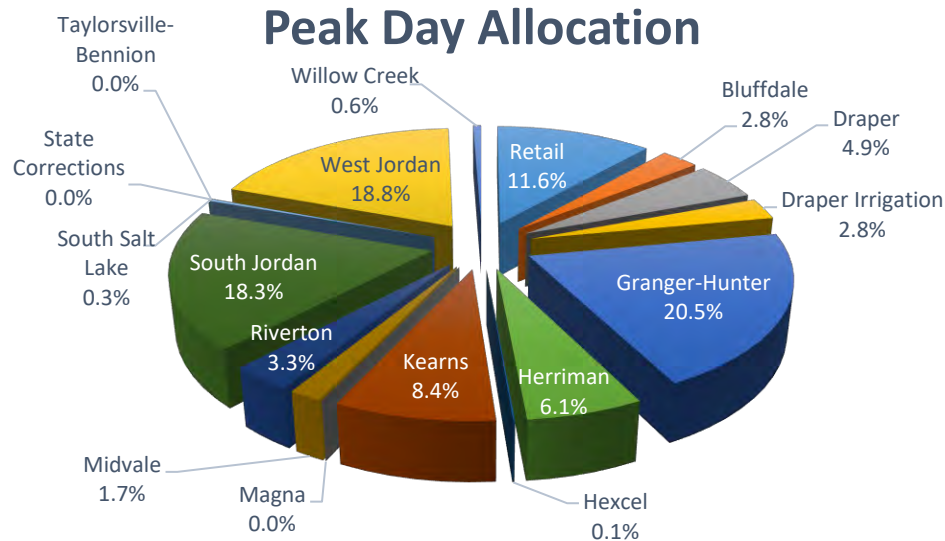
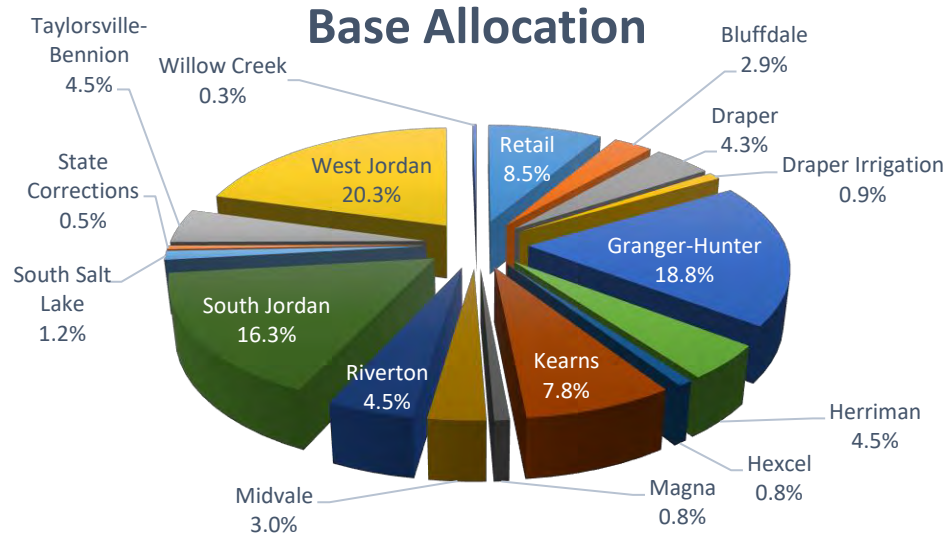
**BASE-EXTRA CAPACITY METHOD**



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

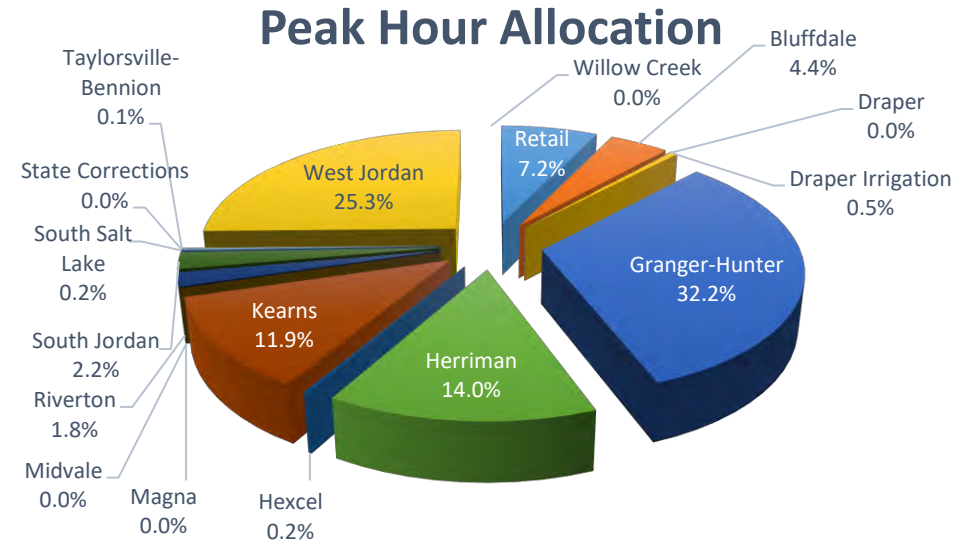
BASE-EXTRA CAPACITY METHOD



### Splitting the Pie

**Base Allocation** – based on deliveries

**Peak Day/Hour Allocation** – based on how Jordan Valley’s system is used (Peaking Factors)



### Peaking Factors

Peaking factors are used to allocate Jordan Valley's system costs related to the delivery of extra-capacity demand

$$\frac{\text{PEAK DEMAND}}{\text{AVERAGE DEMAND}} = \text{PEAKING FACTOR}$$

PEAKING FACTORS

- Extra-capacity costs are defined as those costs related to meeting demands over and above average (base) demands
  - Peak day extra demand
  - Peak hour demand in excess of peak day demand
- Member Agency's peak demands are measured and then averaged over a 3-day period, when Jordan Valley's system-wide peak demand occurs
- A Member Agency's peaking factor is the ratio of peak uses of water to its average uses of water
- A factor of 2.0 means that peak demand is twice the average



