JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

JVWCD Trustees are Appointed by the Governor

Corey Rushton
Chair

Karen Lang
Vice Chair

Dawn Ramsey

Sherrie Ohrn
Conservation Committee Chair

Zach Jacob

Mick M. Sudbury

John Taylor
Finance Committee Chair

A. Reed Gibby

Barbara Townsend

JVWCD Mission and Strategy to Fulfill Mission

Our Mission:

Delivering quality water and services every day

JVWCD's Strategy to Fulfill its Mission

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

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

ATTRIBUTES FOR AN EFFECTIVELY MANAGED DISTRICT

February 2023 Performance Indicators

Details for each indicator can be seen on the attached pages

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 & 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 management (vehicle & equipment incidents)
- Emergency Response Preparedness
- Power Resiliency

8. Operational Optimization
- Water quality improvements beyond regulatory standards (12-month rolling average)
- 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

**The current model used to determine efficient use of electricity requires significant modifications to account for changes in member agency demand patterns requiring more booster pump operation. Staff plans to reevaluate this KPI during the Strategic Planning efort and recommends suspending the monthly report of this KPI until the new KPI is developed.*

Annual Member Agency Meeting Agenda

April 26, 2023

1. Welcome and introductions (Alan Packard)
2. JVWCD Board of Trustees (Alan Packard)
3. JVWCD mission and strategy to fulfill its mission (Alan Packard)
   a. Water supply/water quality report (Jacob Young/Shazelle Terry)
      i. JVWCD Drought Contingency Plan – Drought Monitoring Committee Recommendation for 2023 and Water Supply Outlook
      ii. Maintaining high quality water
   b. Conservation activities report (Matt Olsen)
      i. Report on 2022 water use results
      ii. Grant opportunities and water conservation programs
   c. Long-term water supply planning and 10-year Capital Projects Plan (Jacob Young)
4. Financial plan, water rates and methodology (Dave Martin)
5. Legislative issues and Prep60 report (Alan Packard)
6. Questions and discussions (Alan Packard)

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

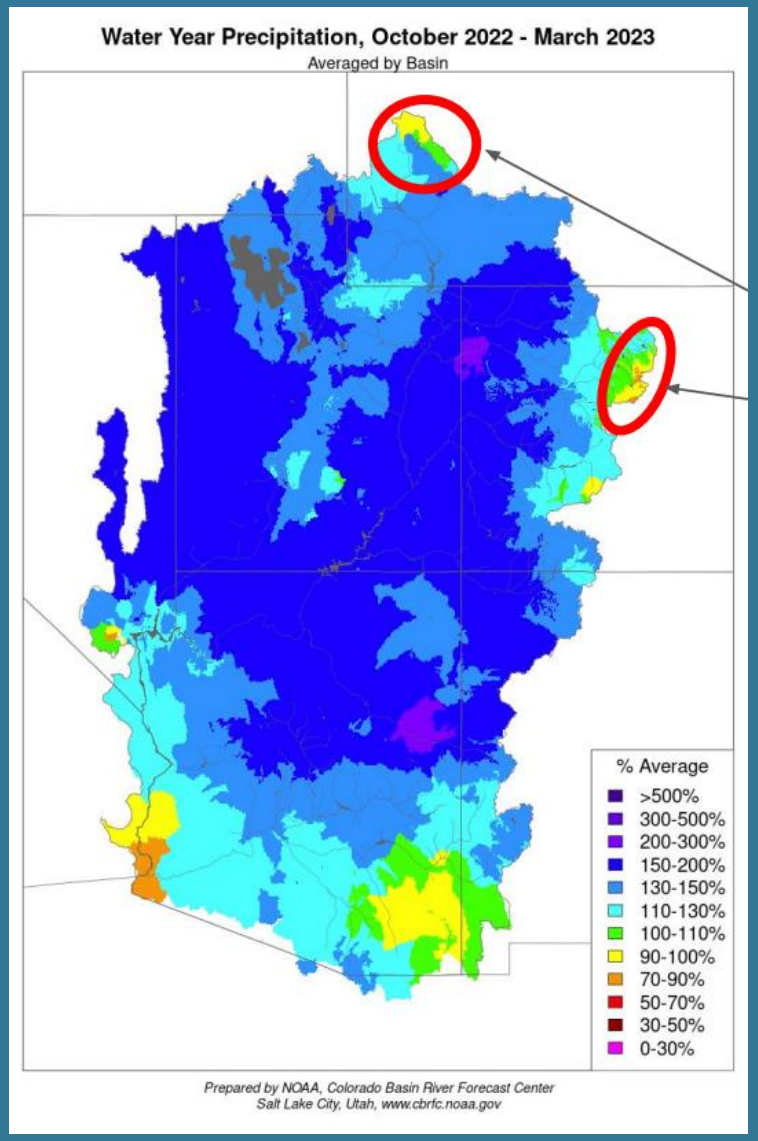
JORDAN VALLEY WATER
CONSERVANCY DISTRICT

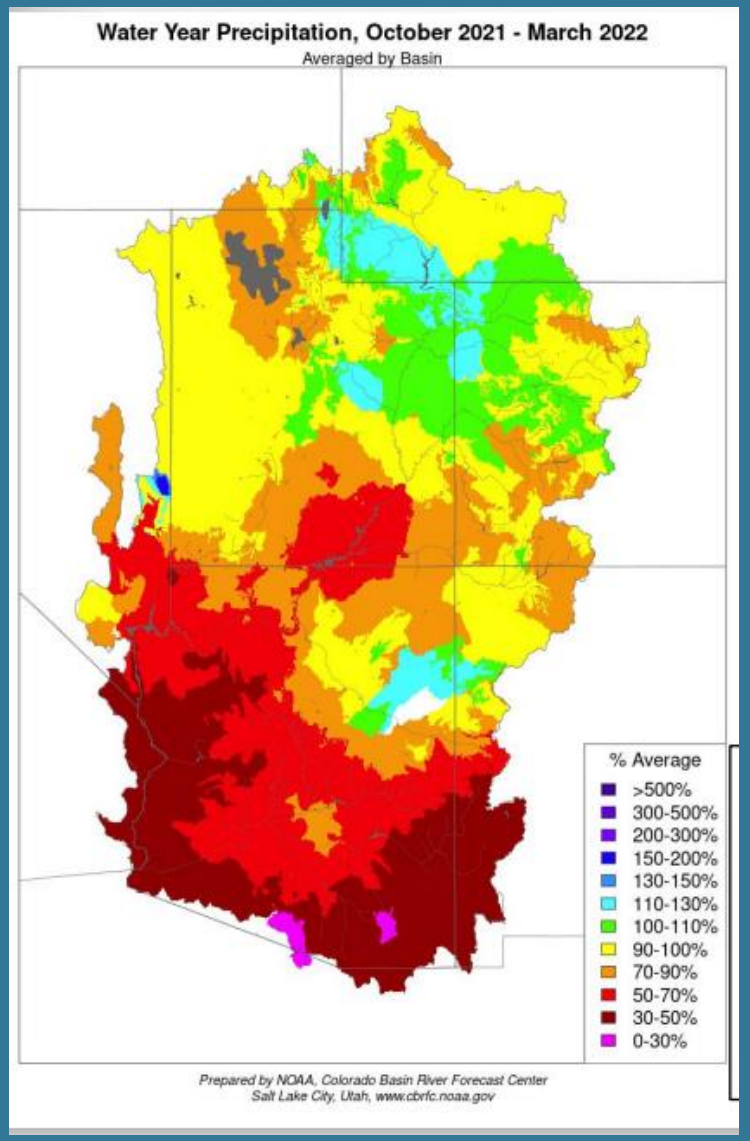
Water Supply Outlook

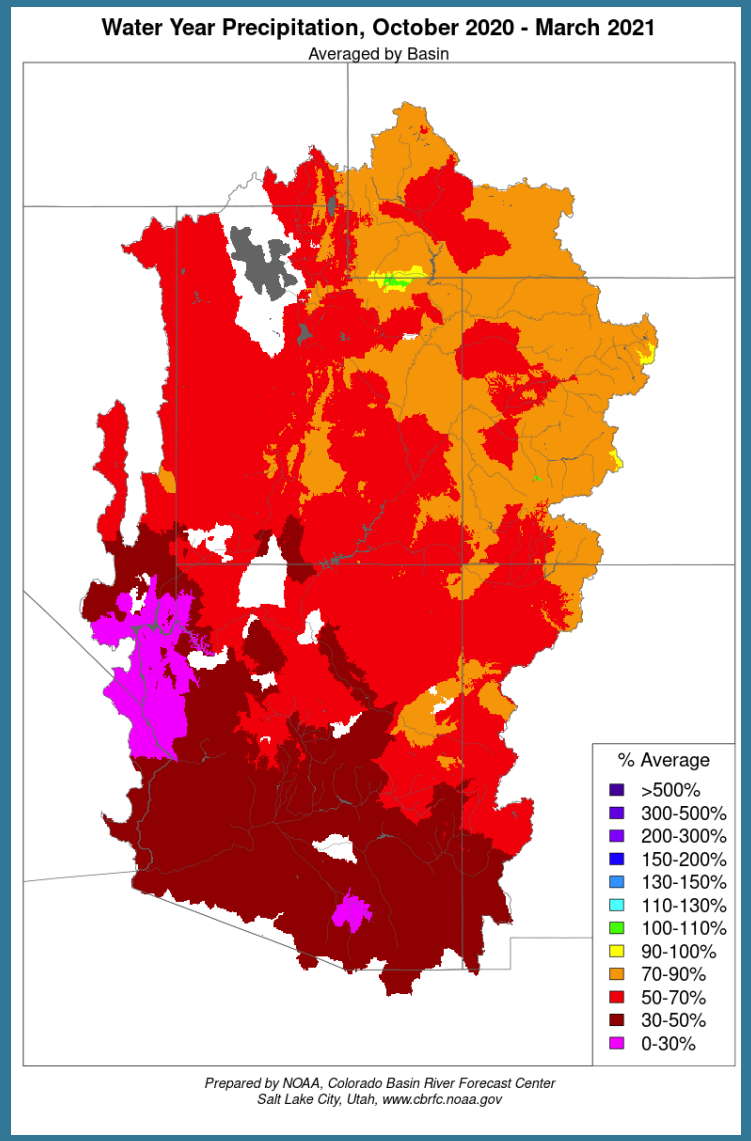
JVWCD Annual Member Agency Meeting

April 26, 2023

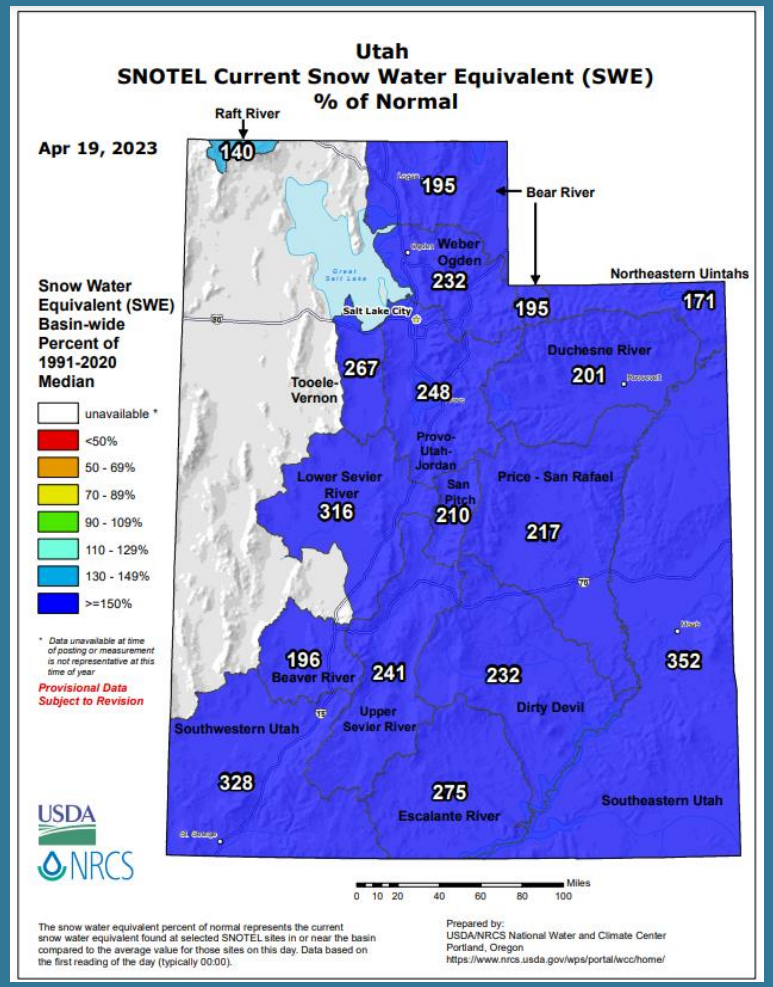
Water Year Precipitation October – March for 2023, 2022, 2021

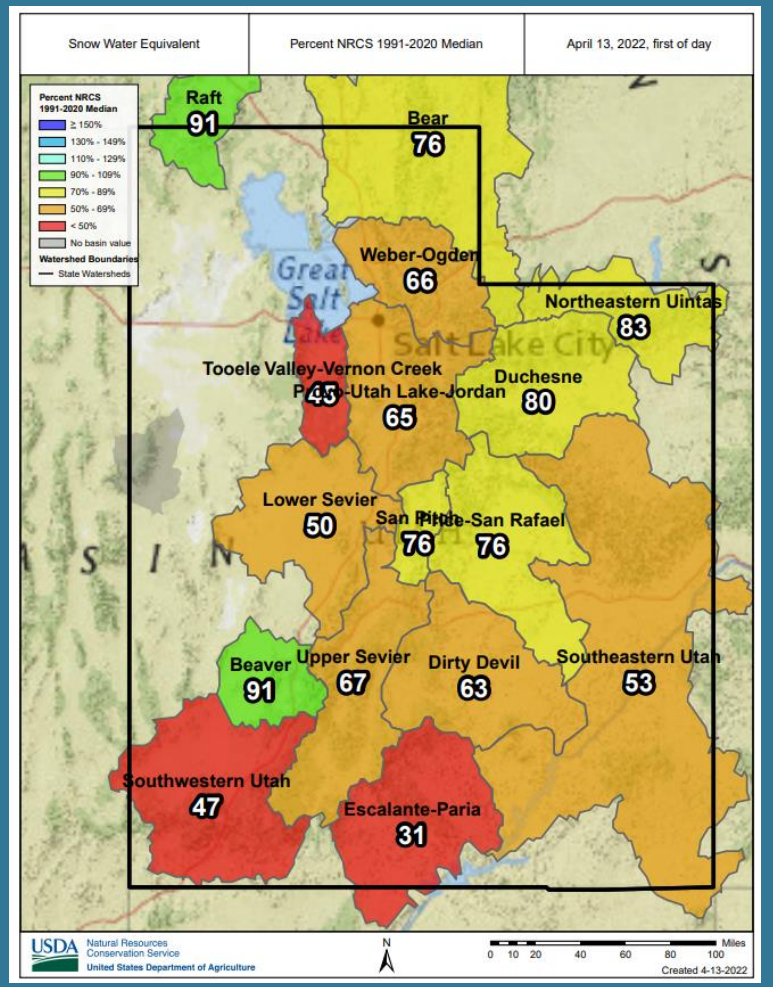


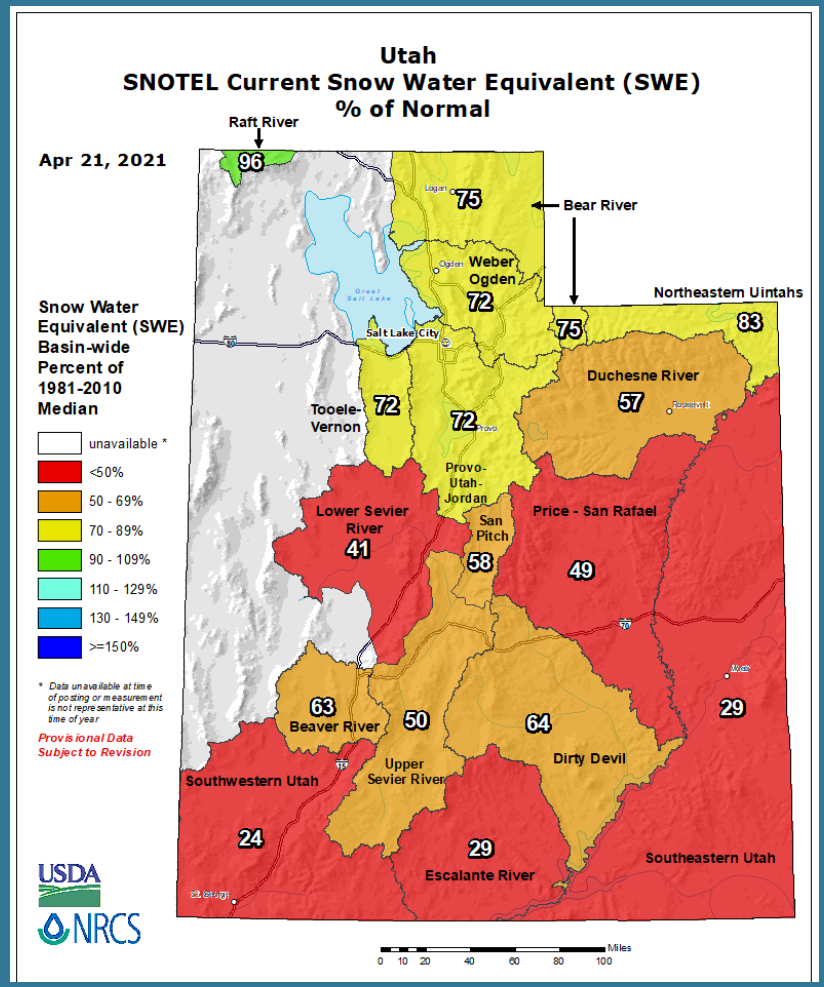




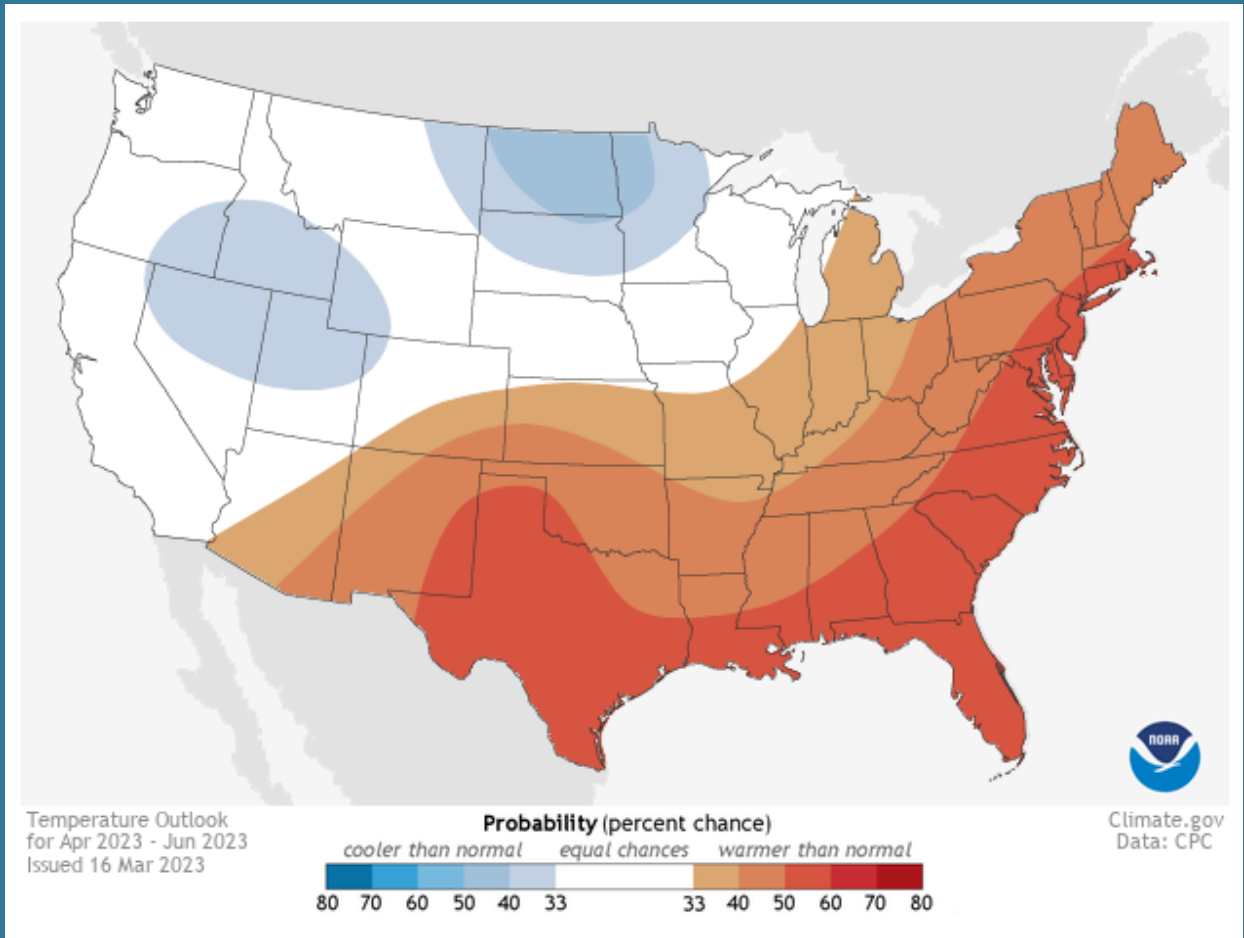
Snow Water Equivalent % of Median -- Mid April 2023, 2022, 2021