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

PEAKING FACTORS

### PEAK DAY

### PEAK HOUR

Member Agency	Actual Peak DAY Factor					Average Peak DAY Factor (for FY)		Actual Peak HOUR Factor					Average Peak HOUR Factor (for FY)		
	Peak day period:	7/20-7/22	7/3-7/5	7/6-7/8	7/22-7/24	8/3-8/5	Average of the lowest 3 of last 4 years		7/20-7/22	7/3-7/5	7/6-7/8	7/22-7/24	8/3-8/5	Average of the lowest 3 of last 4 years	
		2016	2017	2018	2019	2020	20/21	21/22	2016	2017	2018	2019	2020	20/21	21/22
Bluffdale	2.58	2.01	2.17	2.59	2.02	2.25	2.07	3.23	2.01	3.99	3.29	3.18	2.84	2.83	
Draper	2.51	2.42	2.15	2.70	2.25	2.36	2.27	2.51	2.42	2.15	2.70	2.25	2.36	2.27	
Draper Irr.(WaterPro)	3.90	3.43	5.51	4.38	5.26	3.90	4.36	3.91	4.09	6.18	4.61	5.26	4.20	4.65	
Granger-Hunter	2.30	2.39	2.33	2.27	2.03	2.30	2.21	3.63	3.58	3.64	3.01	2.64	3.41	3.08	
Herriman	2.99	2.72	2.62	2.64	2.19	2.66	2.48	4.36	4.44	4.25	4.29	3.61	4.30	4.05	
Hexcel Corp.	1.00	1.00	1.22	1.21	1.00	1.07	1.07	1.42	1.40	1.47	1.21	1.00	1.34	1.20	
Kearns	2.28	2.30	2.08	2.46	2.20	2.22	2.19	2.76	3.10	3.16	3.23	2.62	3.01	2.96	
Magna Water	1.00	1.00	1.00	1.06	1.00	1.00	1.00	1.57	1.00	1.00	1.06	1.00	1.02	1.00	
Midvale	1.00	1.00	2.96	2.14	1.78	1.38	1.64	1.12	1.00	10.15	2.14	1.78	1.42	1.64	
Riverton	2.93	1.89	1.91	1.89	1.66	1.90	1.81	3.27	2.14	2.56	2.15	1.77	2.28	2.02	
South Jordan	2.53	2.35	2.29	2.67	2.11	2.39	2.25	3.09	2.35	2.29	2.83	2.31	2.49	2.32	
South Salt Lake	1.00	1.84	1.10	1.06	1.62	1.05	1.26	1.47	1.84	1.34	1.06	1.62	1.29	1.34	
Utah Dept. of Corr.	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.02	1.00	1.08	1.00	1.01	1.01	
Taylorsville-Bennion	1.00	1.00	1.00	1.00	1.01	1.00	1.00	1.12	1.00	1.30	1.00	1.02	1.04	1.01	
West Jordan	2.36	2.31	1.84	2.45	1.93	2.17	2.03	2.77	3.14	2.71	2.98	2.29	2.82	2.66	
JVWCD Retail System	3.19	2.02	2.02	2.25	1.85	2.10	1.96	3.84	2.27	2.23	2.41	2.03	2.30	2.18	



# 2021 ANNUAL MEMBER AGENCY MEETING

## Financial Plan, Water Rates and Methodology

### Cost of Service Analysis (COSA) Results – Proposed Adjustment

COST OF SERVICE ANALYSIS - RESULTS

COSA	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	Proposed COSA Adj 21/22	10 YR AVE
<b>Average Rate Adjustment</b>	<b>5.0%</b>	<b>5.0%</b>	<b>4.0%</b>	<b>5.0%</b>	<b>4.0%</b>	<b>3.5%</b>	<b>3.5%</b>	<b>1.5%</b>	<b>0.0%</b>	<b>2.0%</b>	<b>3.4%</b>
Bluffdale	5.5%	5.2%	2.4%	4.5%	2.3%	2.8%	-1.5%	2.2%	1.8%	2.2%	2.7%
Draper City	5.4%	1.3%	3.7%	1.4%	0.7%	2.0%	3.5%	0.1%	1.9%	2.2%	2.2%
Draper Irrigation	6.1%	0.0%	7.6%	4.1%	3.3%	2.8%	-0.4%	3.2%	-0.5%	12.9%	3.9%
Granger-Hunter	3.7%	4.6%	3.9%	4.4%	5.7%	3.4%	4.7%	1.8%	-2.3%	0.9%	3.1%
Herriman	2.6%	0.7%	3.7%	2.7%	6.1%	3.3%	2.8%	1.7%	-1.2%	1.7%	2.4%
Hexcel	0.9%	8.2%	3.5%	3.4%	1.3%	3.2%	3.9%	2.1%	-1.9%	1.1%	2.6%
Kearns	5.9%	3.1%	2.6%	3.6%	4.0%	2.0%	4.5%	0.8%	-0.3%	3.7%	3.0%
Magna	2.6%	5.6%	4.0%	1.7%	0.6%	1.3%	3.9%	1.0%	-0.5%	1.6%	2.2%
Midvale	0.0%	5.2%	7.7%	2.8%	-0.7%	2.0%	-0.1%	0.9%	8.6%	8.5%	3.5%
Riverton	4.8%	9.1%	4.4%	-0.7%	5.3%	8.3%	2.6%	9.6%	-3.7%	0.1%	4.0%
South Jordan	4.4%	3.7%	3.5%	4.6%	2.9%	3.2%	0.5%	0.3%	-0.1%	1.0%	2.4%
South Salt Lake	2.0%	4.0%	6.0%	3.4%	1.4%	3.2%	8.3%	2.9%	-5.0%	5.6%	3.2%
State Corrections	0.0%	7.0%	5.5%	2.9%	2.0%	1.6%	2.0%	0.0%	-0.5%	1.7%	2.2%
Taylorsville-Bennion	0.0%	1.6%	-4.5%	0.8%	0.8%	1.7%	2.9%	1.3%	-0.3%	1.4%	0.6%
West Jordan	4.8%	8.3%	4.4%	6.1%	3.5%	1.7%	3.5%	-0.3%	-0.6%	1.3%	3.3%
Retail	8.5%	6.5%	5.6%	8.6%	3.1%	5.4%	4.1%	1.0%	2.2%	1.0%	4.6%

### Water Rate Influences

#### REVENUE REQUIREMENT

##### JORDAN VALLEY WATER

- Operation & Maintenance budget
- Planning and funding of capital improvements
  - Rate funded
  - Bonds – debt service
- Financing reserve funds
- Property tax revenue and tax rate increases
- Conservation goals

##### EXTERNAL INFLUENCES

- Economy (inflation, recession)
- Drought / Climate change
- Compliance standards
- Legislative changes

#### ALLOCATION OF COSTS

##### MEMBER AGENCY (INDIVIDUAL)

- Minimum purchase contract
- Actual annual water deliveries
- Extra-capacity demand – peak day/hour flows
- Number of meters and meter capacity
- Conservation efforts

##### MEMBER AGENCIES (GROUP)

- Jordan Valley’s system-wide peak (3-day period) is determined by Member Agencies as a group
- One Member Agency’s increase/decrease of its peak day/hour factor shifts the cost allocation for the entire group



### Water Rate Influences

#### REVENUE REQUIREMENT

**2.0% Average  
Water Rate  
Adjustment**

**Increased costs of operation**

**Proposed property tax rate increase and  
use of Revenue Stabilization Fund  
(prior year revenues used as offset)**

#### ALLOCATION OF COSTS

##### MEMBER AGENCY (INDIVIDUAL)

- Minimum purchase quantity
  - Actual annual water deliveries
  - Extra-capacity day/hour flows
  - Number of meters and meter capacity
  - Conservation
- +/- 5% of  
Average  
Shifting of peaking factors**

**Changes in projected water sales**

##### MEMBER AGENCIES (GROUP)

- Jordan Valley's system-wide peak (3-day period) is determined by Member Agencies as a group
- One Member Agency's increase/decrease of its peak day/hour factor shifts the cost allocation for the entire group



# 2021 ANNUAL MEMBER AGENCY MEETING

## 2021/2022 Tentative Water Rates

### Water Rate Design & Remaining Timeframe

- 2021/2022 water rates:
  - Monthly base charge/flat fee
  - Pumping costs are directly assigned (zones)
  - Uniform wholesale rates – Block 1 and Block 2
  - Tiered retail rates (changed to 4 tiers)
- Tentative water rates were approved 4/14/2021
- Public hearing is scheduled 5/12/2021 at 6:00 p.m.
- Final water rates to be approved/adopted 6/9/2021
- Effective 7/1/2021



# JORDAN VALLEY WATER CONSERVANCY DISTRICT

Annual Member Agency Meeting  
April 21, 2021

# Legislative Issues

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BART FORSYTH

GENERAL MANAGER

APRIL 21, 2021

# Legislative Issues

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The 2021 general legislative session dealt with several water issues, including:

- ❖ HB 13: School and Child Care Center Water Testing (did not pass)
- ❖ HB 14 : Water Conservancy District Amendments (passed)
- ❖ HB 29S1: Statewide Aquatic Invasive Species Emergency Response Plan (passed)

## Legislative Issues, cont.

- ❖ HB 98: Local Government Building Regulation (passed, then vetoed)
- ❖ HB 107: Subdivision Plat Amendments (passed)
- ❖ HB 121: Local District Amendments (passed)
- ❖ HB 144: Water Pricing Structure (did not pass)
- ❖ HB 208: Water Quality Act Amendments (passed)
- ❖ HB 297: Colorado River Amendments (passed)

## Legislative Issues, cont.

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- ❖ HB 364: Utah Lake Authority (did not pass)
- ❖ SB 96: Legislative Water Development Commission Amendments (passed)
- ❖ SB 199: Water Amendments (passed)

# HB 98: Local Government Building Regulation

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*Sponsor:* Rep. Paul Ray (passed, then vetoed)

*Topic:* Under certain conditions, allows a building permit applicant to opt out of local building inspections and plan review requirements

## *Impacts to JVWCD Member Cities:*

- ❖ Applies to one- or two-family dwellings or town homes
- ❖ Land use authorities have 14 days to review plans and essentially have one chance to review with some limited options for re-submittal



# HB 98: Local Government Building Regulation , cont.

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- ❖ Developers can hire their own independent inspector to inspect and issue certificate of occupancy if land use authority can't do inspections within three days

# HB 297: Colorado River Amendments

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*Sponsor:* Rep. Brad R. Wilson and Senator J. Stuart Adams (passed)

*Topic:* Creates a six-member Colorado River Authority

## *Impacts to JVWCD Member Cities:*

- ❖ Mission of the Authority is to protect, conserve, use, and develop Utah waters of the Colorado River
- ❖ Five members of Authority represent county areas that have historically received Colorado River water
- ❖ One member represents the governor

# HB 364: Utah Lake Authority

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*Sponsor:* Rep. Brady Brammer (did not pass)

*Topic:* Creates a Utah Lake Authority

*Impacts to JVWCD Member Cities:*

- ❖ Purpose is to work with stakeholders to, among other things, rehabilitate the lake and its waters and maximize the long-term viability and health of the lake to produce economic, aesthetic, recreational, and other public benefits
- ❖ Governed by a 14-member Board

# HB 364: Utah Lake Authority, cont.

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- ❖ Replaces the Utah Lake Commission
- ❖ Would have exclusive land use authority over the land beneath the lake

# SB 199: Water Amendments

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*Sponsor:* Senator Michael K. McKell (passed)

*Topic:* Primarily provides for a grant program to assist with secondary water meter installations

*Impacts to JVWCD Member Agencies:*

- ❖ Grants may be available only to small secondary water retail providers (5,000 or fewer customers)
- ❖ Matching grants not to exceed 50% of the cost of installation
- ❖ \$2 million fiscal note



**PREPARE**

**60**

**SECURING UTAH'S  
ECONOMIC FUTURE**

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Prepare60 is the center established by Utah's four largest water conservancy districts to protect what we have, use it wisely, and provide for the future.

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More than 85% of the state's population resides within the boundaries of the four water districts.