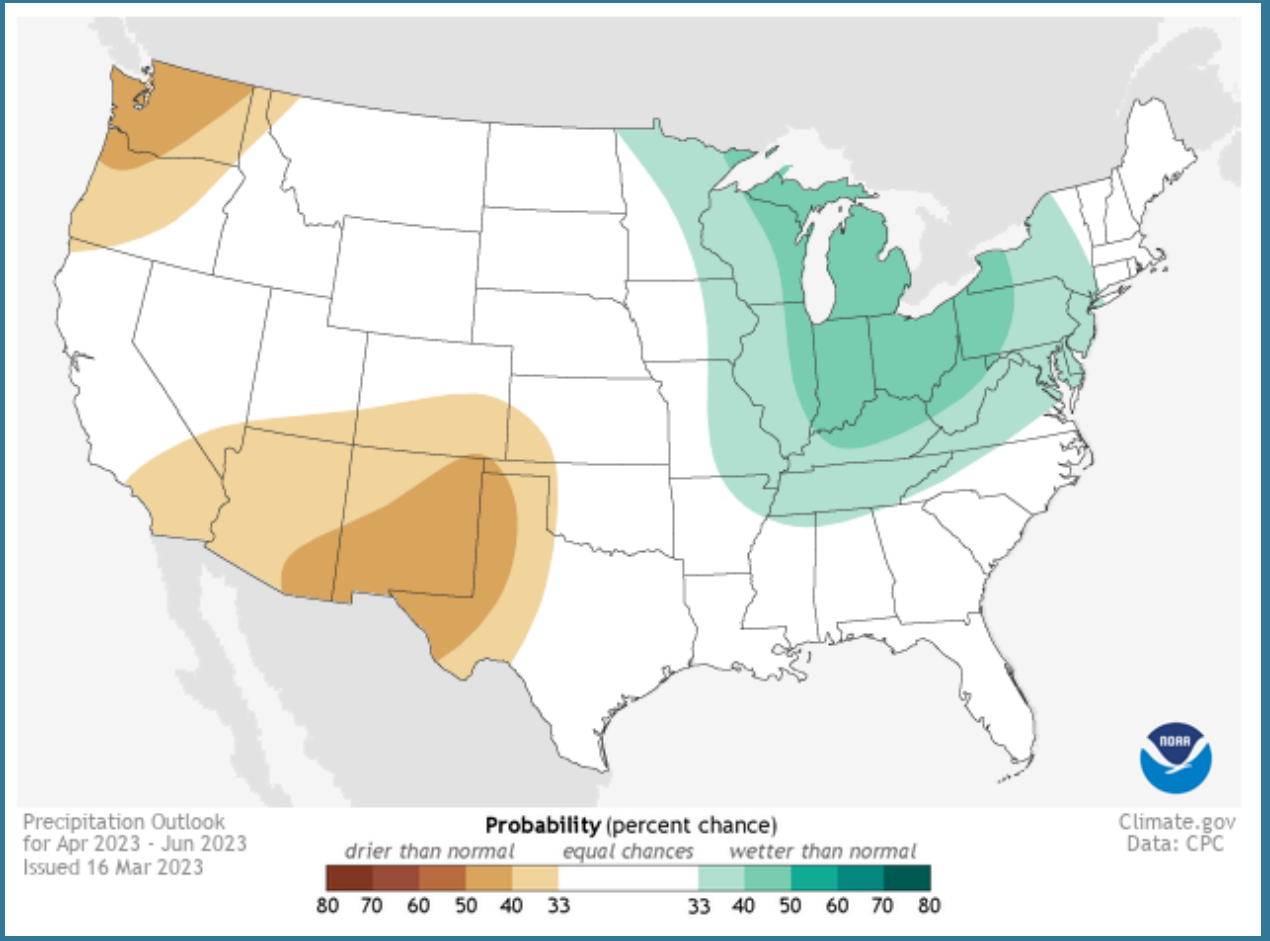




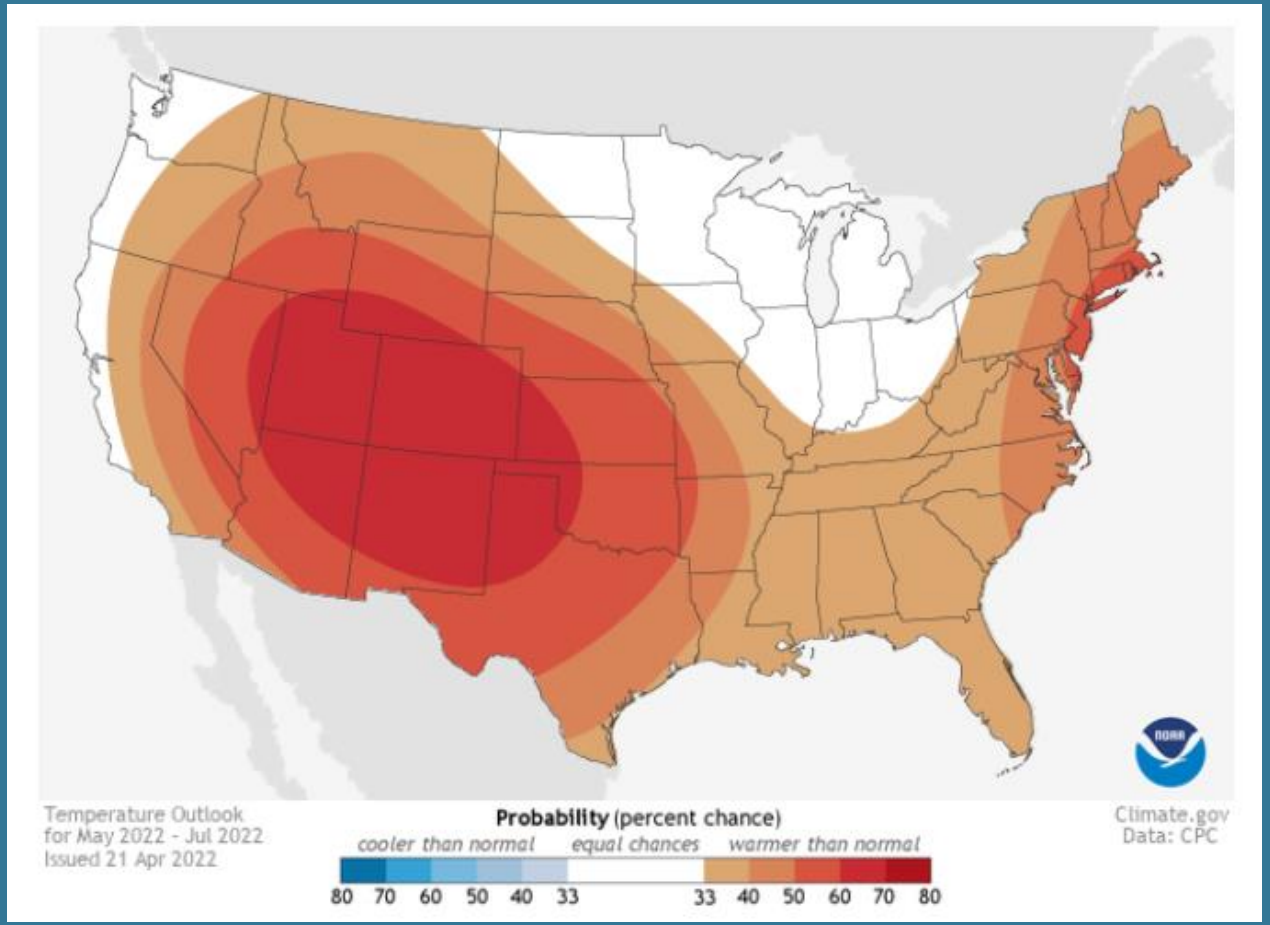


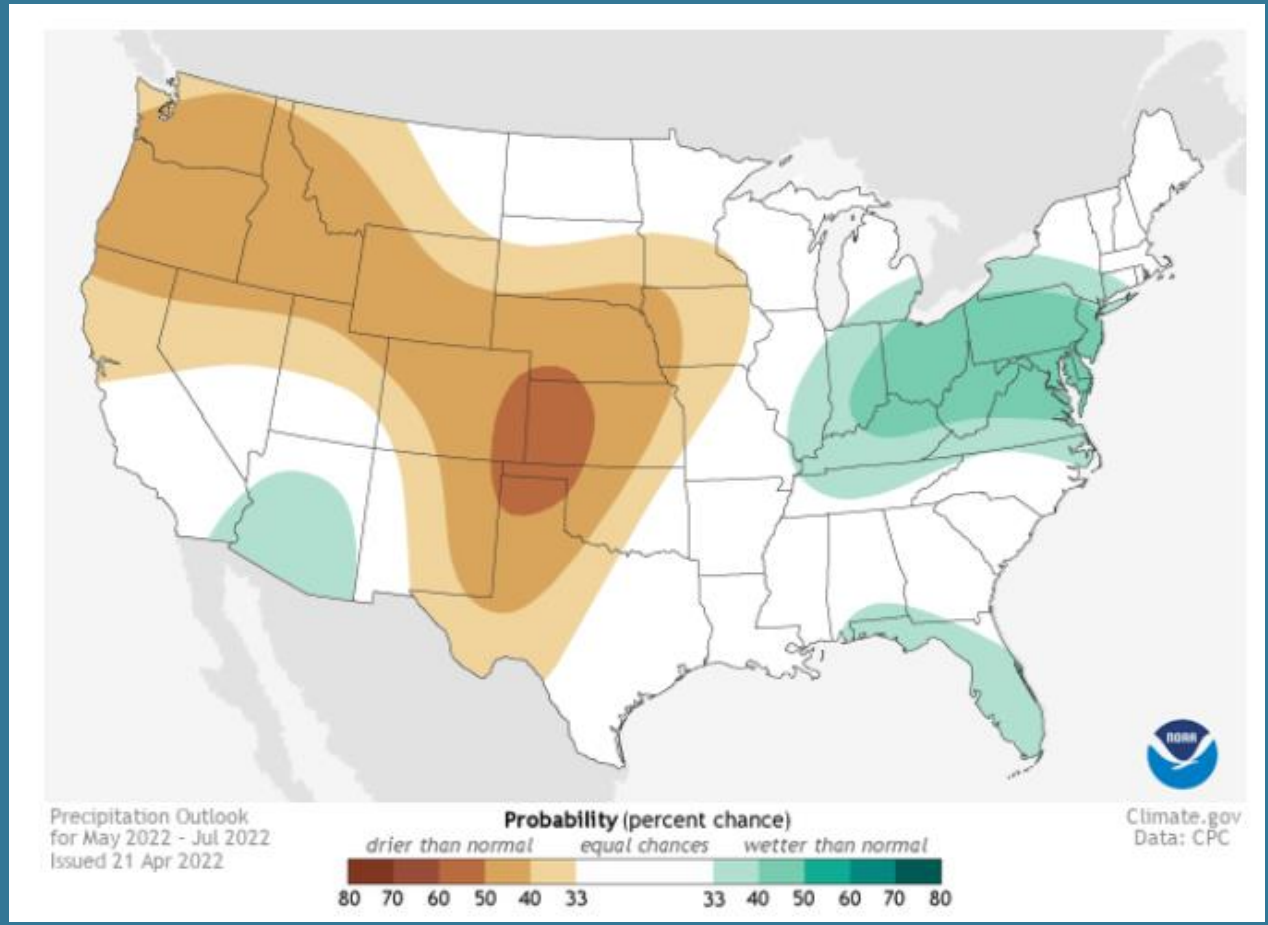
Temperature and Precipitation Outlook April – June 2023



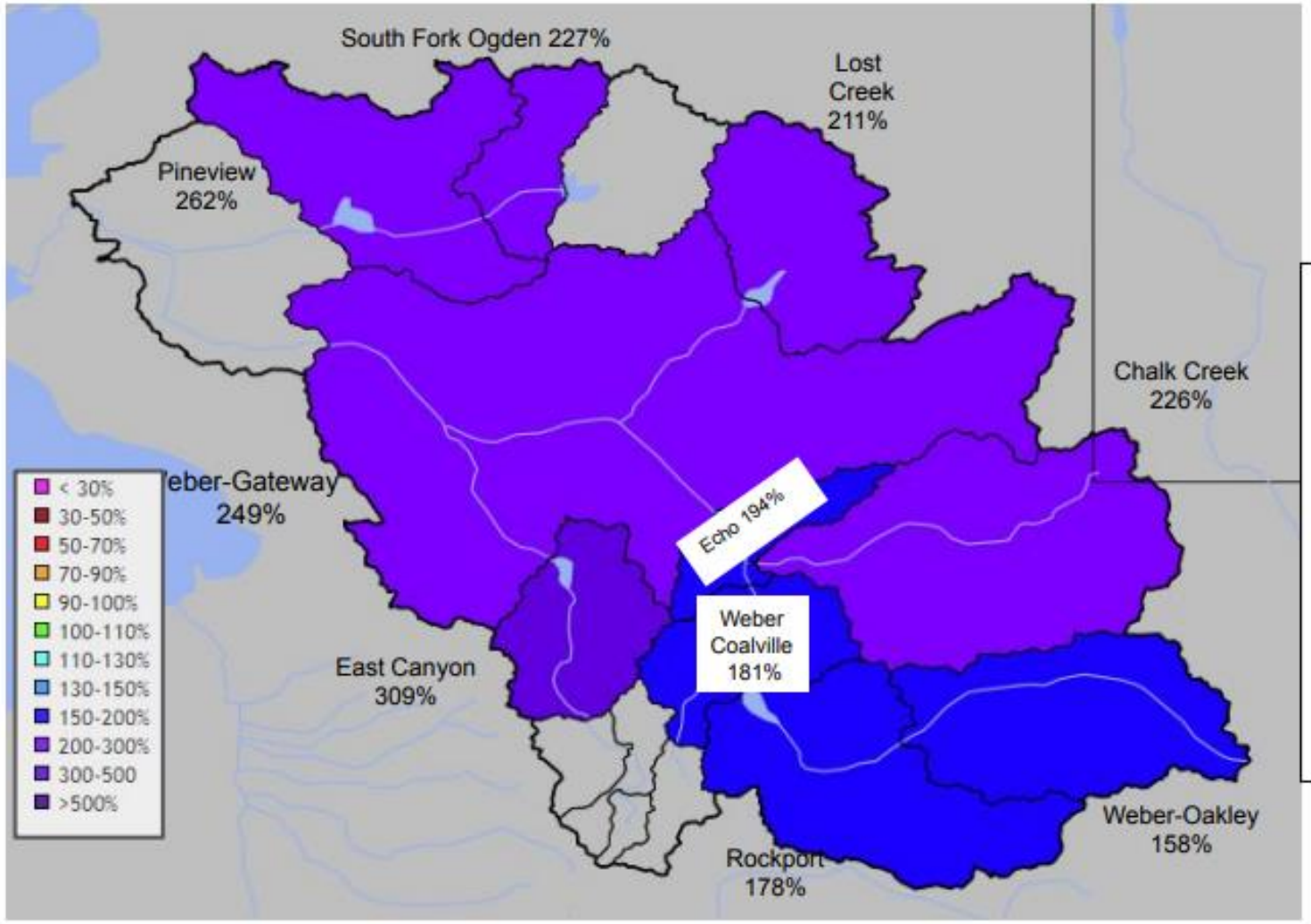


Temperature and Precipitation Outlook May – July 2022





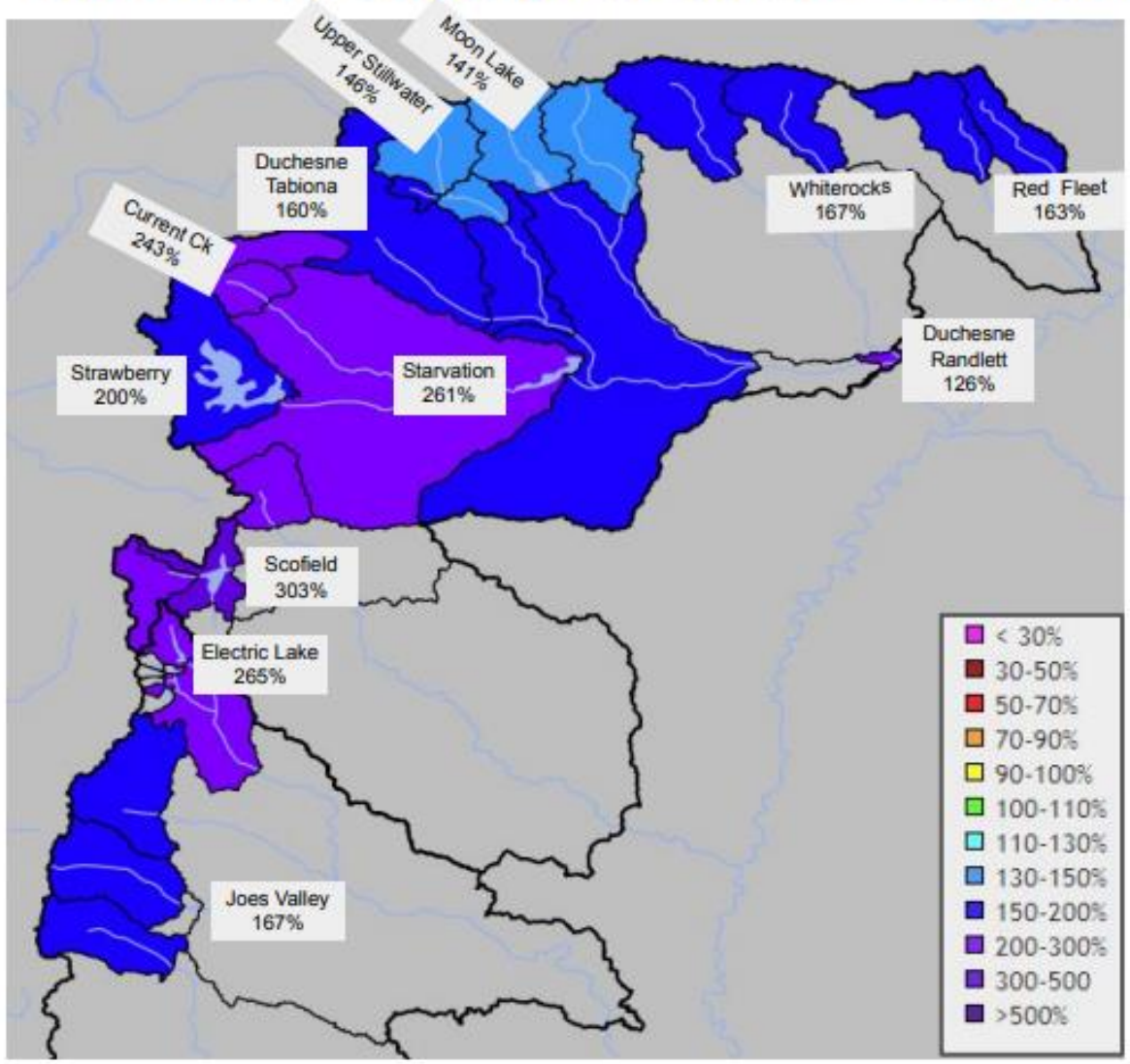
Utah Water Supply Forecasts - Weber



April 1 Forecast

- >10% increases across the basin
- median forecast 215% of avg.
- forecasts range 158-309% of avg.
- No official 50% forecasts over record
- 3 Latest Model Guidance 50% over record
  - South Fork Ogden
  - Pineview
  - East Canyon