# Prepare60 Focus

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Repair and replace aging infrastructure



Reduce water use; adopt water efficiency standards



Develop infrastructure to meet demand



# Roles in Water Systems

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Federal: Primarily played a financing role in the past, but funding is dwindling

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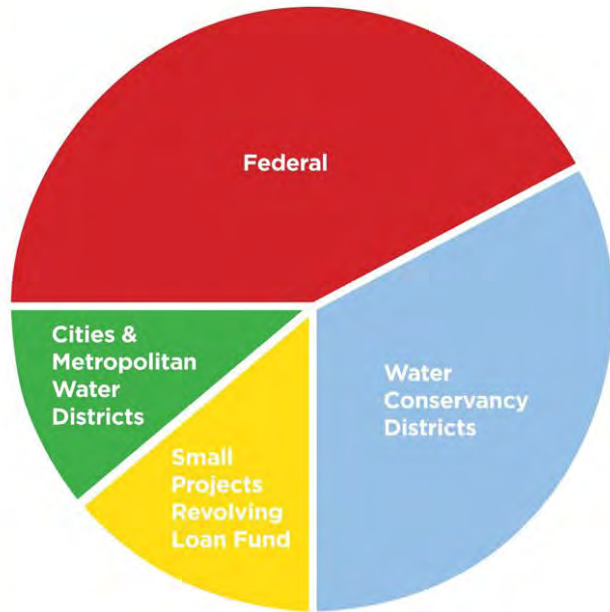
State: Primarily played a planning and regulatory role; must now fill financing gap

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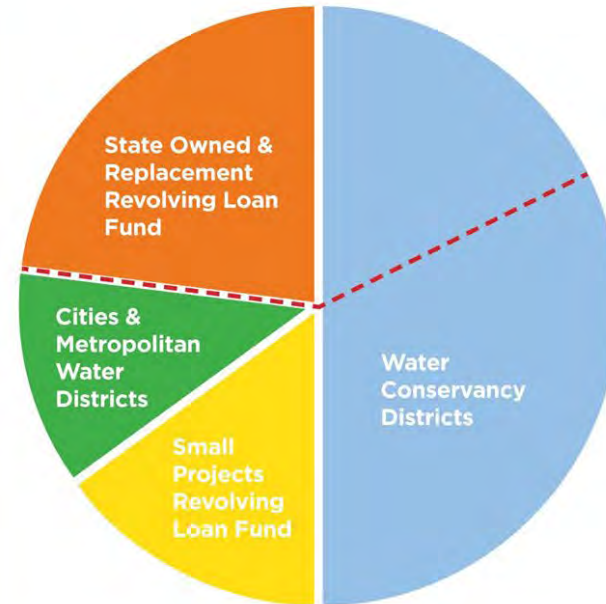
Local: Primary interface of water systems for end users

# Financing

1903-2015  
Financing Model



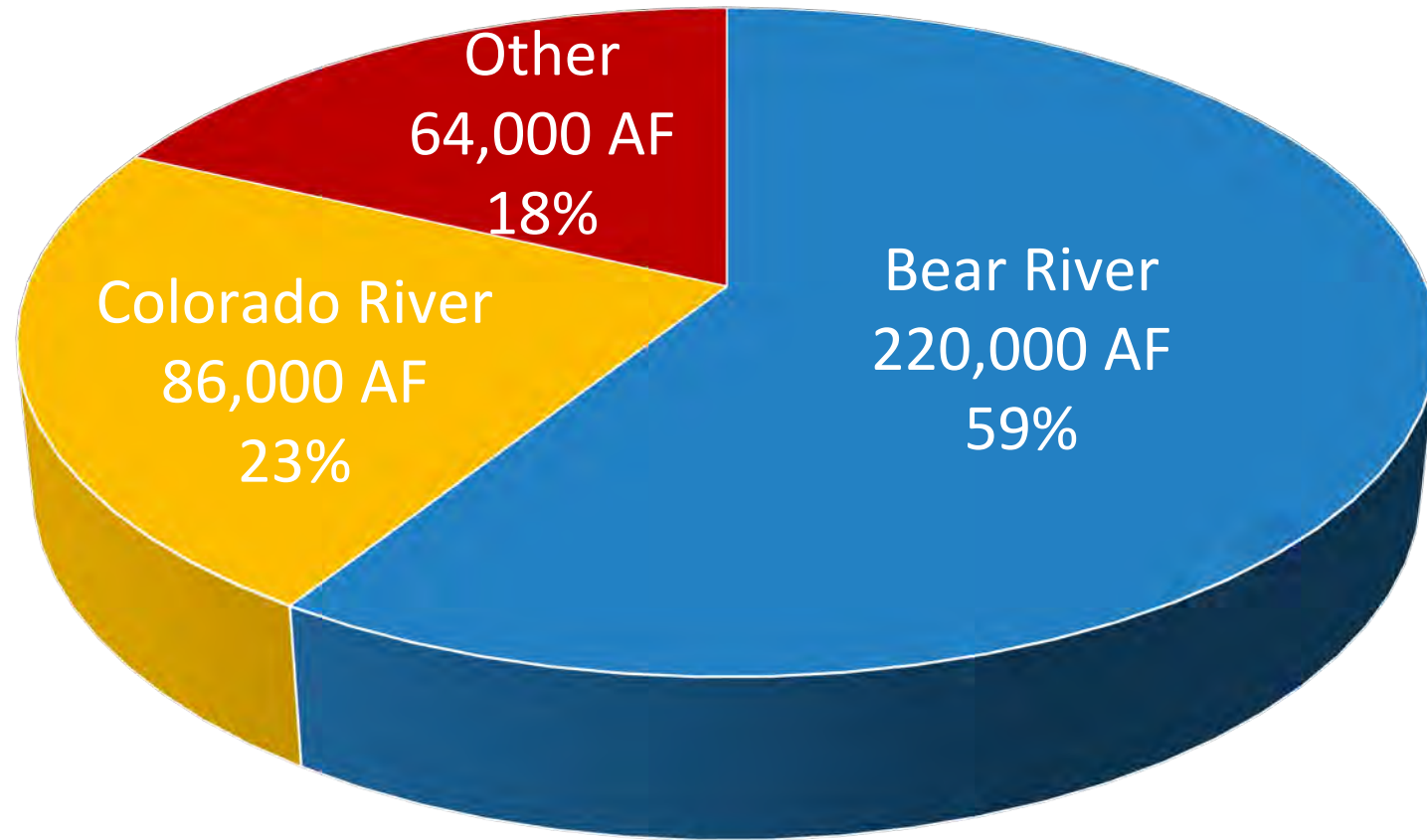
2016-2070 Proposed  
Financing Model



*How much will be paid by the end water user?*

**ALL OF IT!**





New water supply sources

# Planning for the Future

ESTIMATED STATEWIDE INFRASTRUCTURE COSTS **\$38 BILLION**



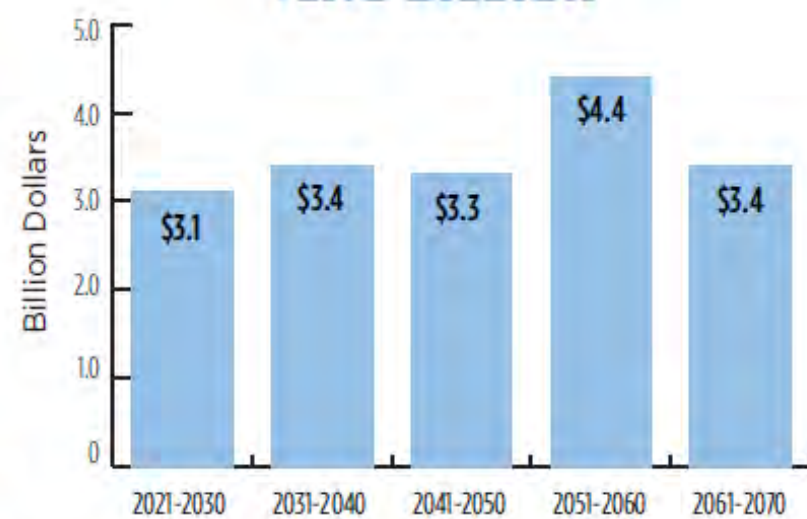
REPAIR & REPLACEMENT OF  
AGING INFRASTRUCTURE

**\$20.6 BILLION**



NEW INFRASTRUCTURE, WATER  
SUPPLIES, and WATER SUPPLIER  
CONSERVATION COSTS

**\$17.6 BILLION**

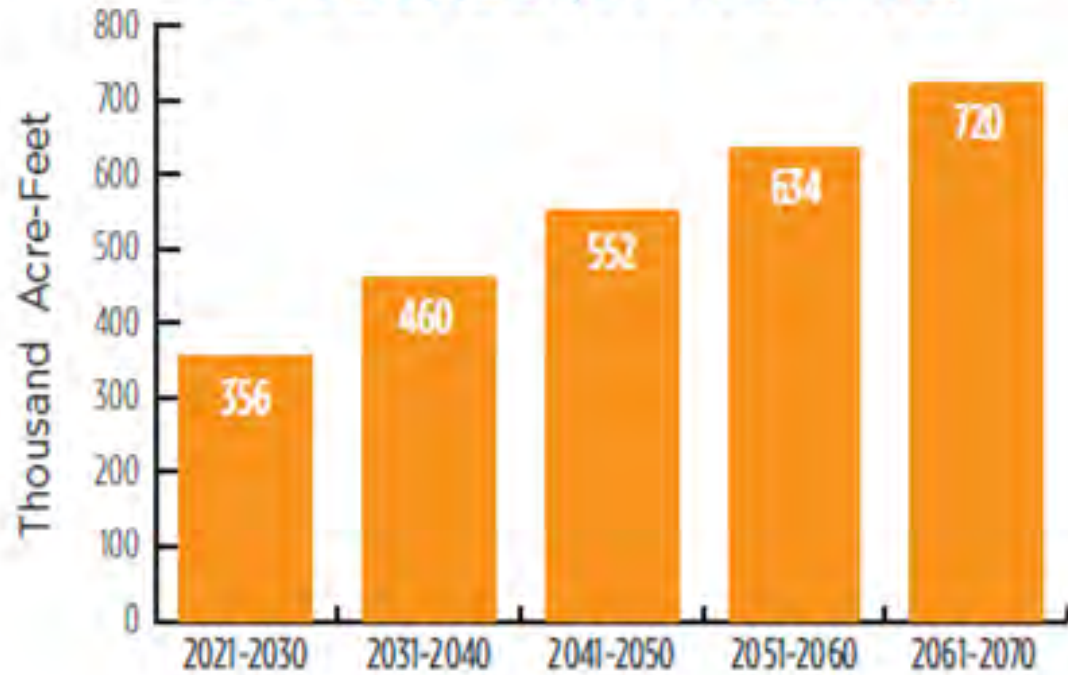


Statewide cost projections by decade in billions of dollars,  
not including **\$9.5 billion** in conservation costs paid by businesses and homeowners.