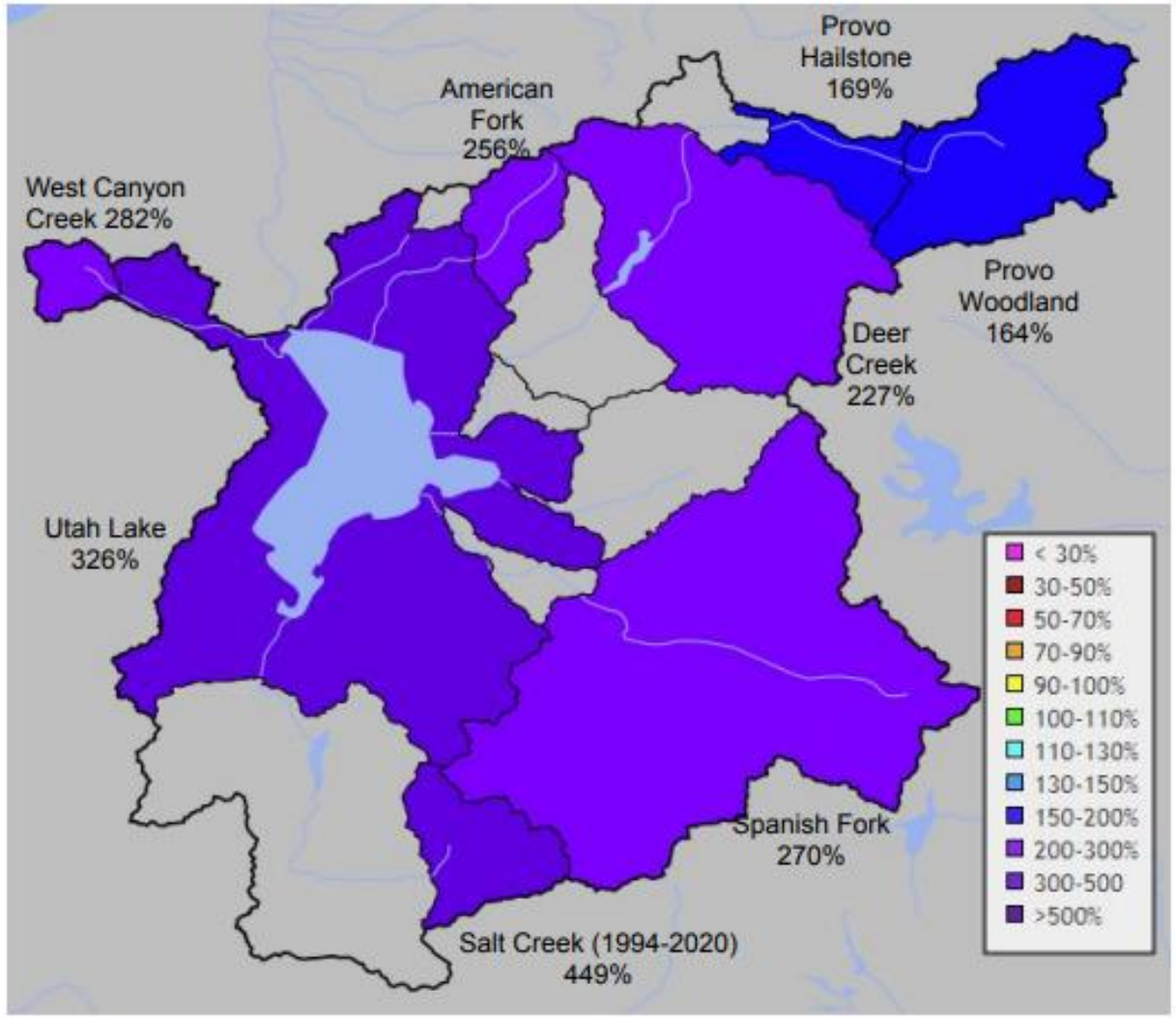
Utah Water Supply Forecasts - Duchesne, Price, and San Rafael



April 1 Forecast

- >30% increases across the basins
- Duchesne:
  - median forecast 165% of avg.
  - forecast range 140-260%
- Price and San Rafael:
  - median forecast 215% of avg.
  - forecast range 150-305%
- No 50% forecasts over record
- Some 10% exceedance forecasts over record

Utah Water Supply Forecasts - Provo - Utah Lake Basin

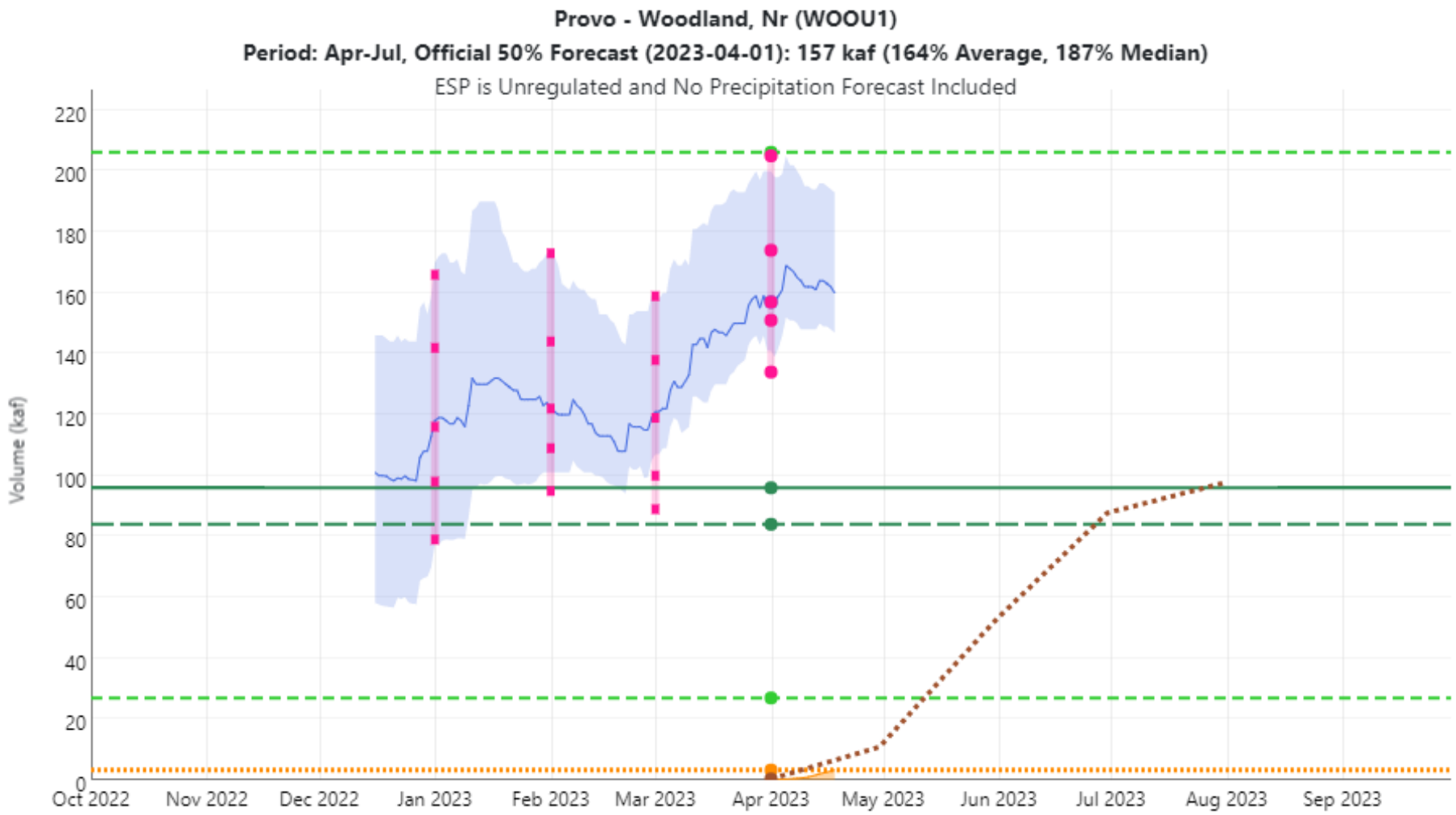


April 1 Forecast

- >10% increases across the basin
- median forecast 260% of avg.
- forecasts range 164-326% of avg.
- 1 official 50% forecasts over record
  - Salt Creek
- 1 additional Latest Model Guidance 50% over record
  - American Fork

Water Supply Forecast

2022 Comparison: 72 kaf (75% Average, 86% Median



2023/04/01:

Max 2011: 206.17

Min 1977: 26.99

Average: 96

Median: 84

Observed Total: 3.29

Normal Accumulation: 0.36

ESP: 157

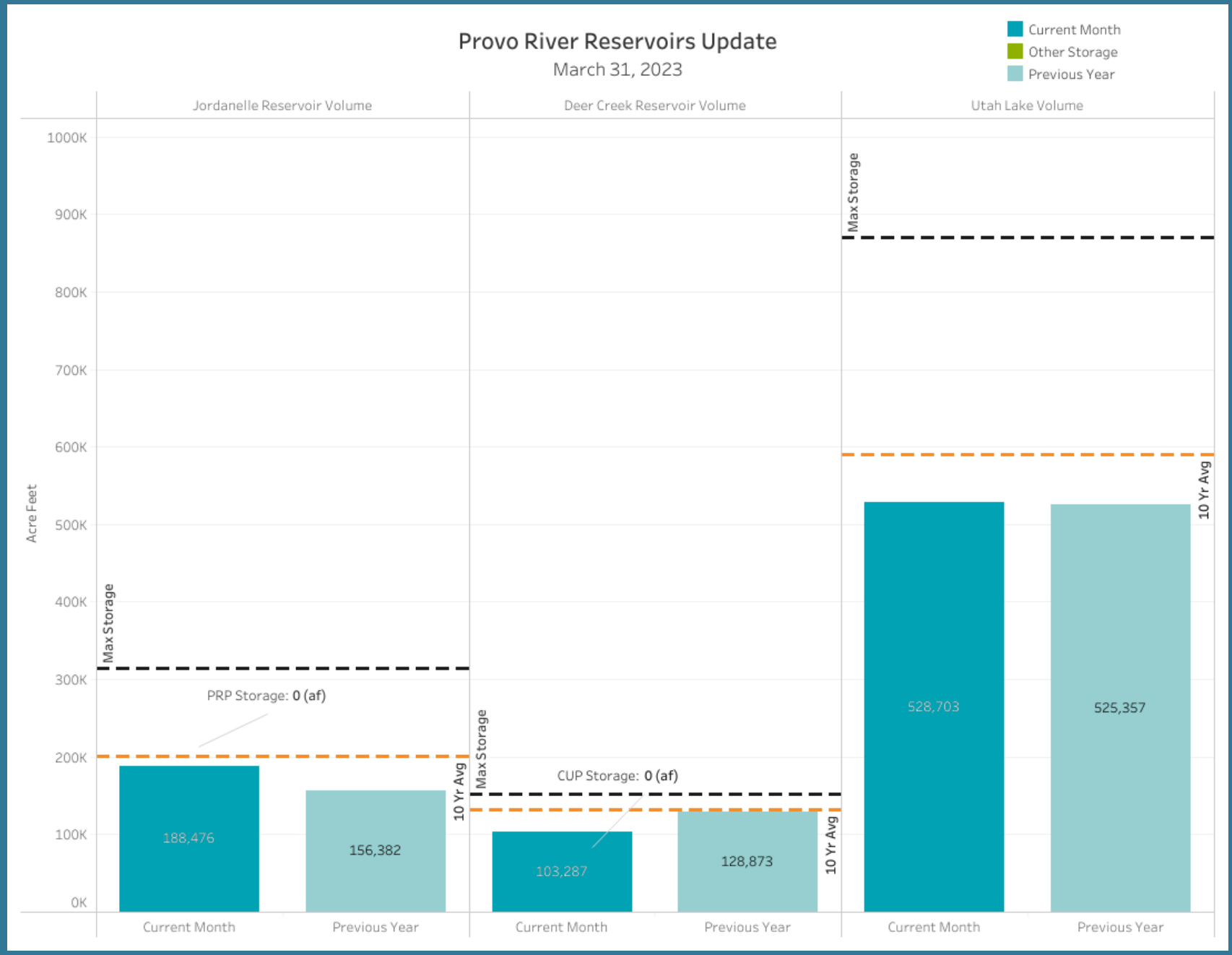
Official 10: 205

Official 30: 174

Official 50: 157

Official 70: 151

Official 90: 134


Provo River Reservoirs Update
March 31, 2023
Current Month
Other Storage
Previous Year
Jordanelle Reservoir Volume
Deer Creek Reservoir Volume
Utah Lake Volume
Acre Feet
1000K
900K
800K
700K
600K
500K
400K
300K
200K
100K
0K
Max Storage
PRP Storage: 0 (af)
10 Yr Avg
188,476
156,382
Max Storage
CUP Storage: 0 (af)
10 Yr Avg
103,287
128,873
Max Storage
10 Yr Avg
528,703
525,357
Current Month
Previous Year
Current Month
Previous Year
Current Month
Previous Year

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

JVWCD Annual Member Agency Meeting

April 26, 2023

JVWCD Drought Contingency Plan

Drought Monitoring Committee Recommendation for 2023 and Water Supply Outlook

Drought Monitoring:

Criteria used to recommend Water Supply Availability Level

Water Supply Restriction Level	Water Restriction Description	Water Demand Reduction Target	Triggering Criteria Applied to Water Supply Restriction Levels		
			CUWCD Supply Availability (Jordanelle storage of CUP)	PRWUA Supply Allocation (in the Provo River Project)	Salt Lake Valley Groundwater Conditions
Level 0 	Normal	None	at least 95% supply availability	At least an 80% supply allocation	3 year average diversions less than safe yield
Level 1 	Moderate	5 – 10%	At least a 95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 12,000 AF, or 3 year average exceeds safe yield
Level 2 	Severe	10 – 20%	At least 90-95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 16,000 AF, or 3 year average exceeds safe yield
Level 3 	Extreme	20 – 30%	At least 90-95% supply availability	<75% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 year average exceeds safe yield
Level 4 	Critical/Exceptional	30 – 50%	Less than 90% supply availability	Less than 45% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 year average exceeds safe yield

March

Convene drought monitoring committee. Review water supply forecast information and develop a preliminary recommended drought level.

April

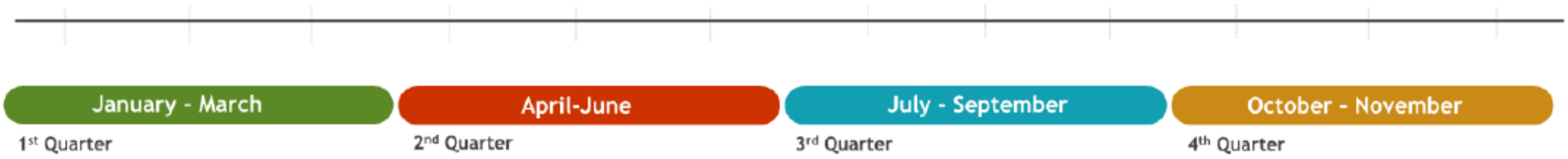
Committee's preliminary recommendation is presented at JVWCD annual Member Agency meeting. Committee considers updated information and makes final drought level recommendation by April 30th.

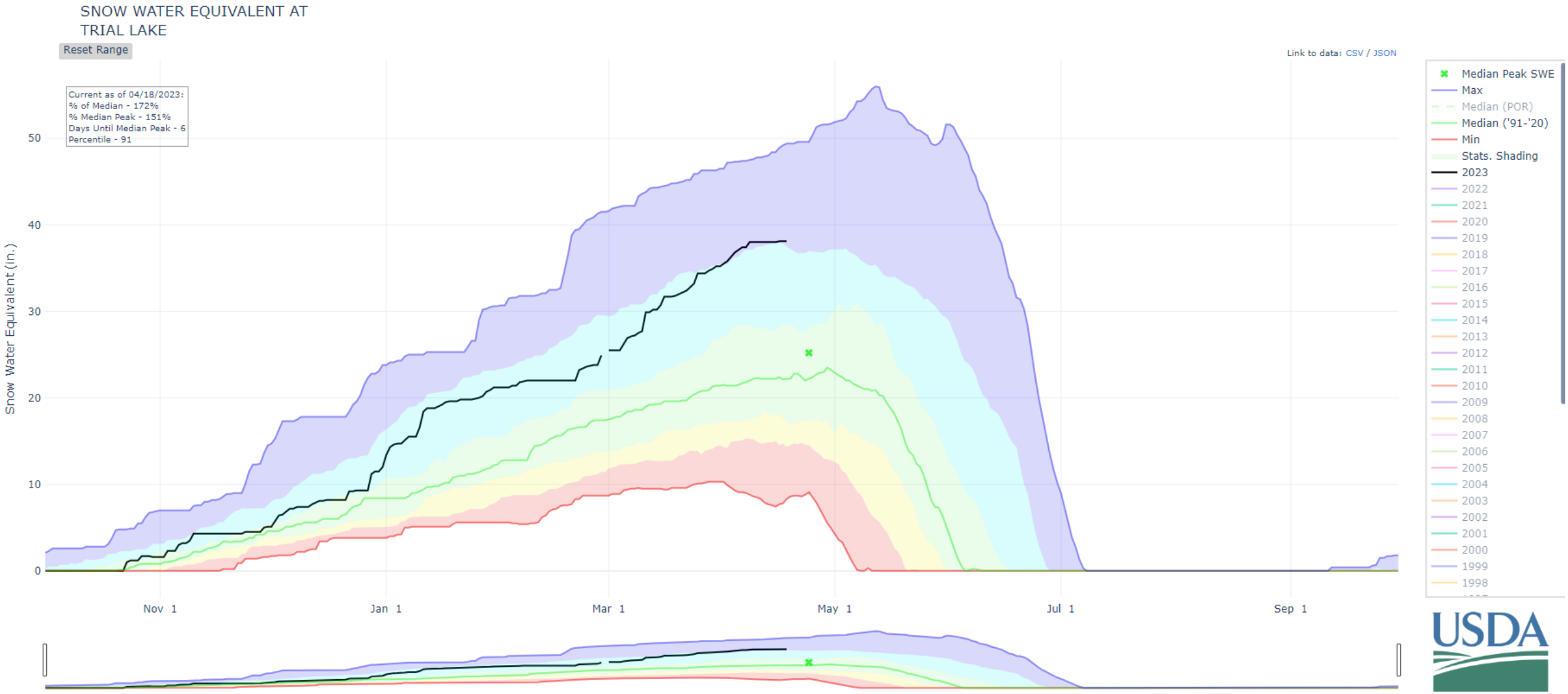
May

JVWCD board considers formal declaration of drought level.

June - December

JVWCD completes a monthly re-assessment of water supply condition. The drought monitoring committee will be re-convened prior to any change in drought level status. The declared drought level condition will typically expire at the end of the calendar year.