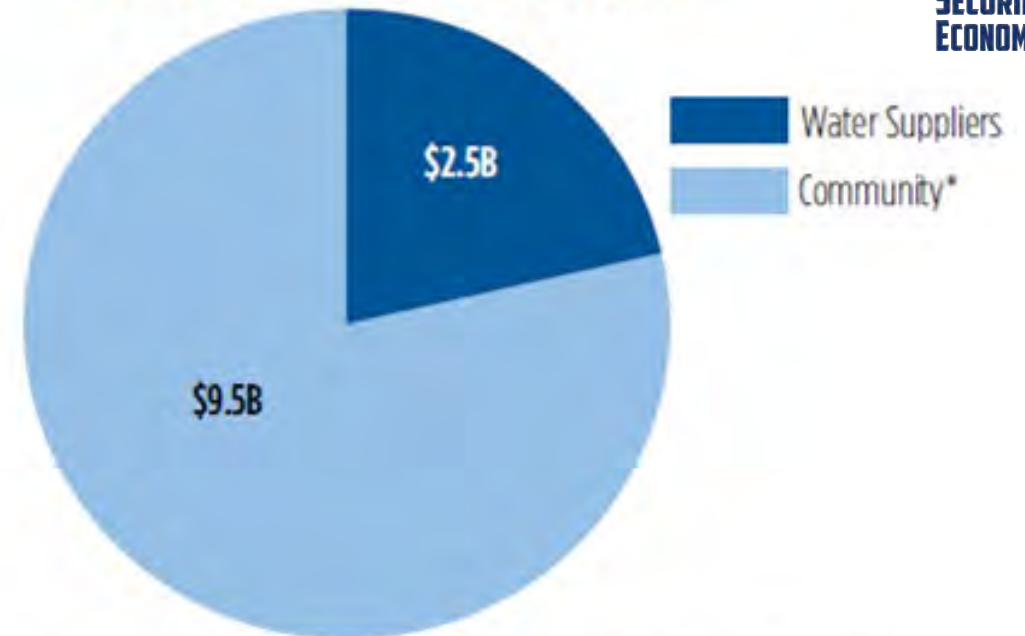
# Water Conservation



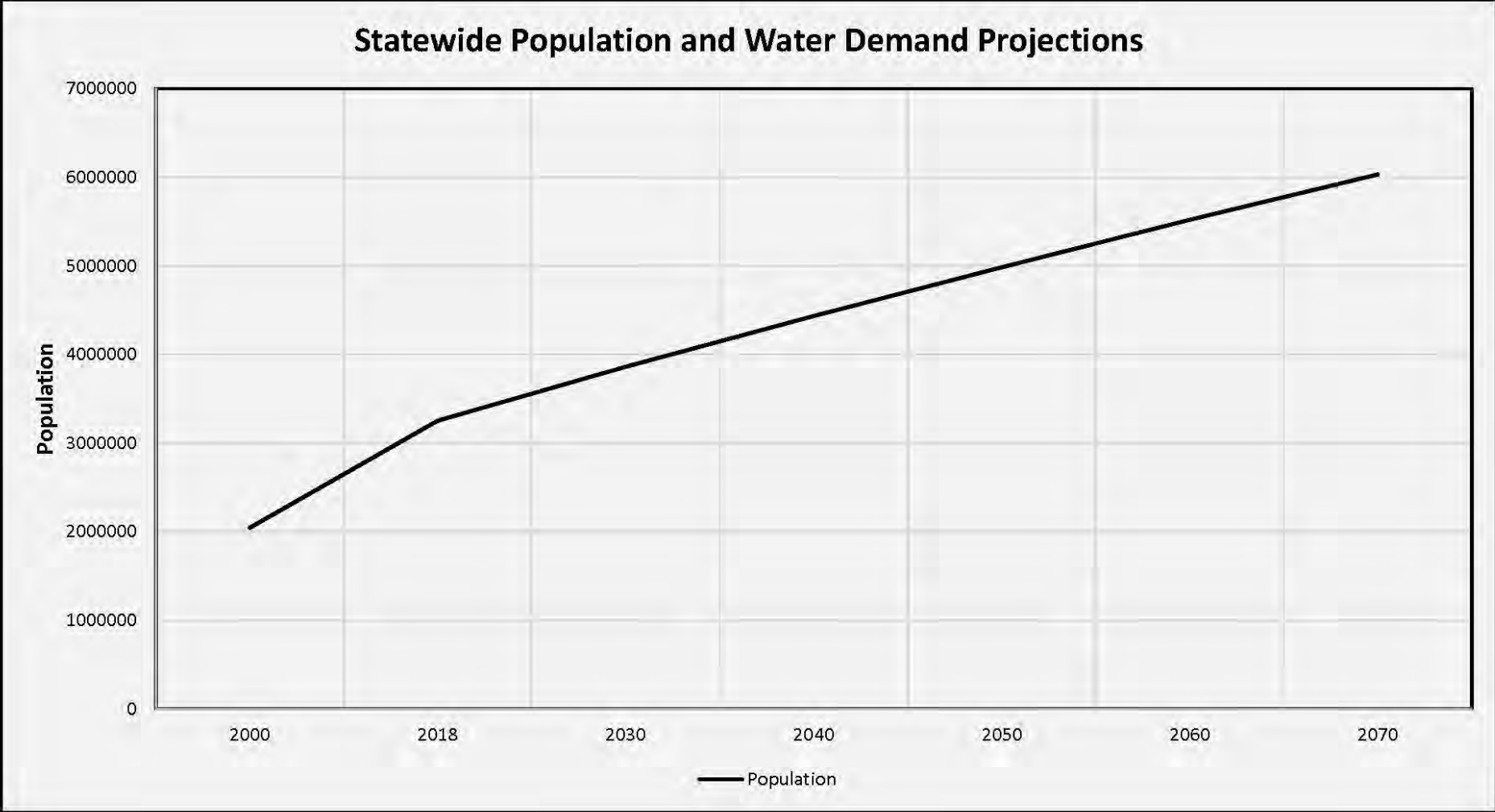
### PROJECTED WATER CONSERVED BY DECADE (CUMULATIVE)

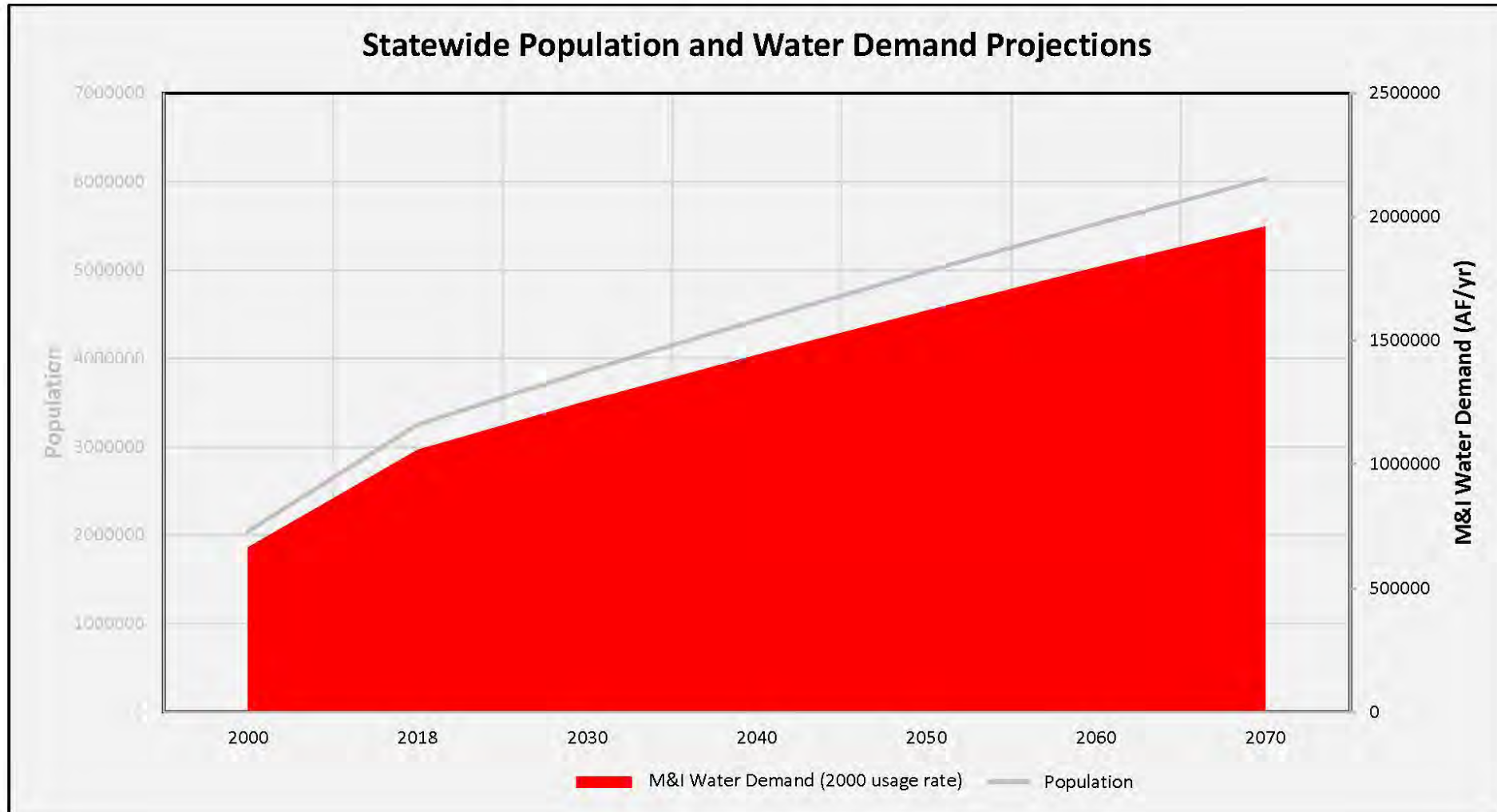


### ESTIMATED WATER CONSERVATION COSTS THROUGH 2070

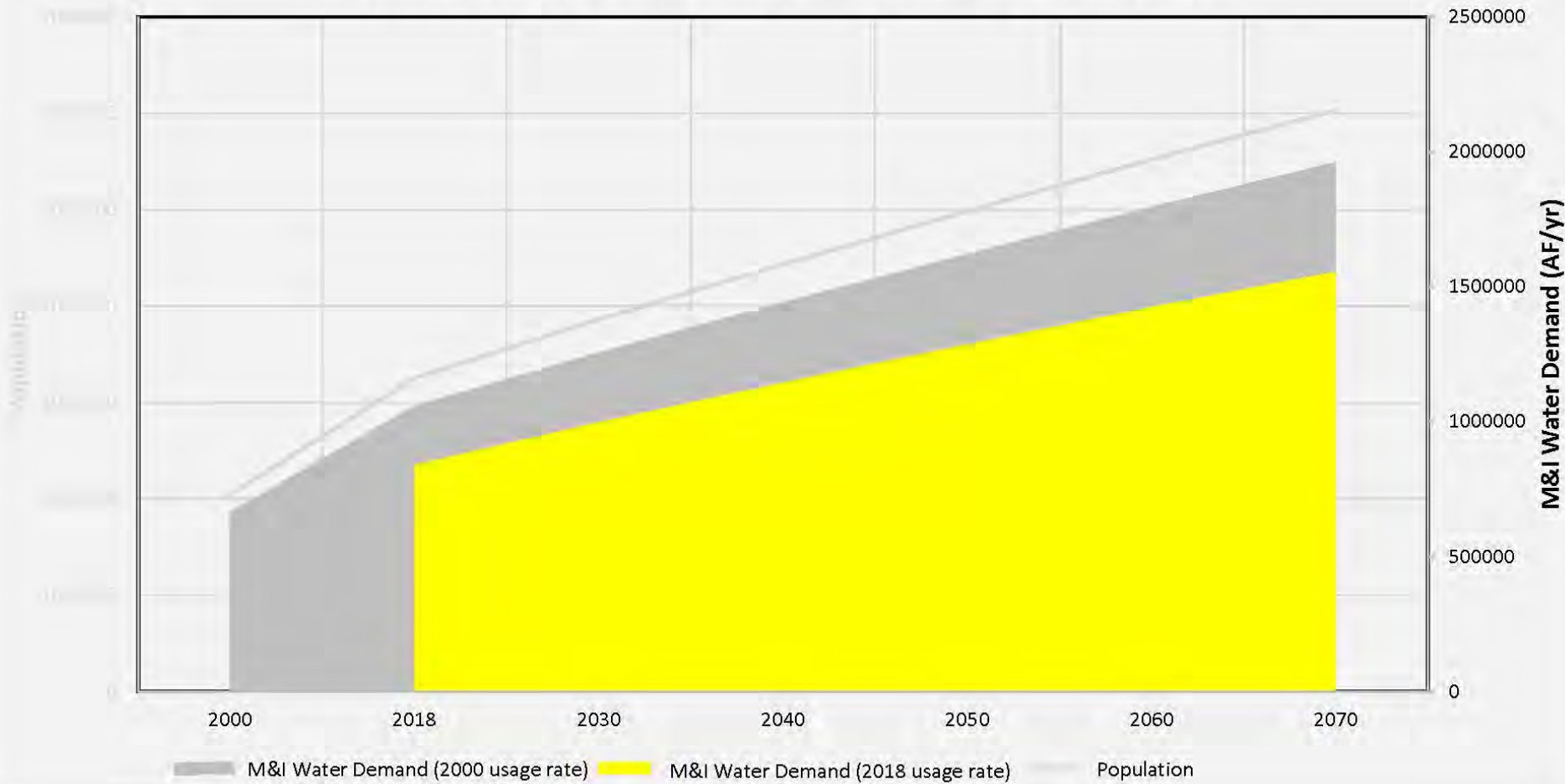


\*Community investment includes costs to home and business owners for water conservation efforts, such as landscape/irrigation alterations or indoor plumbing changes.