SNOW WATER EQUIVALENT AT
TRIAL LAKE
Reset Range
Link to data: CSV / JSON
Current as of 04/18/2023:
% of Median - 172%
% Median Peak - 151%
Days Until Median Peak - 6
Percentile - 91
Snow Water Equivalent (in.)
0
10
20
30
40
50
Nov 1
Jan 1
Mar 1
May 1
Jul 1
Sep 1
Median Peak SWE
Max
Median (POR)
Median ('91-'20)
Min
Stats. Shading
2023
2022
2021
2020
2019
2018
2017
2016
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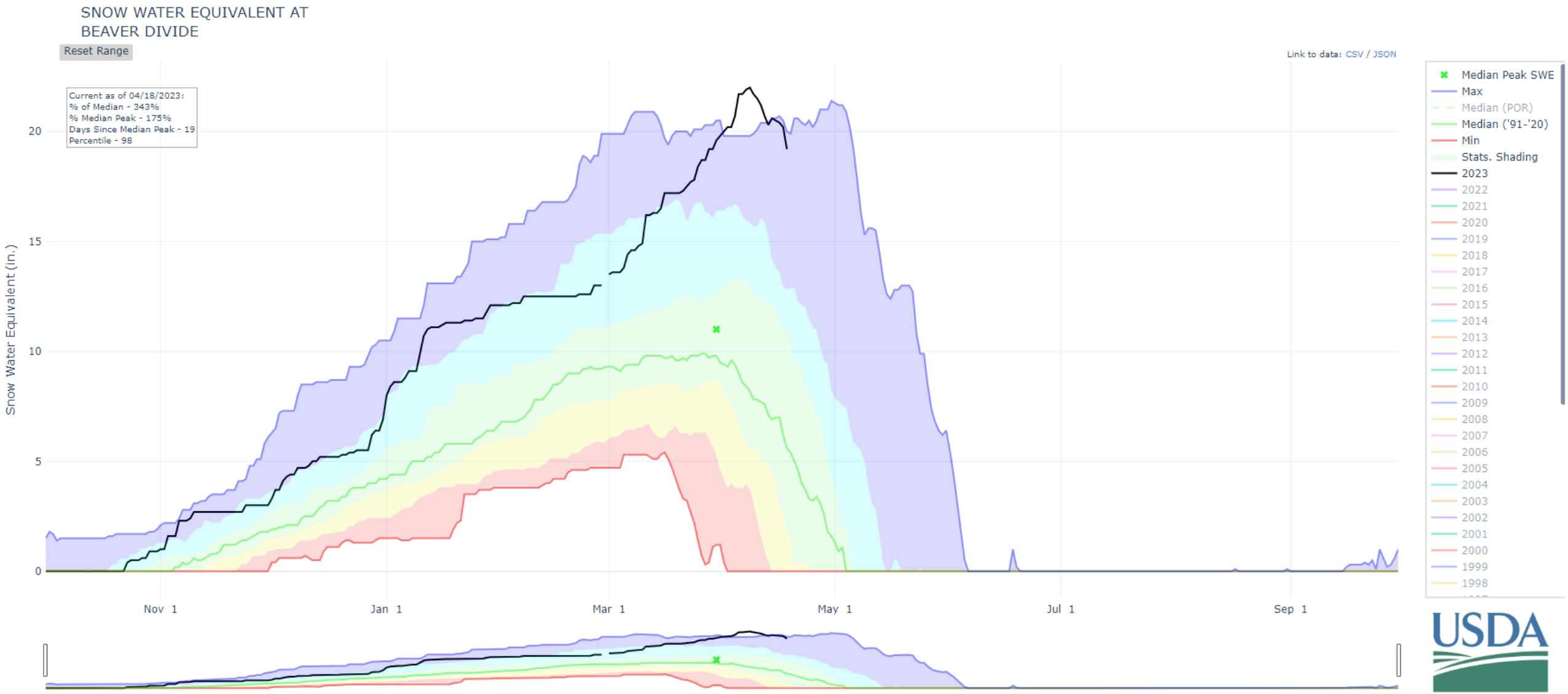

SNOW WATER EQUIVALENT AT
BEAVER DIVIDE
Reset Range
Link to data: CSV / JSON
Current as of 04/18/2023:
% of Median - 343%
% Median Peak - 175%
Days Since Median Peak - 19
Percentile - 98
Snow Water Equivalent (in.)
0
5
10
15
20
Nov 1
Jan 1
Mar 1
May 1
Jul 1
Sep 1
Median Peak SWE
Max
Median (POR)
Median ('91-'20)
Min
Stats. Shading
2023
2022
2021
2020
2019
2018
2017
2016
2015
2014
2013
2012
2011
2010
2009
2008
2007
2006
2005
2004
2003
2002
2001
2000
1999
1998

Water Supply	2021 Water Supply		2022 Water Supply		2023 Water Supply	
	Planned Utilization (AF)	Actual Utilization (AF)	Planned Utilization (AF)	Actual Utilization (AF)	Planned Utilization (AF)	Updated Planned Utilization (AF) **
Central Utah Project (Jordanelle Storage)	47,400	42,625	46,700	38,475	44,700	40,000
PRWUA (Deer Creek Storage) + PRWUC & other un-stored rights + local streams	29,000	27,953	28,100	35,918	34,000	45,000
Salt Lake County high quality groundwater	12,000	16,748	15,000	15,908	11,500	5,000
CWP, SWJVGW	19,000	19,287	18,680	17,661	18,600	18,600
Total	107,700	106,613	108,480	107,962	108,800	108,600

** Not shown in 2023 DMC Meeting

Drought Monitoring Committee Vote

Water Supply Restriction Level	Water Restriction Description	Water Demand Reduction Target	Triggering Criteria Applied to Water Supply Restriction Levels			Vote of Committee Members
			CUWCD Supply Availability (Jordanelle storage of CUP)	PRWUA Supply Allocation (in the Provo River Project)	Salt Lake Valley Groundwater Conditions	
Level 0 	Normal	None	at least 95% supply availability	At least an 80% supply allocation	3 year average diversions less than safe yield	**8**
Level 1 	Moderate	5 – 10%	At least a 95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 12,000 AF, or 3 year average exceeds safe yield	**7**
Level 2 	Severe	10 – 20%	At least 90-95% supply availability	75-80% supply allocation	JV gw diversions to compensate for shortage exceeds 16,000 AF, or 3 year average exceeds safe yield	–
Level 3 	Extreme	20 – 30%	At least 90-95% supply availability	<75% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 year average exceeds safe yield	–
Level 4 	Critical/Exceptional	30 – 50%	Less than 90% supply availability	Less than 45% supply allocation	JV gw diversions to compensate for shortage exceeds 20,000 AF, or 3 year average exceeds safe yield	–

2023 Water Supply Plan (Level 0 Restriction Conditions)

Water Supply	Estimated Drought Year Yield (AF)	Comments
Central Utah Project (Jordanelle Storage)	40,000	Plan to “carry over” ~10,900 AF for 2024.
PRWUA (Deer Creek Storage) + PRWUC & other un-stored rights + local streams + MWD purchase	45,000	Maximizing the use of instream flows.
Salt Lake County high quality groundwater	5,000	Allowing the aquifer to recharge as much as possible.
CWP, SWJVGW	18,600	Utilization per contracts (relatively unaffected by drought).
Total 2022 Water Supply Plan:	108,600	

Drought Monitoring:

Rules and Regulations for Wholesale Water Services

WHOLESALE RATE SURCHARGES APPLICABLE DURING ESTABLISHED WATER SUPPLY RESTRICTIONS

Drought Contingency Plan (DCP) Water Supply Restriction Level	Water Restriction based on contract volume	Rate surcharge for water deliveries exceeding restriction level
0 – Normal	n/a	n/a (a)
1 – Moderate	Maximum Contract Volume (b)	Block 2 Rate x 1.10
2 – Severe	Intermediate Contract Volume (c)	Block 1 Rate x 1.25 (d)
3 – Extreme	Minimum Contract Volume	Block 1 Rate x 1.50 (d)
4 – Exceptional/Critical	Less than Minimum Contract Volume < 100% (e)	Block 1 Rate x 2.00 (d)

Notes: a) Block 2 rates are charged for all water delivered which exceeds 120% Minimum Contract Volume regardless of DCP Water Supply Restriction Level.
b) Maximum Contract Volume is 20% more than the Minimum Contract Volume defined in the Wholesale Water Purchase Agreement.
c) Intermediate Contract Volume is 10% more than the Minimum Contract Volume defined in the Wholesale Water Purchase Agreement.
d) Water deliveries in excess of Maximum Contract Volume will also be charged at Block 2 Rate x 1.10.
e) During Level 4 – Exceptional/Critical conditions, the District will establish a water restriction level based upon the then current conditions.

Drought Monitoring:

Rules and Regulations for Wholesale Water Services

Drought Contingency Plan Water Supply Restriction Level	% Contract available for deferred delivery (a)	Number of subsequent years deferred water will be available (b)
0 – Normal	5%	1
1 – Moderate	7.5%	2
2 – Severe	10.0%	2
3 – Extreme	12.5%	3
4 – Exceptional/Critical	(c)	(c)

Notes: a) Subject to supply and system capacity availability.

b) Delivery of deferred water is subject to the conditions in Section 1.8.1. A calendar year during which JVWCD establishes a Water Supply Restriction Level 1,2,3, or 4 will not count against the year limit that deferred water will be available.

c) To be determined by Board.

Next Steps

Unless conditions change significantly, Drought Monitoring Committee recommendation will be presented to JVWCD Board on May 10th. The Board will consider the recommendation and establish a water availability level on May 10th.

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Maintaining High Quality Water

JVWCD Annual Member Agency Meeting

April 26, 2023

JVWCD Approach to Water Quality

Source Water Protection

Water Treatment Optimization

High Quality Deliveries

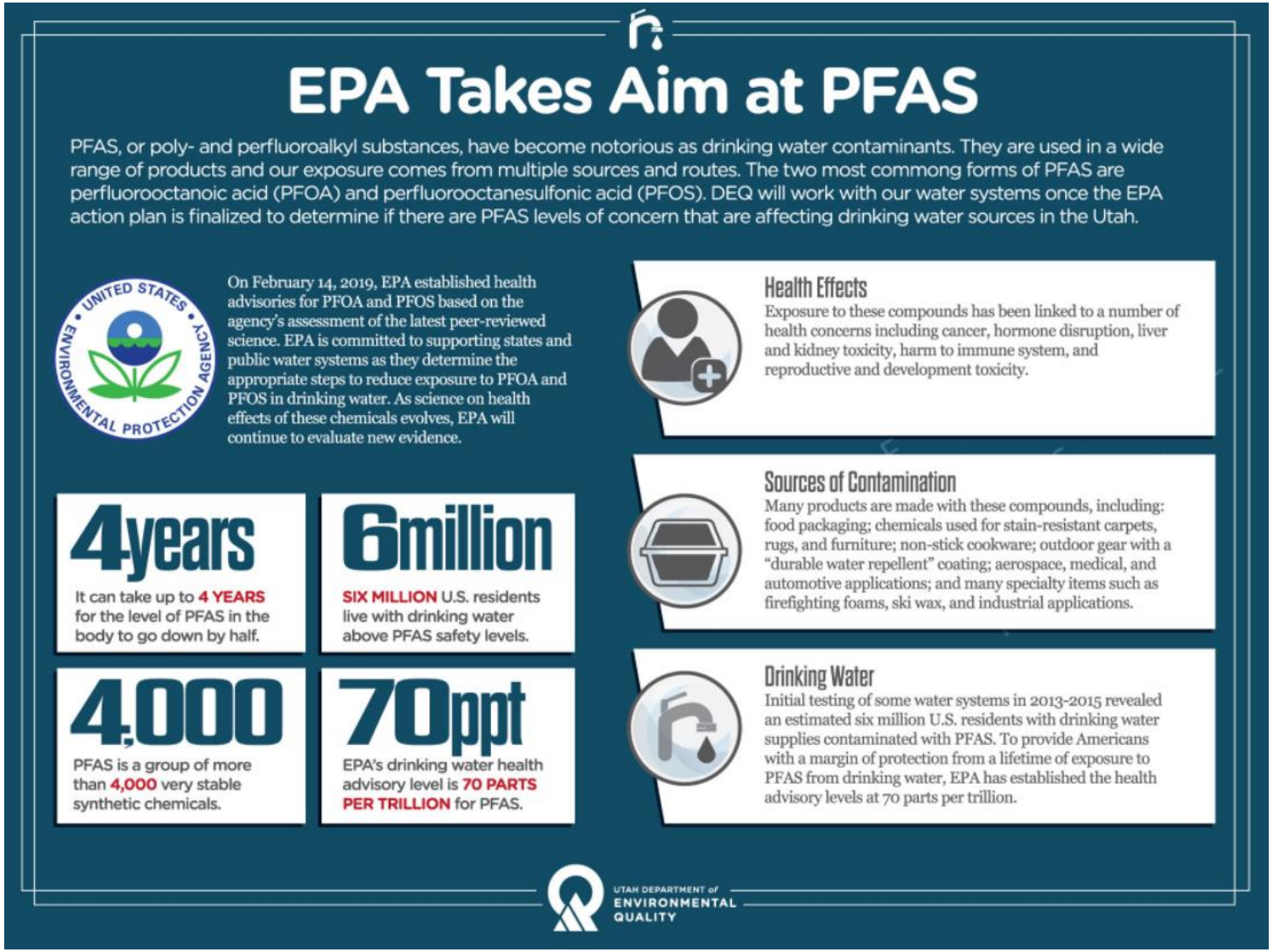
Current Regulatory Issues

Unregulated Contaminant Monitoring Rule 5 (UCMR 5)

- Requirements depend on population size
- Sampling of both surface water and groundwater
- 30 parameters
- Sampling happens between 2023 - 2025

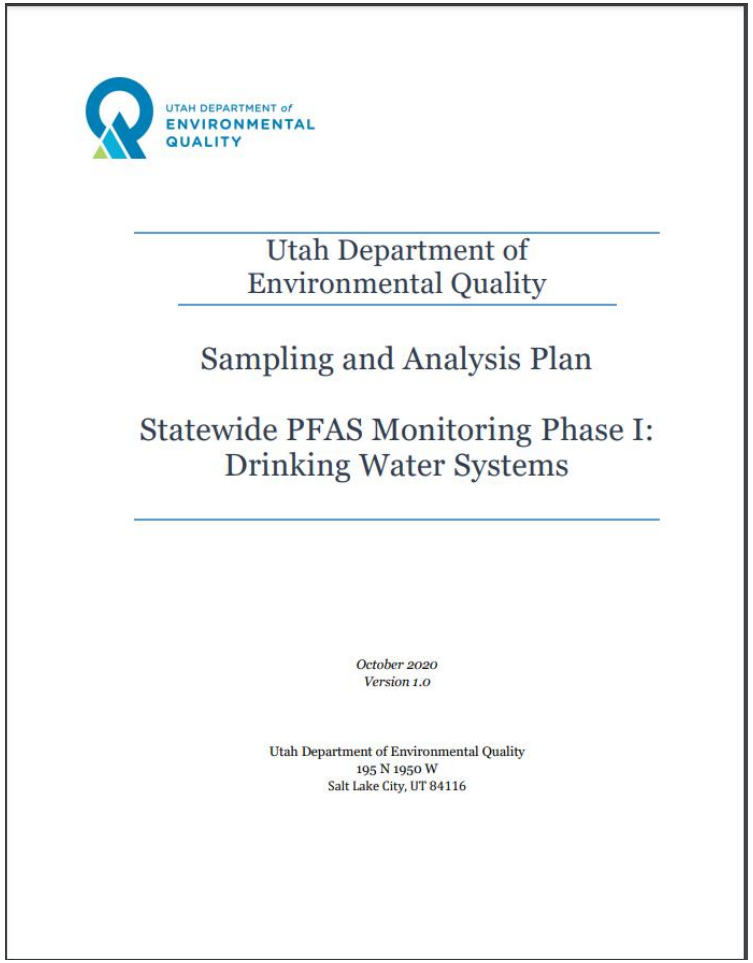
Current Regulatory Issues

Poly- and Perfluoroalkyl Substances (PFAS)



Current Regulatory Issues

Poly- and Perfluoroalkyl Substances (PFAS)



UTAH DEPARTMENT of ENVIRONMENTAL QUALITY

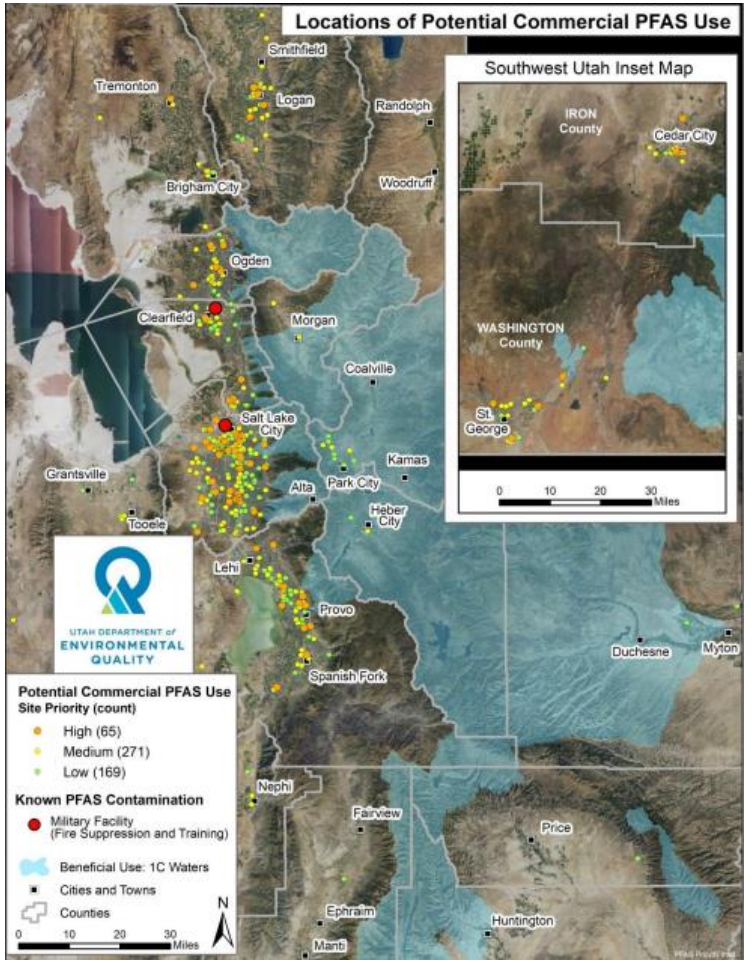
Utah Department of Environmental Quality

Sampling and Analysis Plan

Statewide PFAS Monitoring Phase I: Drinking Water Systems

October 2020
Version 1.0

Utah Department of Environmental Quality
195 N 1950 W
Salt Lake City, UT 84116



Current Regulatory Issues

Poly- and Perfluoroalkyl Substances (PFAS)

DEQ 2022 Press Release: In all circumstances, test results fell well below all Environmental Protection Agency (EPA) advisory limits for the PFAS measured. This indicates low risk for human exposure to PFAS through drinking water in Utah.

Although all results were well below advisory levels, in the rare cases where the results were above the reporting limits, repeat monitoring will be performed. This additional monitoring will help determine if the results were due to cross contamination or a source in the watershed.

DDW is planning future monitoring of PFAS in Utah, including broader monitoring of drinking water sources, analysis of fish and waterfowl tissue, and municipal wastewater sources.

JVWCD Sampling

- 8 locations along the Provo River
- JVWTP
- SERWTP
- DW3 (Feeds the SWGWTP)
- 1300 E 7000 S Well

All Results have been Non-Detect

Current Regulatory Issues

Lead and Copper Rule Updates

In Early 2021, EPA published the Lead and Copper Rule Revisions (LCRR)

- EPA determined improvement were needed and the Lead and Copper Rule Improvements (LCRI) are expected in 2024

Currently the LCRR requires PWS to complete a Lead Service Line Inventory (LSLI) that must be submitted to the State DDW by October 2024

- This LSLI must also be made publicly available

Member Agency Login

View wholesale meter, lab, and other information specific to your organization by logging in below.

Member Agency Login

User name

Password

Remember Me

Log in

Please contact us if you need your username and password or have trouble logging in.

AGENCY RESOURCES

Member Agency Home

Grant Assistance Program

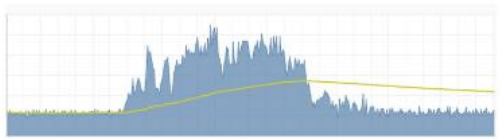
Member Agency Login

EPA WaterSense PARTNER

CONSERVATION GARDEN PARK

Member Agency Menu

Riverton City



Wholesale Meter Data
View live and historical wholesale meter data from our SCADA system.

Laboratory Data
View completed laboratory analyses, export data, and find pricing information.

Member Agency Documents

- 2022 Annual Member Agency Meeting - Packet for the Annual Member Agency Meeting on April 27, 2022
- 2021 Annual Member Agency Meeting - Packet for the Annual Member Agency Meeting on April 21, 2021
- 2020 Annual Member Agency Meeting - Packet for the Annual Member Agency Meeting on April 22, 2020
- 2019 Annual Member Agency Meeting - Packet for the Annual Member Agency Meeting on May 1, 2019
- 2018 Annual Member Agency Meeting - Packet for the Annual Member Agency Meeting on April 18, 2018

Member Agency Logout

AGENCY RESOURCES

Member Agency Home

Grant Assistance Program

Member Agency Menu

Wholesale Meter Data

Laboratory Data

M&I Water Reporting

Wholesale Meter List

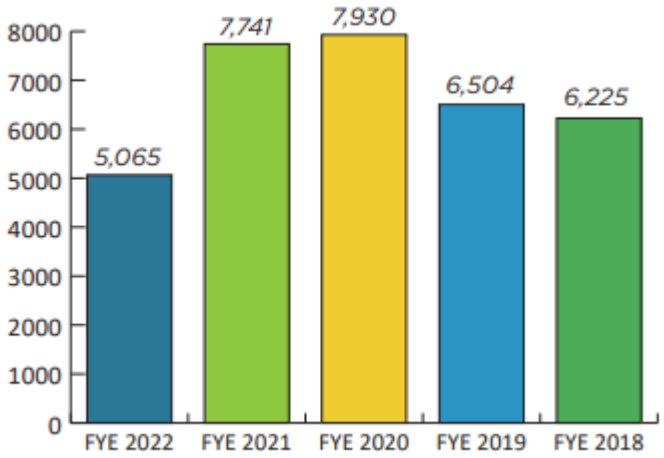
Contract Amount:
Listed are wholesale meters and current values we have in our SCADA system. It is updated every 5 minutes.

Last Poll Time: 3:19 PM

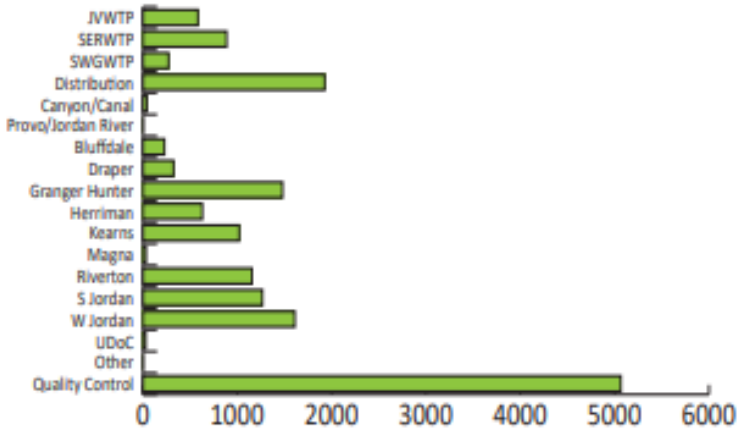
Zone	Address	ID Number	Current Rate (GPM)	Day Total (AF)	Month Total (AF)	Year Total (AF)	Last Month (AF)
A	[redacted]		0.00	0.99	39.96	227.54	60.36
A			633.00	1.63	48.89	281.19	80.21
A			0.00	0.00	25.14	107.91	34.73
C			452.00	1.25	36.13	214.72	59.34
C			178.00	0.52	15.19	101.58	24.25
C			26.00	0.05	1.82	9.91	2.72
C			110.00	0.31	9.95	50.74	10.50
C			0.00	0.00	0.00	6.35	5.50
C			441.00	1.10	33.78	197.56	55.59
C			0.00	0.00	0.00	0.31	0.00
		Agency Totals	1840.00	5.85	210.86	1197.81	333.20
							JVWCD Totals

Water Quality Sampling & Analysis

Total JVWCD Samples Collected

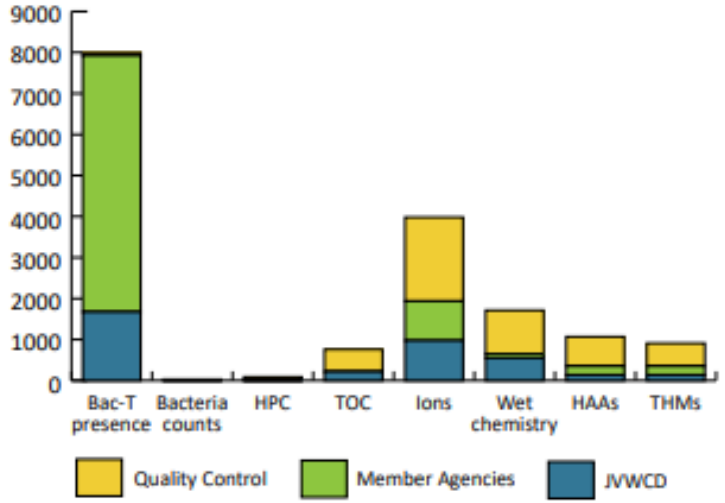


Total Analyses by Agency



Total Samples Analyzed 2021/2022 = 16,537

Total Samples Analyzed 2020/2021 = 15,475



JV Laboratory Services

Available 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
- **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.)

Laboratory Services

Calculating Pricing

Using the most recent three years of data, we calculate how much of the total water delivered by each member agency is purchased from JVWCD.

The remaining percentage is multiplied by the base price for each analyses type to get the adjusted price.

Member Agency 1

Purchases 100% of the total water they deliver from JVWCD they pay no additional cost for analyses.

Member Agency 2

Purchases 40% of the total water they deliver from JVWCD, they pay 60% of the base price for analyses.

Laboratory Services

Calculating Pricing

- This year everything increased by an average of 15%

JORDAN VALLEY WATER CONSERVANCY DISTRICT

Member Agency Assistance Water Quality Analysis Charges
Effective July 1, 2023

				(1) Presence/Absence Bacteriological		(2) Quantitative Bacteriological		(3) Heterotrophic Plate Count (HPC)		(4) Trihalomethanes (THMs)		(5) Haloacetic Acids (HAAs)		(6) *Anions (up to 7 ions)		(7) One Anion Only (Fluoride or Nitrate)	
Current Year Base Price →				$25.25		$35.00		$48.25		$158.50		$224.00		$92.00		$28.75	
Previous Year Base Price				$22.05		$30.50		$42.00		$137.75		$194.75		$80.00		$25.00	
Member Agency	% District Water (2018-20 average)	% District Water (2019-21 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	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	$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	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
City of South Salt Lake	34%	35%	N	$14.55	$16.41	$20.13	$22.75	$27.72	$31.36	$90.92	$103.03	$128.54	$145.60	$52.80	$59.80	$16.50	$18.69
City of West Jordan	92%	95%	Y	$1.76	$1.26	$2.44	$1.75	$3.36	$2.41	$11.02	$7.93	$15.58	$11.20	$6.40	$4.60	$2.00	$1.44
Draper City	100%	100%	Y	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Granger Hunter Improvement District	77%	81%	Y	$5.07	$4.80	$7.02	$6.65	$9.66	$9.17	$31.68	$30.12	$44.79	$42.56	$18.40	$17.48	$5.75	$5.46
Herriman City	61%	60%	Y	$8.60	$10.10	$11.90	$14.00	$16.38	$19.30	$53.72	$63.40	$75.95	$89.60	$31.20	$36.80	$9.75	$11.50
Hexcel Corporation	99%	99%	N	$0.22	$0.25	$0.31	$0.35	$0.42	$0.48	$1.38	$1.59	$1.95	$2.24	$0.80	$0.92	$0.25	$0.29
Kearns Improvement District	94%	95%	Y	$1.32	$1.26	$1.83	$1.75	$2.52	$2.41	$8.27	$7.93	$11.69	$11.20	$4.80	$4.60	$1.50	$1.44
Magna Water District	14%	14%	Y	$18.96	$21.72	$26.23	$30.10	$36.12	$41.50	$118.47	$136.31	$167.49	$192.64	$68.80	$79.12	$21.50	$24.73
Midvale City	50%	51%	N	$11.03	$12.37	$15.25	$17.15	$21.00	$23.64	$68.88	$77.67	$97.38	$109.76	$40.00	$45.08	$12.50	$14.09
Riverton City	100%	100%	Y	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Taylorsville Bennion Improvement District	34%	36%	N	$14.55	$16.16	$20.13	$22.40	$27.72	$30.88	$90.92	$101.44	$128.54	$143.36	$52.80	$58.88	$16.50	$18.40
Utah Department of Corrections	81%	0%	Y	$4.19	$25.25	$5.80	$35.00	$7.98	$48.25	$26.17	$158.50	$37.00	$224.00	$15.20	$92.00	$4.75	$28.75
Water Pro	17%	18%	N	$18.30	$20.71	$25.32	$28.70	$34.86	$39.57	$114.33	$129.97	$161.64	$183.68	$66.40	$75.44	$20.75	$23.58
White City Water Improvement District	0%	0%	N	$22.05	$25.25	$30.50	$35.00	$42.00	$48.25	$137.75	$158.50	$194.75	$224.00	$80.00	$92.00	$25.00	$28.75

* Anions (7 ions) include Fluoride, Nitrate, Nitrite, Chloride, Bromide, Phosphate, and Sulfate.

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Water Conservation:
Update, Progress, and Direction

Annual Member
Agency Meeting

April 26, 2023

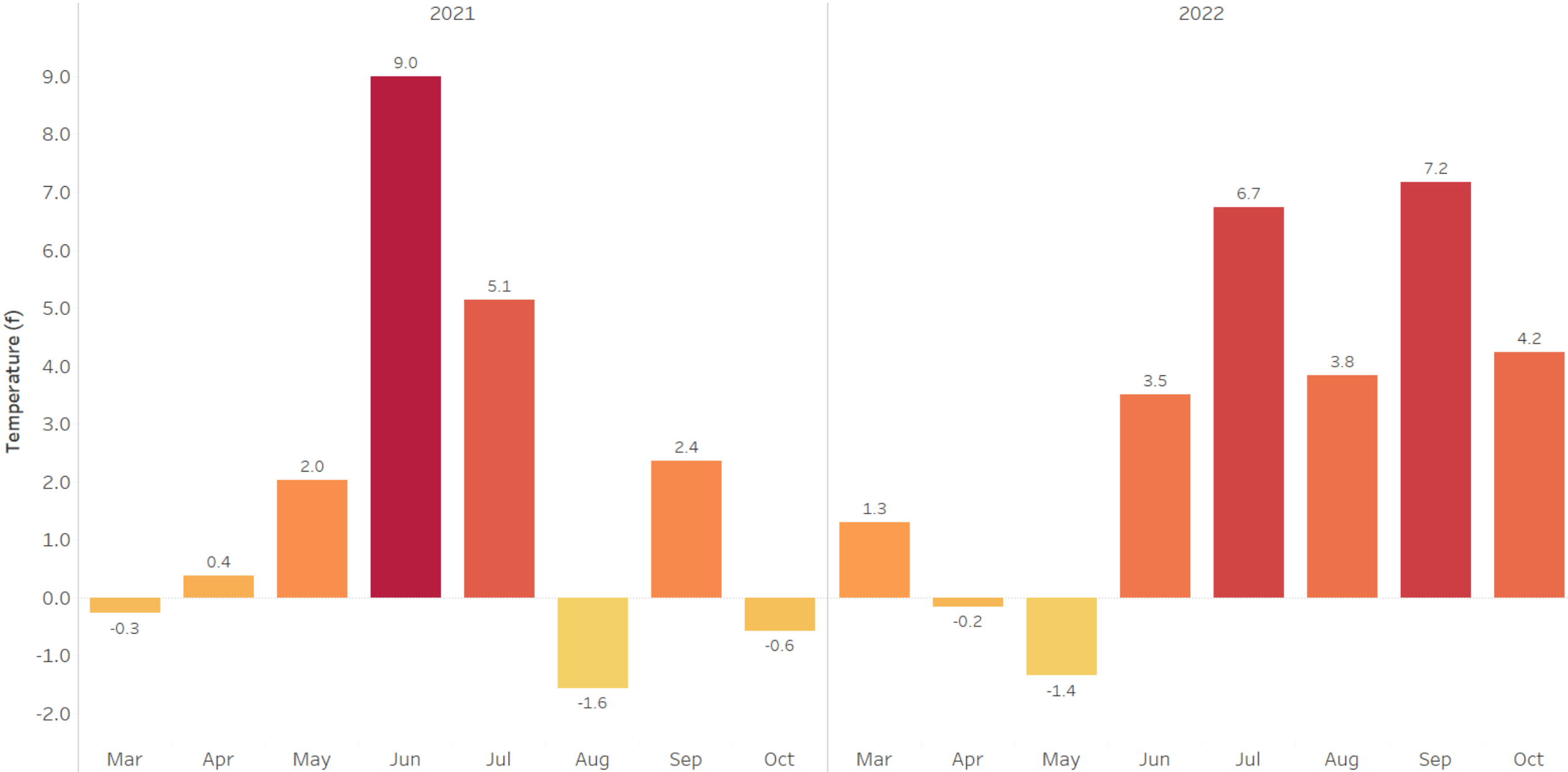
Matt Olsen
Assistant General Manager
Conservation – Communications – Technology

2022 Water Use Results

Review of water use and weather from 2022

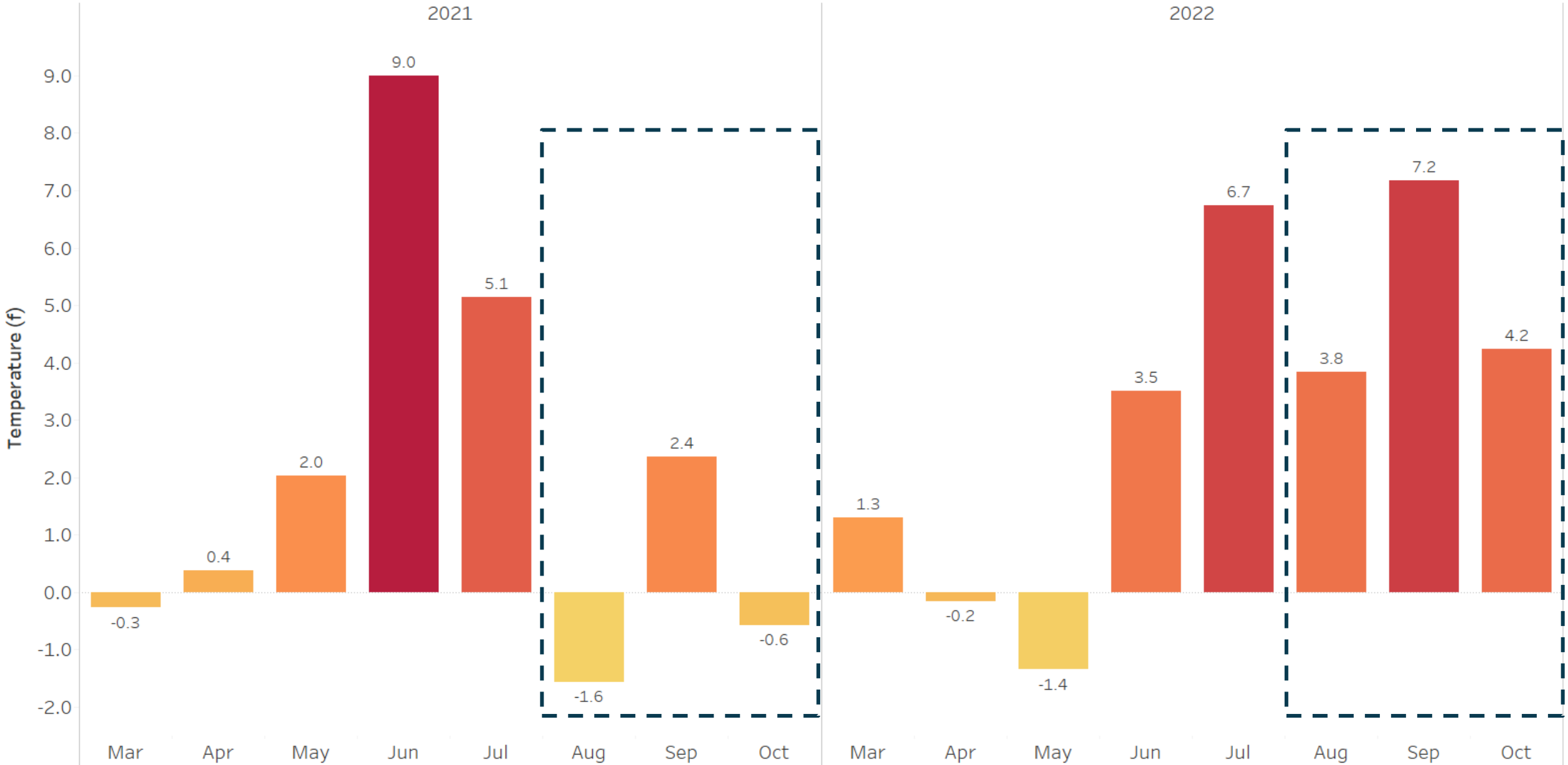
Jordan Valley Water Conservancy District

Average Summer Temperature Departure from Normal by Month - Salt Lake City International Airport



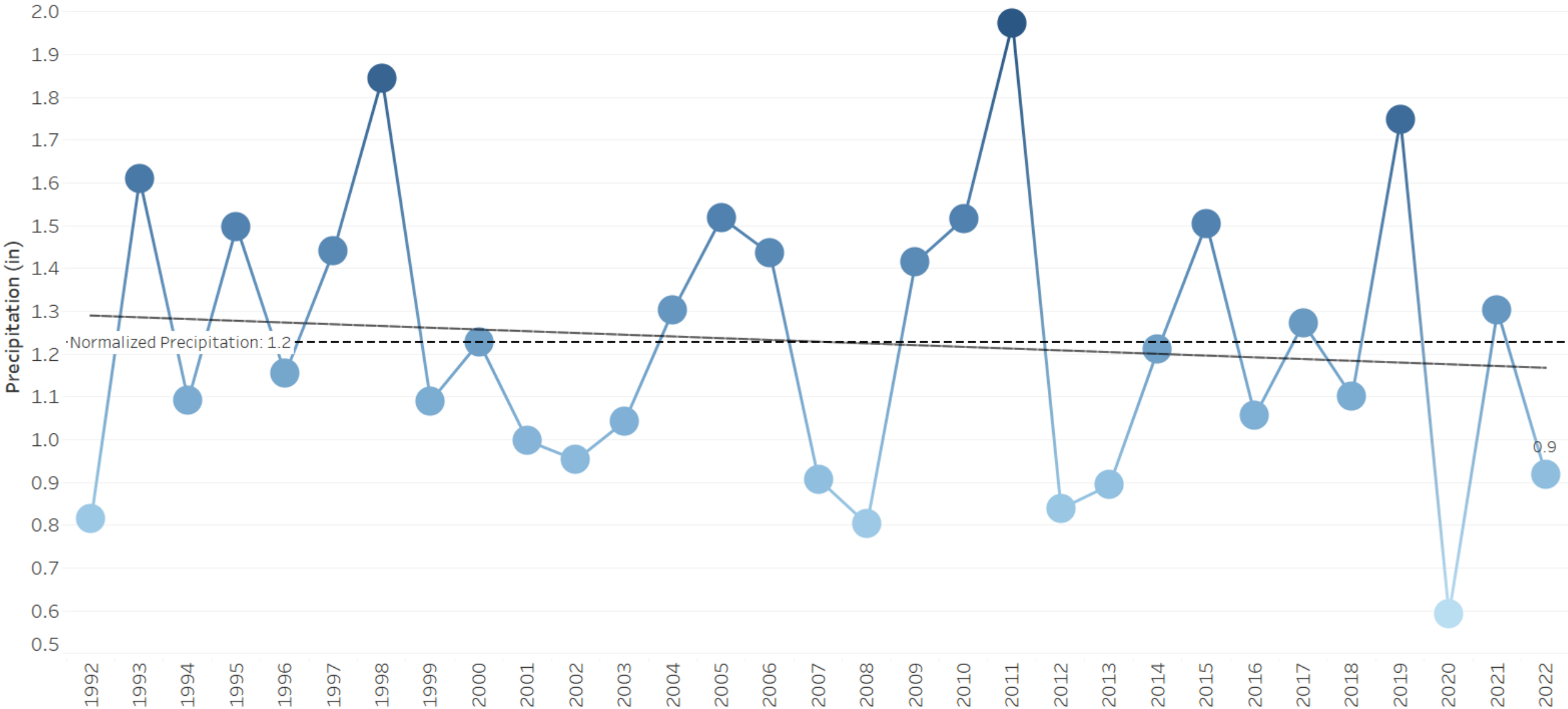
Jordan Valley Water Conservancy District

Average Summer Temperature Departure from Normal by Month - Salt Lake City International Airport