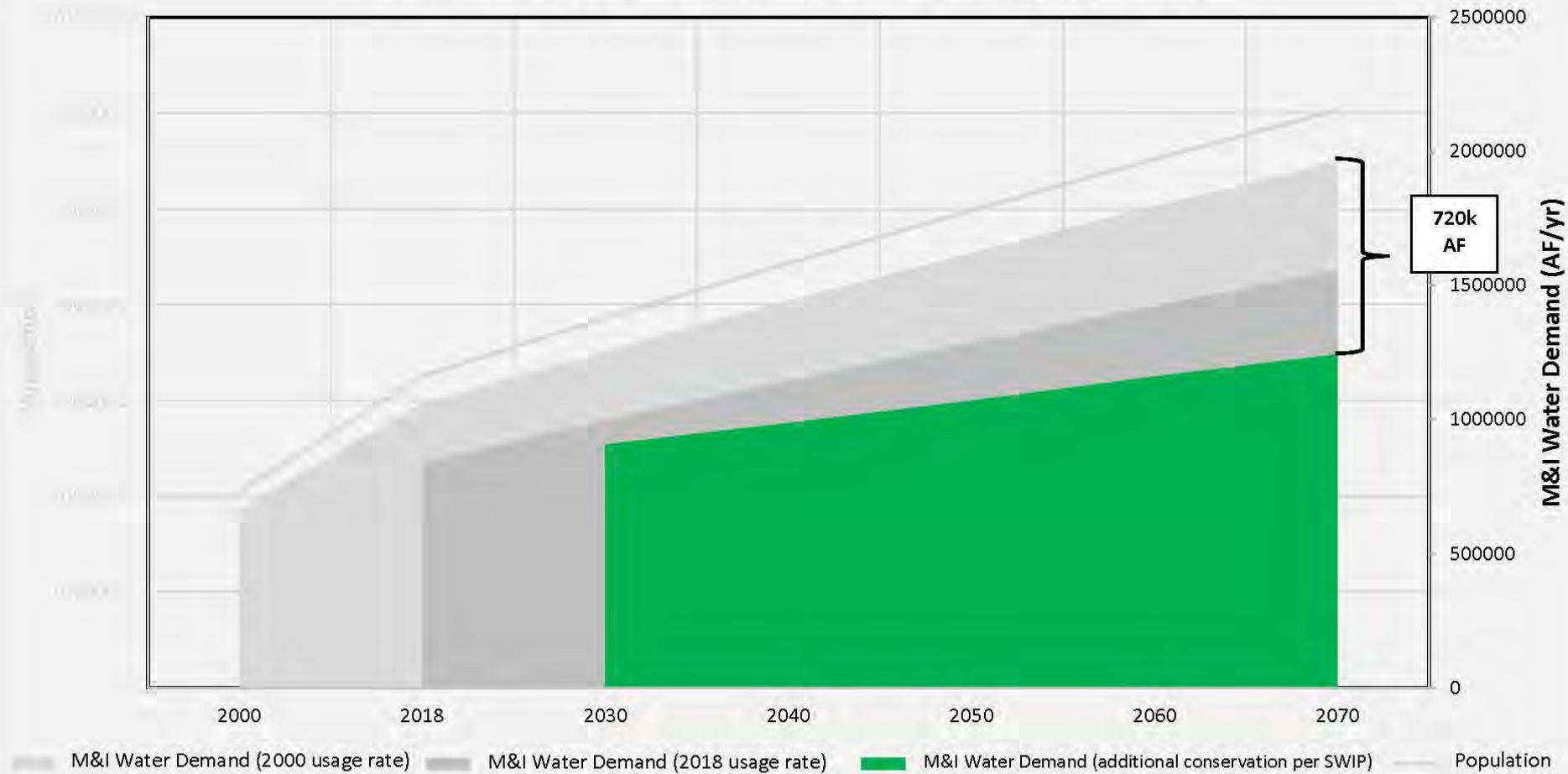


### Statewide Population and Water Demand Projections





## Statewide Population and Water Demand Projections



# Member Agency Outreach Plan

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- ❖ Annual Member Agency Meeting
- ❖ Member Agency Coordination Meetings
- ❖ Periodic Planning Meetings
- ❖ Lunch and Learns/Tours
- ❖ Annual Water Use Data Collection Meetings

JORDAN VALLEY WATER CONSERVANCY DISTRICT

April 21, 2021

**Staff Contact Names By Topic**

Functions	Primary Contact	Alternate Contact
Finance, water rates, property taxes, budgets, and bonding	Dave Martin _____	
Water deliveries, service disruptions, and pressure issues	Matt Hinckley _____	Shazelle Terry _____
Water quality, water treatment, and laboratory services	Jon Hilbert _____	Shazelle Terry _____
Emergency response and planning	Jeff King _____	Shazelle Terry _____
Construction projects	Shane Swensen _____	
Water supply and infrastructure planning	Shane Swensen _____	Alan Packard _____
Water conservation programs and grants	Courtney Brown _____	Matt Olsen _____
SCADA and telemetry	Jason Brown _____	Matt Olsen _____
Water use data collection and member agency web portal	Todd Schultz _____	Clifton Smith _____
Communications, outreach, social media, news, and community relations	Linda Townes-Cook _____	Megan Jenkins _____
Executive topics and issues	Bart Forsyth _____	Shazelle Terry _____ Matt Olsen _____ Alan Packard _____



# Questions and Discussion

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