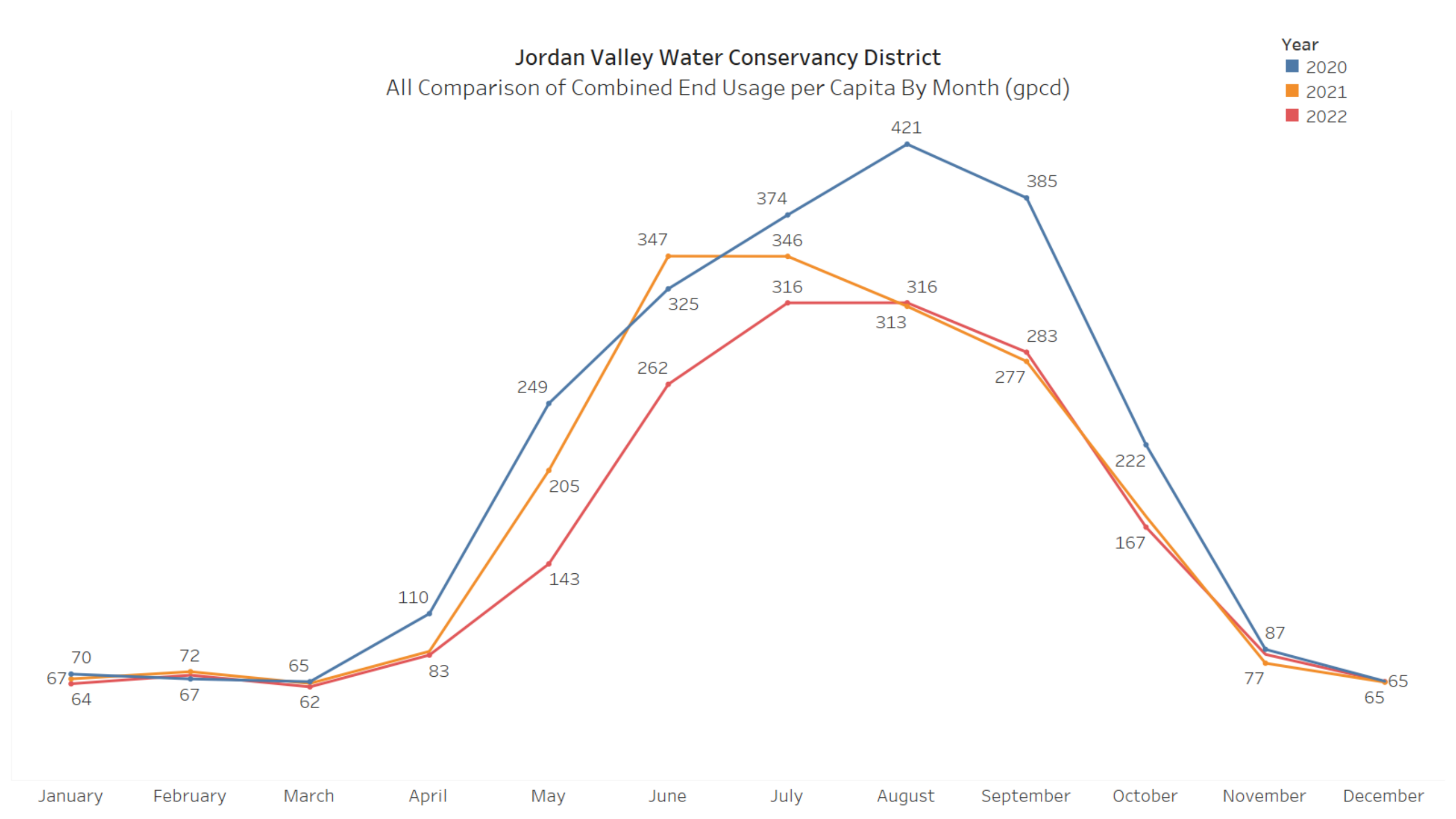


Jordan Valley Water Conservancy District

Summer Month Precipitation by Year - Salt Lake City International Airport

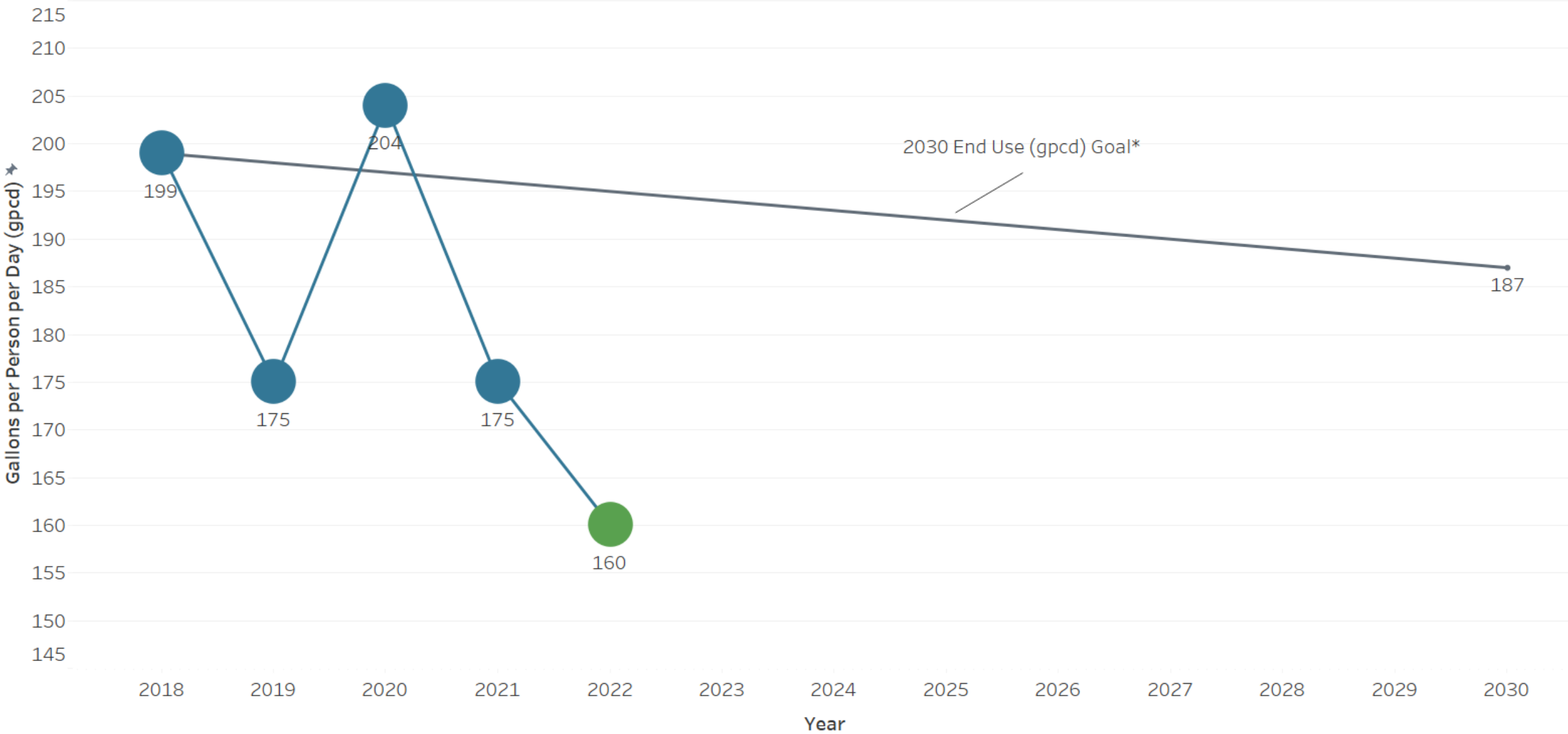


January, February, November, and December were removed from the analysis.


Jordan Valley Water Conservancy District
All Comparison of Combined End Usage per Capita By Month (gpcd)
Year
2020
2021
2022
January
February
March
April
May
June
July
August
September
October
November
December
70
67
64
72
67
65
62
110
249
205
83
143
262
347
325
346
374
316
313
316
421
385
283
277
222
167
87
77
65
65

Jordan Valley Water Conservancy District

Annual End Usage per Capita (gpcd)



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

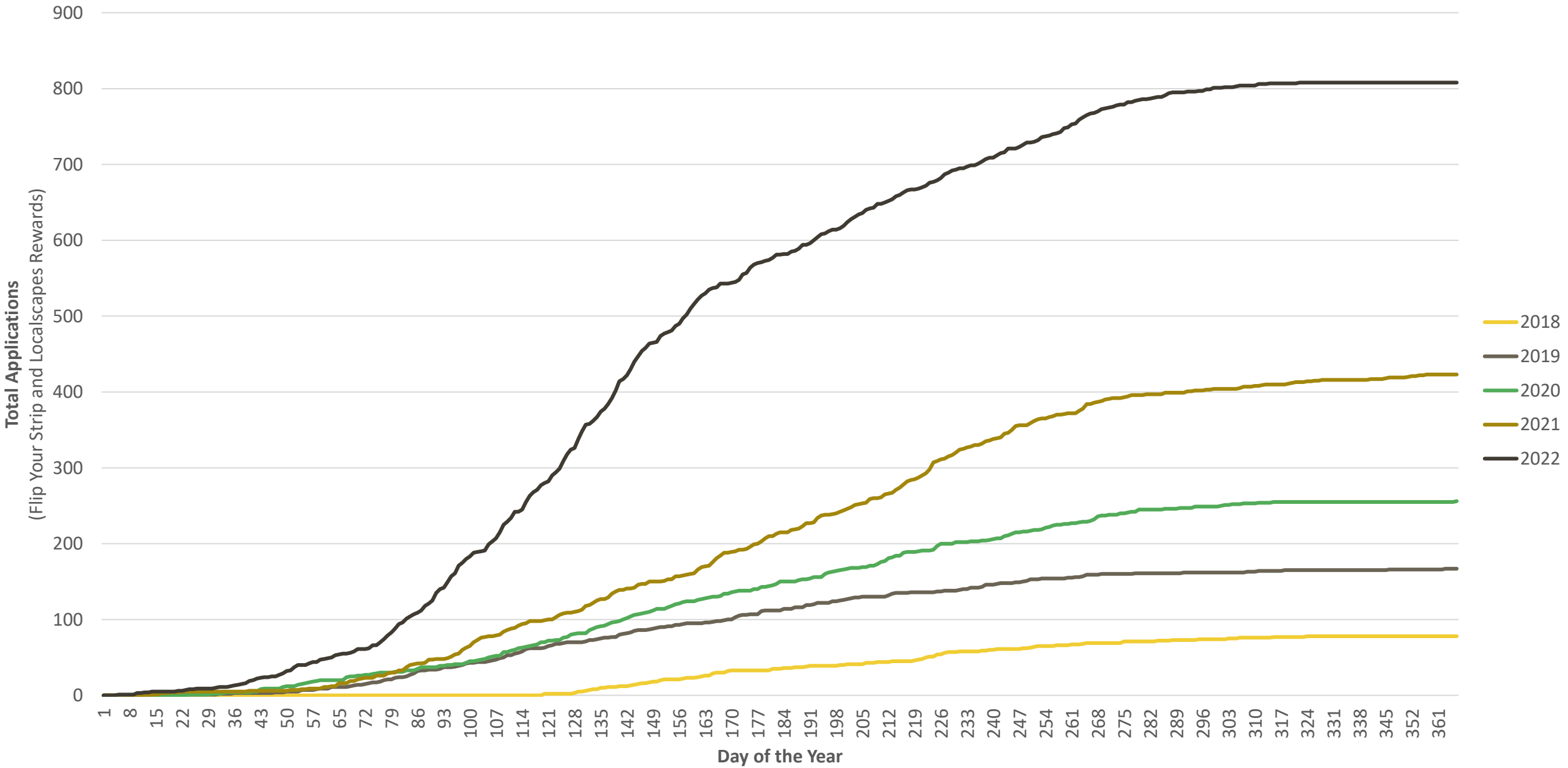
2022 Residential Program Participation

Review of Utah Water Savers activities

Jordan Valley Water Conservancy District

Utah Water Savers

Applications Submitted by Day of Year



Landscape Incentive Marketing

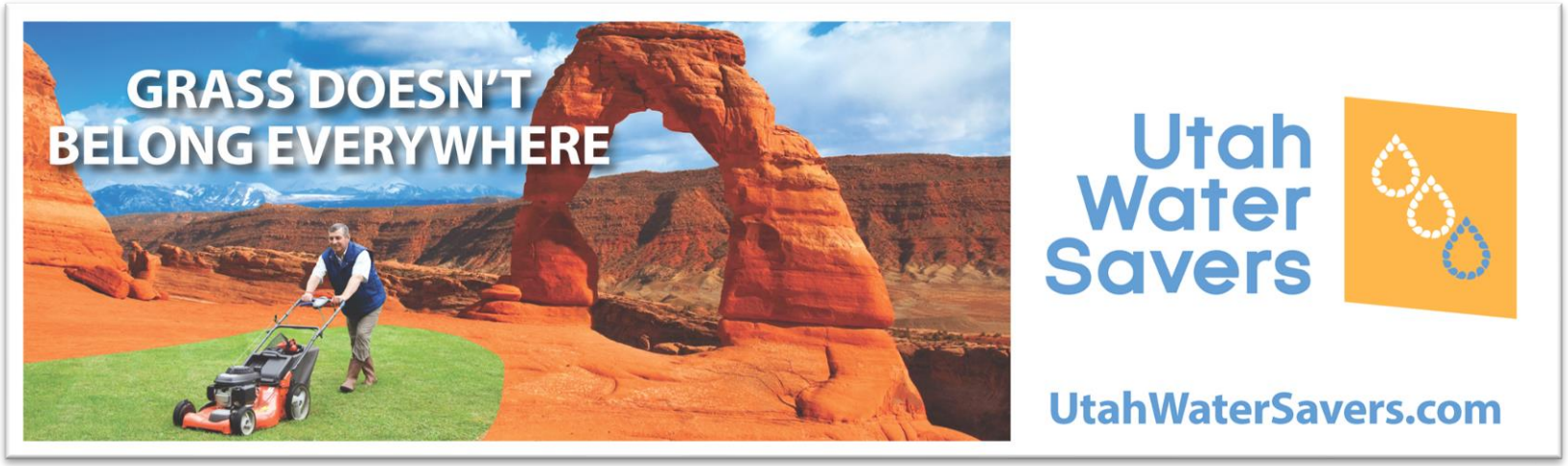
2023 turf replacement marketing

Billboards

- Utah and Salt Lake Counties

Billboards

- Utah and Salt Lake Counties



Videos

- YouTube
- Social Media
- Streaming Services

Videos

- YouTube
- Social Media
- Streaming Services

Water Efficiency Standards

Summary of studies related to the water efficiency standards

Adoption

Member Agency Adoption of **Water Efficiency Standards**

JVWCD's Water Efficiency Standards are comprehensive outdoor landscaping requirements intended for all new construction. The cities that have adopted these standards have shown leadership in planning for the future and building drought-resilient communities.

Herriman
- **December 19, 2020**
  - Adopted as City ordinance

South Jordan
- **May 4, 2021**
  - Adopted as City ordinance

West Jordan
- **June 9, 2021**
  - Adopted as City ordinance

Retail System
- **June 9, 2021**
  - Adopted as JVWCD policy

Bluffdale
- July 14, 2021
  - Adopted as City ordinance

Kearns Metro Township
- February 14, 2022
  - Adopted as Township ordinance

West Valley
- **January 10, 2023**
  - Adopted as City ordinance

Riverton
- **February 21, 2023**
  - Adopted as City ordinance

Water Conservation Programs

Summary of the programs available to Member Agencies and the public

Recent Legislation

2022 – HB 121

2023 – SB 118

$5 million plus an additional $3 million ongoing

- Provides financial incentives for removing lawn or turf and replacing with water-efficient landscaping
- Division of Water Resources may:
  - Award grants to water conservancy districts for incentive programs
  - Provide incentives directly to landowners in areas without programs
- Eligibility requirements for landowners:
  - Have living lawn or turf
  - Participate voluntarily
  - Property within a municipality or unincorporated area implementing regional-based water use efficiency standards
- Landowners must:
  - Maintain water-efficient landscaping and drip irrigation system
  - Not reinstall lawn, turf, or overhead spray irrigation in the project area
- Division required to establish rules on:
  - Defining water-efficient landscaping
  - Setting maximum incentive amounts
  - Developing regional-based water use efficiency standards

Utah Water Savers

utahwatersavers.com

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

(Programs available throughout most of JVWCD'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.

Utah Water Savers

utahwatersavers.com

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 incentives for lawn replacement and water-efficient landscaping.

Landscape Incentive Program

New funding from the state and CUWCD comes with some modifications. Rebates are per square foot (ft^2)

Type	Water Efficiency Standards	No Water Efficiency Standards
New Construction Projects		
- Front yards	✗	✗
- Backyards	**$0.50**	**$0.50**
- Commercial, Industrial, Institutional	✗	✗
Retrofit Projects		
- Front yards (full)	**$3.00**	**$0.75**
- Backyards (full)	**$3.00**	**$0.75**
- Front yards (partial)	**$2.00**	**$0.50**
- Backyards (partial)	**$2.00**	**$0.50**
- Commercial, Industrial, Institutional	**$2.00**	**$0.50**

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.

2023 Member Agency Grant Program Changes

Minor modifications eligible projects for Tier 1 funding

- Member Agency landscaping projects will be transitioned to use Utah Water Savers.
  - Doing so will allow the projects to receive higher funding levels and ease program administration.
- Secondary meters will no longer be funded.
  - Due to available state funding and requirements.

Strategic WATER MANAGEMENT

Strategic Water Management is a joint effort between JVWCD 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 JVWCD, 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.

Press Event

- May 1, 2023
- 9:30 AM
- Conservation Garden Park

- Speakers
  - Governor Spencer Cox
  - Senator Scott Sandall
  - Representative Doug Owens
  - Candace Hasenyager (DWRe)
  - Joel Ferry (DNR)
  - Mayor Kress Staheli (Washington City)
  - CUWCD (TBD)

JORDAN VALLEY WATER

CONSERVANCY DISTRICT

Delivering Quality Every Day®

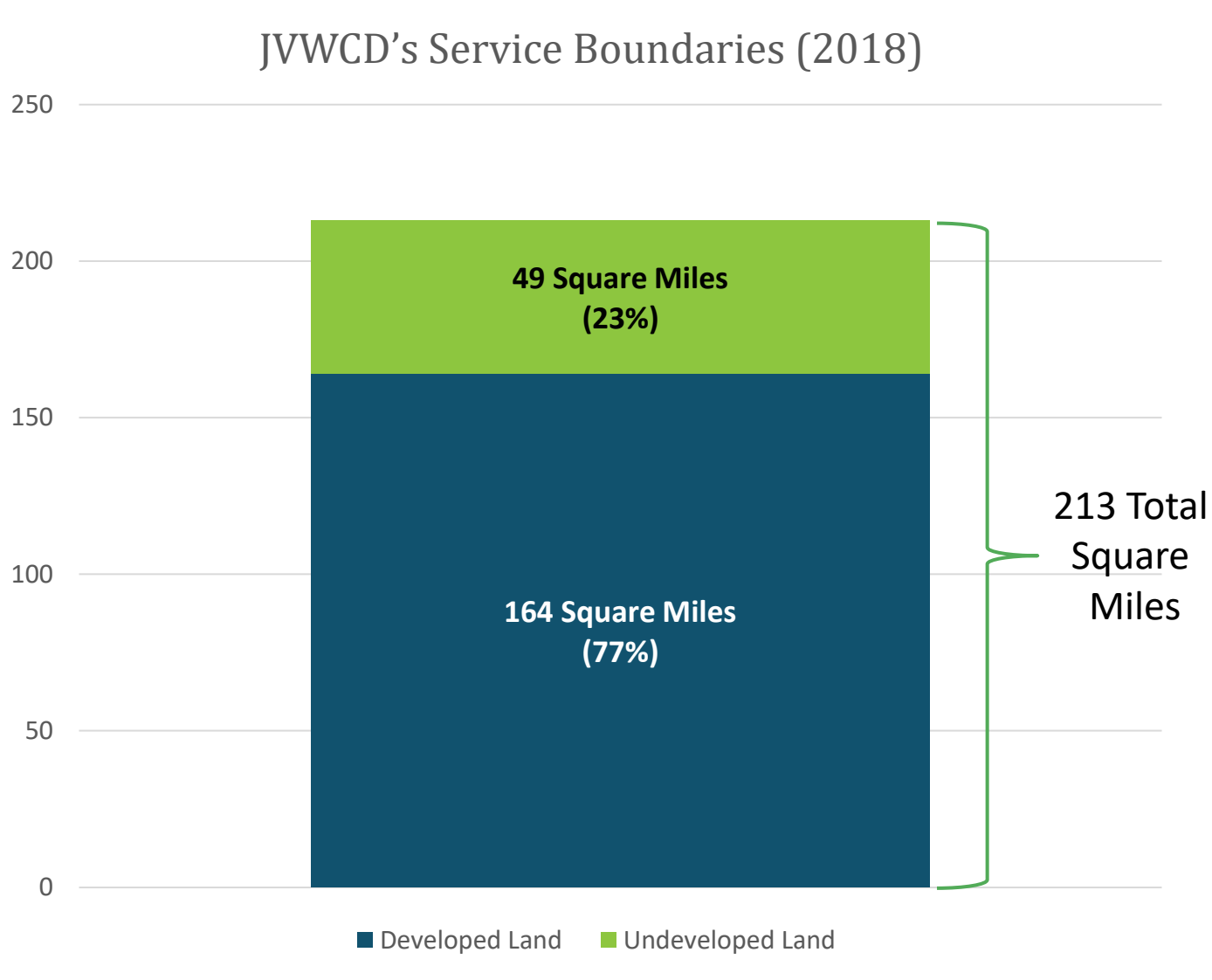
Future Land Development

In 2019, JVWCD staff performed a study to see JVWCD's current water supply portfolio was sufficient to meet the demands of its existing service boundaries.

The study concluded that there is enough water to meet the needs of JVWCD's existing service area so long as new construction conforms to a series of water efficiency standards.

This water supply has since been categorized as Block 1 water. It excludes the Central Water Project and the future Bear River Development.

A Block 2 water rate was created to reflect the cost of JVWCD's latest water supply, the Central Water Project.



Impact of Water Efficiency Standards

	2019 Budget and Staffing (current)	2030 Budget and Staffing (if water efficiency standards are adopted by 2023)	2030 Budget and Staffing (if no water efficiency standards are adopted)
Total Annual Budget	$1,655,242	$4,090,008	$17,846,925
Full Time Employees	6	9	14
Seasonal Employee	10	12	16
Total Spending (2019-2030)		$34,312,565	$116,487,082

Note: Both 2030 projections use a similar methodology to achieve the 2030 goal. Each conservation program has an estimated level of public participation, staffing time, budgetary cost, and associated water savings for each year through 2030.

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Key Benefits of Adopting Water Efficiency Standards

- Every land use decision is a water management decision. As land is developed, it creates a perpetual commitment for how water will be used for many decades.
- 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.
- 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.

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Long-Term Water Supply Planning and 10-Year Capital Projects Plan

Demand, Supply, and Major Conveyance Master Plan Summary

April 26, 2023

Evaluation Criteria

1. Used to identify deficiencies and develop improvements.
2. Established from:
   - State Regulations
   - Industry Standards
   - JVWCD LOS Goals

JORDAN VALLEY WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER CONSERVANCY DISTRICT STRATEGIC PLAN

UPDATED NOVEMBER 10, 2016

Jordan Valley Water Conservancy District's strategic plan is to pursue its mission of delivering quality water and services every day, and its vision to provide a sustainable water supply to promote individual and community well-being. This will be accomplished by focusing on the "Ten Attributes of An Effectively Managed Water Utility," and by employing the keys to management success, from the emerging industry collaborative effort known as "Effective Utility Management."[1]

OUR STRATEGIC PLAN ELEMENTS INCLUDE:

1. PRODUCT QUALITY

We understand many of our Member Agencies rely on our high-quality finished water for meeting established public expectations. To provide this service, our strategies are to:

1.1. Meet and exceed drinking water regulations through aggressive self-initiated water quality goals.
1.2. Maintain the perceived and aesthetic quality of finished water through reasonable process improvements and system operations.
1.3. Educate the public on water quality issues through its Water Quality Reports, tours, and other efforts.
1.4. Establish a committee of District employees who can detect changes in water aesthetics.

2. WATER RESOURCE ADEQUACY

Developing and maintaining an adequate water supply to meet the current and future needs of our customers is central to our mission and vision. Strategies include:

2.1. Maintain a long-term water supply plan, considering a 30- to 40-year planning horizon, build-out water needs within our boundaries, water conservation goals, and potential extreme climate conditions.
2.2. Actively develop and/or contract for sufficient water supplies and adequate infrastructure to meet projected needs over a term of 10-15 years.
2.3. Maintain sufficient water sources for meeting short-term (2 years) "dry year" water demands.

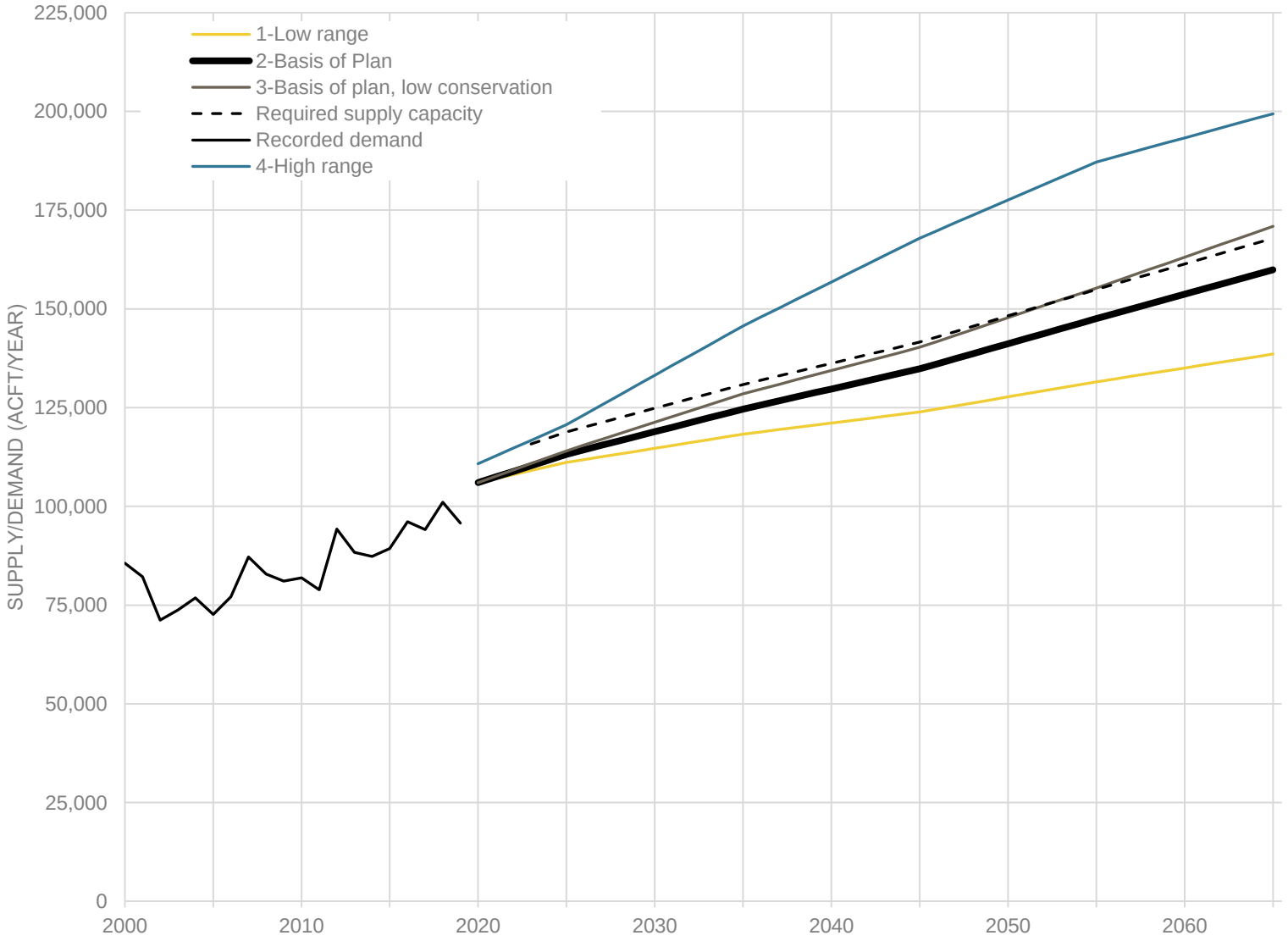
[1] "Effective Utility Management: A Primer for Water and Wastewater Utilities," June 2008

PAGE 1

Demand Projections (Annual)

Range of demands accounting for uncertainty in the following parameters:

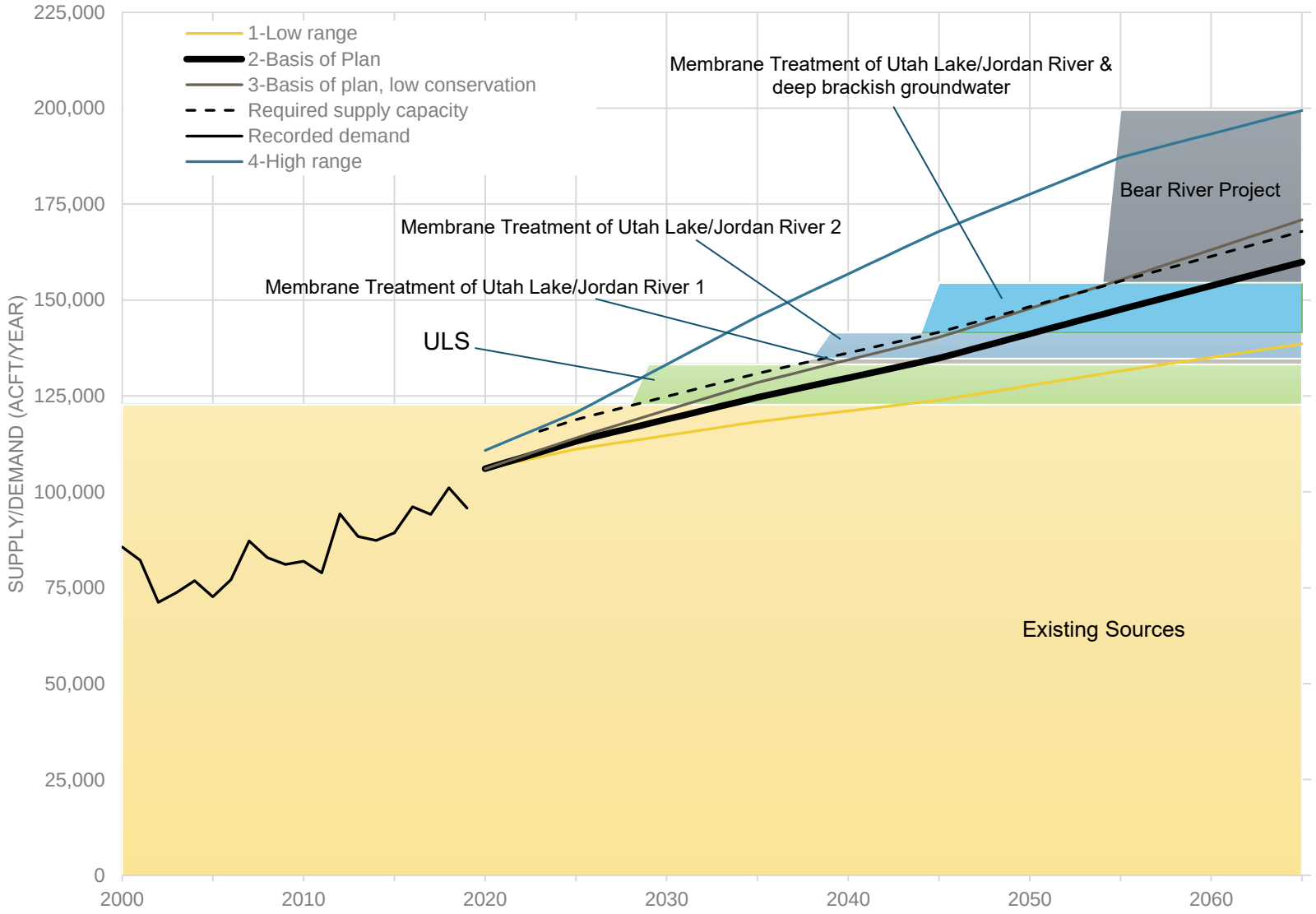
- Population growth rate
- Conservation effort effectiveness
- Climate change impact



Annual Supply and Demand

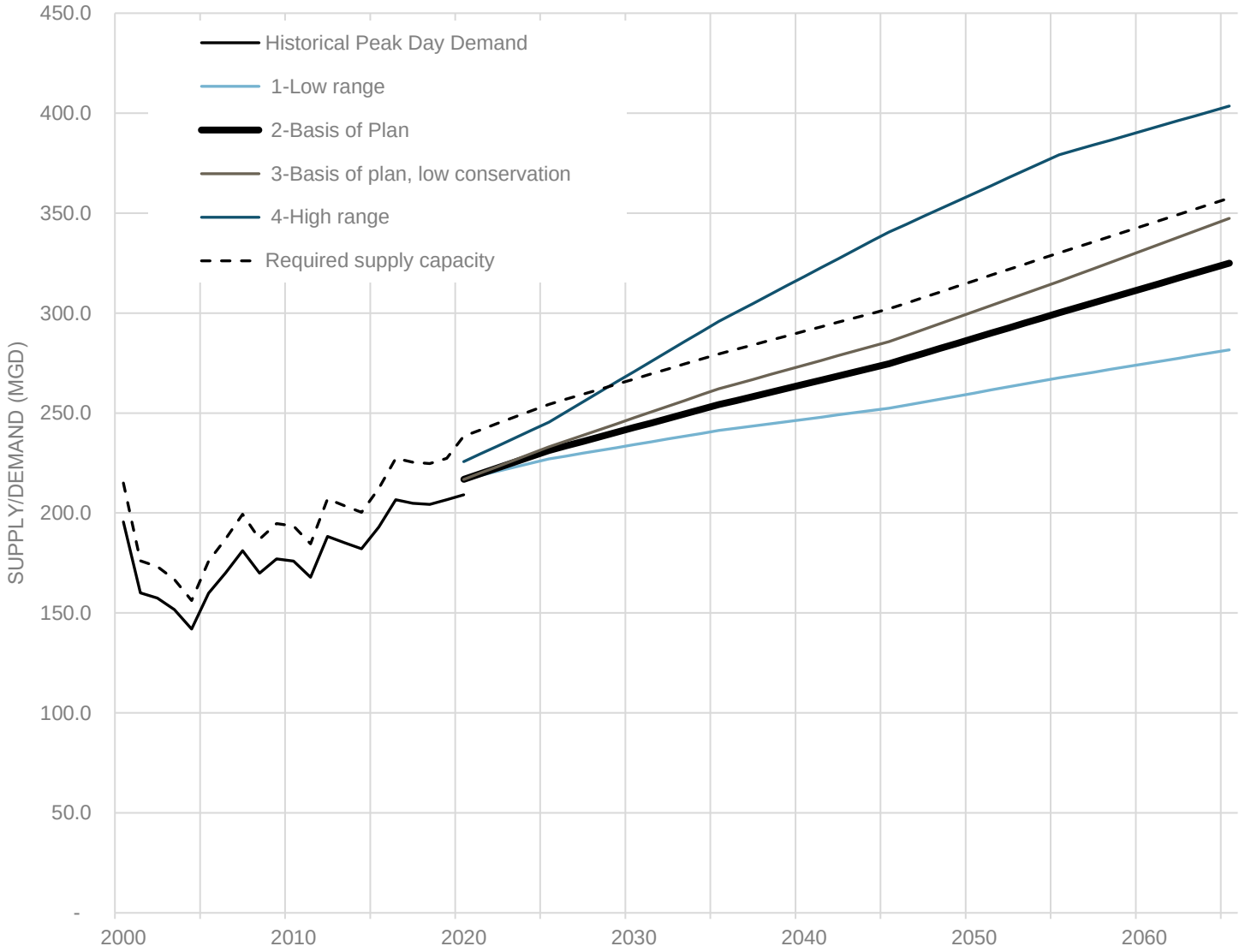
Timing for new Sources:

- ULS Water – 2028
- New SWGWTP Wells – 2038
- SWGWTP Expansion – 2039
- Utah Lake/Jordan River Treatment – 2045
- Bear River Water Development - 2055



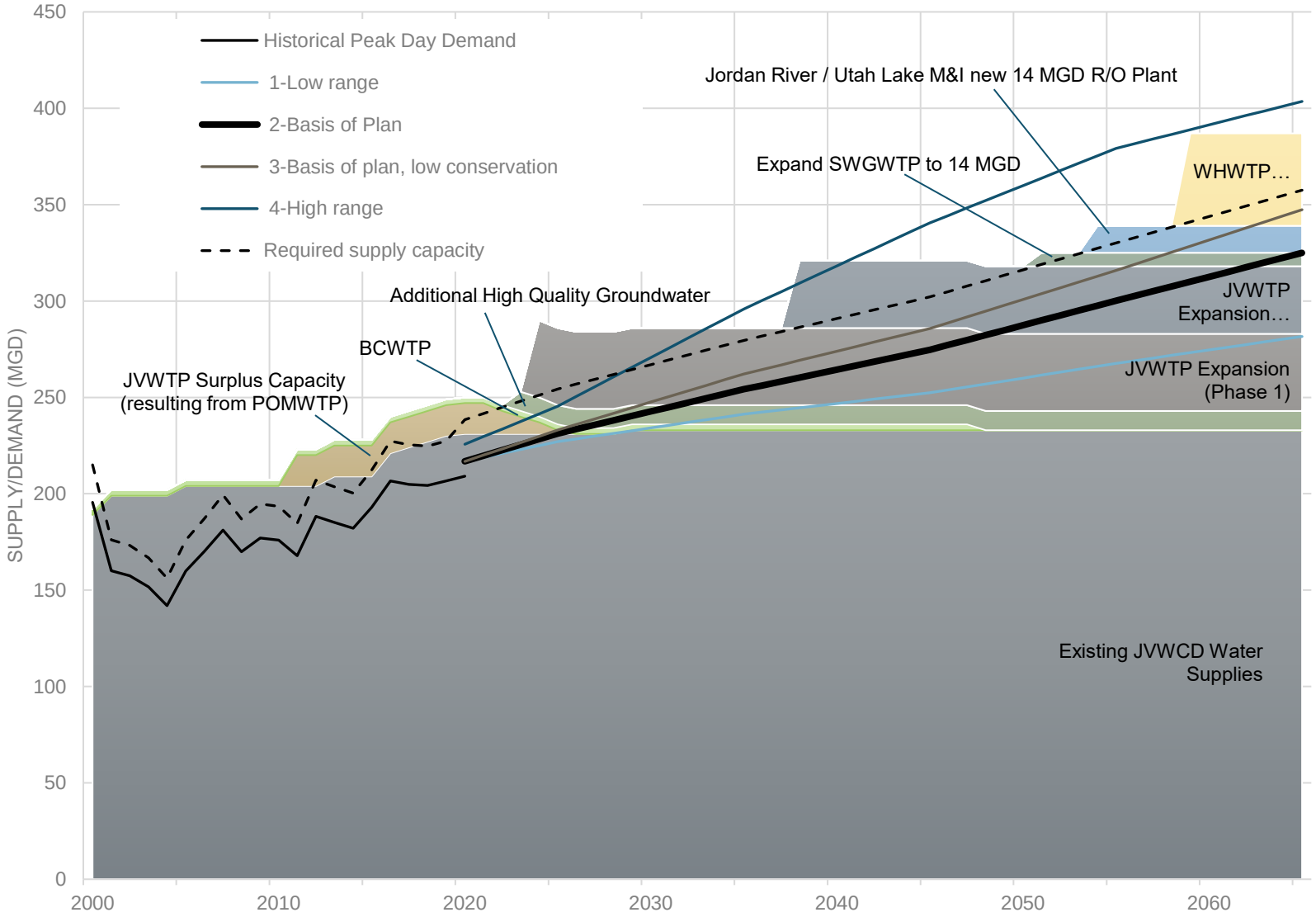
Demand Projections (Max Day)

Peaking factor from average day demand = 2.28



Max Day Supply and Demand

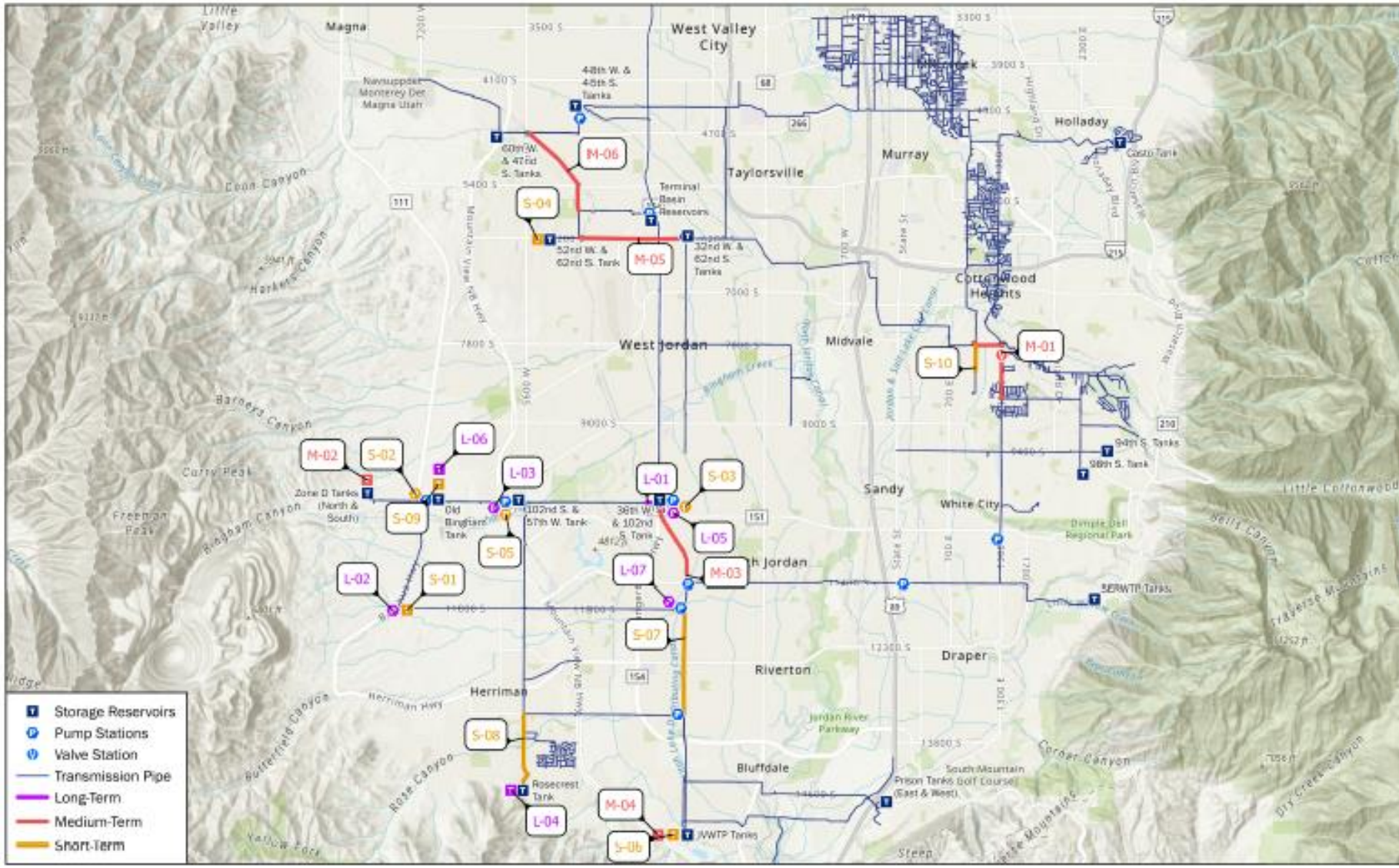
- New wells – 2023
- JVWTP Expansion to 220 MGD – 2024
- JVWTP Expansion to 255 MGD – 2038
- SWGWTP Expansion – 2039
- Utah Lake/Jordan River Treatment – 2045
- West Haven WTP - 2055



Project Plan

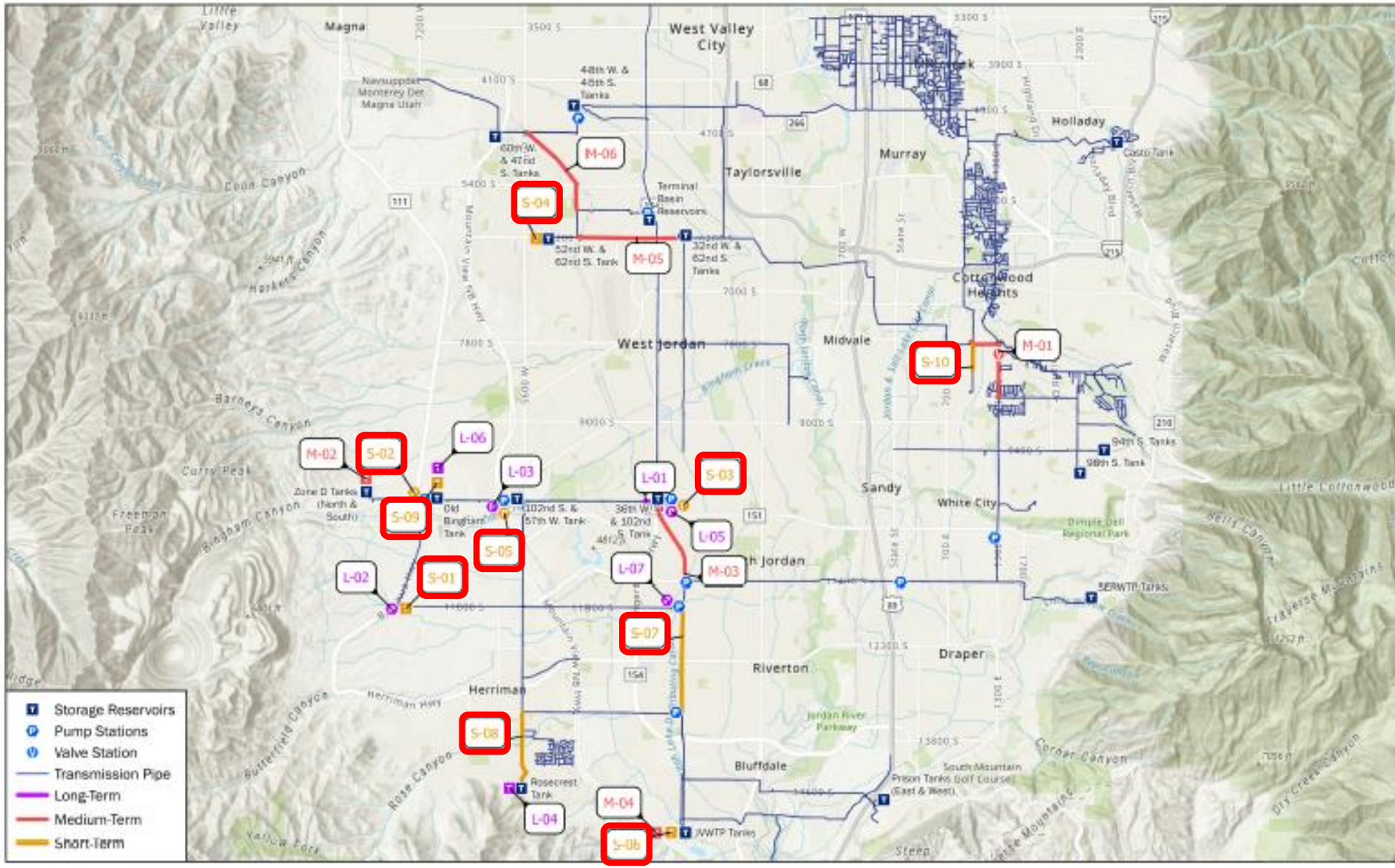
Planning Horizons

- 2030
- 2040
- 2065

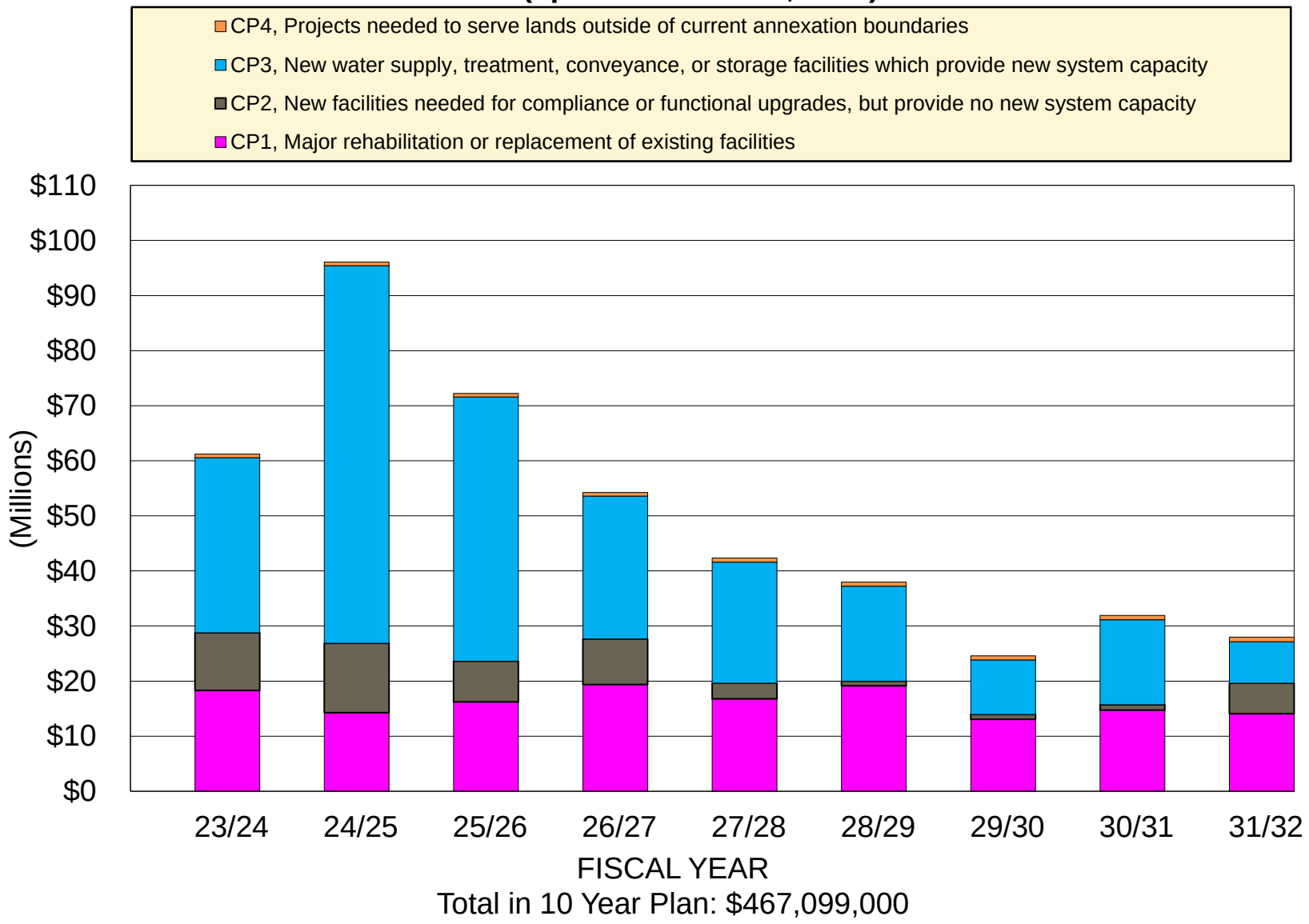


2030 Project Plan

- Short Term Projects



TEN YEAR CAPITAL PROJECTS PLAN SUMMARY
(updated March 16, 2023)



Total in 10 Year Plan: $467,099,000

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Financial Plan, Water Rates and Methodology

Annual Member Agency Meeting

David Martin
CFO/Treasurer

April 26, 2023

JORDAN VALLEY WATER CONSERVANCY DISTRICT

2023 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

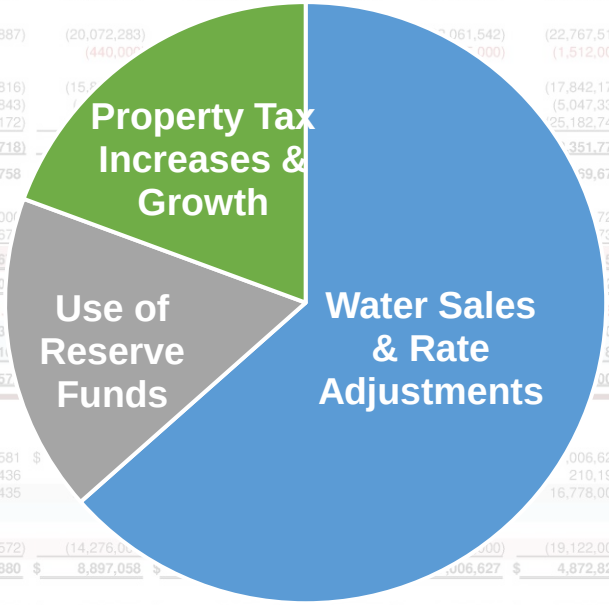
10 YEAR FINANCIAL PROJECTIONS

(March 2023 Update w/ March 2023 Capital Projects Plan projections)

Fiscal Years

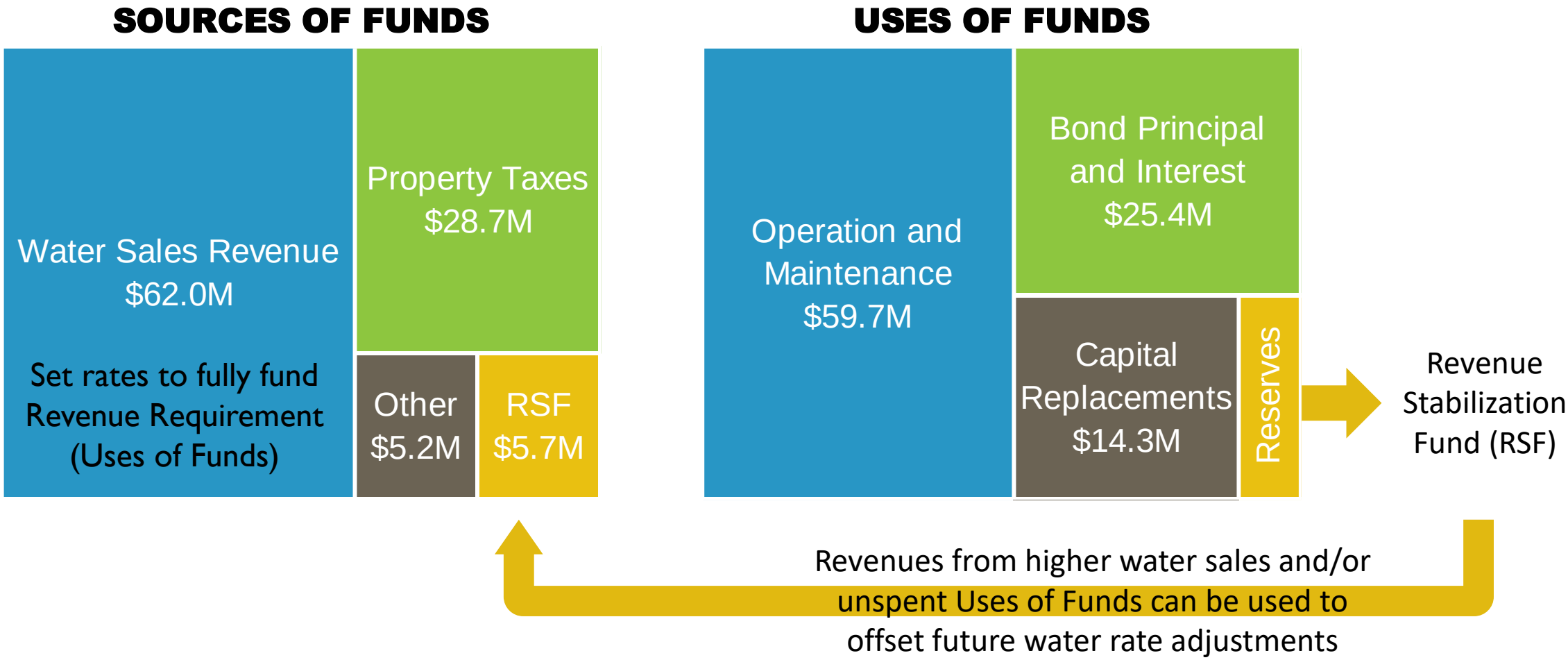
13-Apr-23 2.0% to 5.0% Proposed Rate Increases WITH MULTIPLE Tax Rate Increases		CURRENT FY BUDGETED 2022/2023	PROPOSED BUDGET 2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031
Water Delivery Percentage Increase (From the Water Supply Plan)		-1.9%	0.0%	9.5%	1.3%	1.0%	1.0%	1.0%	1.0%	1.0%
Budgeted Water Deliveries		102,000	102,000	111,738	113,173	114,318	115,463	116,608	117,753	118,898
Actual Water Delivery Percentage Change										
Actual Water Deliveries										
Average Water Rate Increase		3.5%	5.0%	4.0%	4.0%	4.0%	3.5%	3.0%	2.0%	2.0%
Average Water Rate		$581.50	$610.58	$635.00	$660.40	$686.82	$710.84	$732.16	$746.80	$757.94
REVENUES:										
Water Sales	Vol*Rate	$ 59,313,072	$ 61,980,076	$ 71,000,000	$ 75,000,000	$ 78,000,000	$ 81,000,000	$ 84,950,094	$ 87,499,899	$ 90,117,550
Property Taxes	1.8%	25,650,346	28,735,600	29,000,000	30,000,000	31,000,000	32,000,000	34,194,098	34,809,592	35,436,165
Other	1.5%	3,842,393	7,953,800	6,673,107	4,664,204	4,734,167	4,805,180	4,877,258	4,950,417	5,024,673
TOTAL REVENUES		88,805,811	98,669,476	106,621,496	112,536,713	117,231,044	120,700,157	124,021,450	127,259,908	130,578,388
OPERATING EXPENSES:										
Water Purchased	3.2%	(18,615,784)	(19,449,887)	(20,072,283)			(22,061,542)	(22,767,511)	(23,496,071)	(24,247,945)
Additional 6,300 AF CUP Water				(440,000)			(1,500,000)	(1,512,000)	(1,543,500)	(1,575,000)
ULS Water Supply (16,400 AF)										(3,280,000)
Operating & Maintenance	3.0%	(13,213,689)	(15,390,816)	(15,8				(17,842,173)	(18,377,438)	(8,928,761)
General & Administrative	2.7%	(4,135,820)	(4,417,843)					(5,047,339)	(5,183,617)	(5,323,575)
Personnel	3.7%	(19,587,691)	(20,467,172)					(25,182,749)	(26,314,511)	(27,488,148)
TOTAL OPERATING EXPENSES		(55,552,984)	(59,725,718)					(76,351,772)	(74,915,137)	(80,843,429)
INCOME BEFORE DEBT SERVICE		33,252,827	38,943,758					69,678	52,344,771	49,734,959
DEBT SERVICE PAID:										
Principal		(11,367,000)	(12,312,00					725)	(14,009,200)	(15,097,275)
Interest		(11,797,500)	(13,093,67					33)	(17,465,972)	(17,292,149)
TOTAL DEBT SERVICE		$ (23,164,500)	$ (25,405,6					58)	$ (31,475,172)	$ (32,389,424)
PAYGO FROM OPERATIONS		$ 10,088,327	$ 13,538,0					20	$ 20,869,599	$ 17,345,535
DEBT SERVICE COVERAGE		1.44	1.					32	1.66	1.54
FROM REVENUE STABILIZATION FUND (RATES		1,674,574	2,982,3					00	2,000,000	2,000,000
ADDITIONAL AMOUNT FROM REV STAB FUND		6,727,534	2,677,1					80	-	-
AVAILABLE FOR PAYGO TRANSFER		$ 18,490,435	$ 19,197,57					000	$ 22,869,599	$ 19,345,535
CAPITAL FUNDS BALANCE (CASH BASIS FROM BOARD REPORT)										
REPLACEMENT RESERVE FUND										
Beginning of Year R&R Fund Balance:		$ 10,563,095	$ 10,659,581	$				006,627	$ 4,872,826	$ 11,096,011
Interest Income	3.0%	78,177	375,436					210,199	146,185	332,880
Transfers from Operations		10,898,744	15,880,435					16,778,000	19,122,000	3,045,000
Transfers from Revenue Stabilization Fund										
Transfers from Capital Projects Fund		4,000,000								
CP1 Capital Expenditures (Net)		(14,880,435)	(18,328,572)	(14,276,0				(19,122,000)	(13,045,000)	(4,749,000)
End of Year R&R Fund Balance:		$ 10,659,581	$ 8,586,880	$ 8,897,058	$			006,627	$ 4,872,826	$ 11,096,011
CAPITAL PROJ. FUND & BOND PROCEEDS										
Beginning of Year Capital Funds Balance:		$ 49,452,872	$ 19,658,761	$ 79,373,088	$ 412,281	$ 34,837,649	$ 1,484,778	$ 21,394,321	$ 3,618,151	$ 17,639,696
Interest Income	3.0%	433,723	589,763	2,381,193	12,368	1,045,129	44,543	641,830	108,545	529,191
Transfers of Impact Fees		336,820	512,000	435,000	435,000	435,000	435,000	435,000	435,000	435,000
Transfers from Operations		-	-	-	-	-	-	-	-	-
From Debt Service Reserve Funds										
From Sale of Capital Project Assets			1,500,000							
Transfers to Replacement Reserve Fund		(4,000,000)	-	-	-	-	-	-	-	-
Bond Proceeds		-	100,000,000	-	90,000,000	-	45,000,000	-	25,000,000	-
CP2-CP4 Capital Expenditures		(26,564,654)	(42,887,436)	(81,777,000)	(56,022,000)	(34,833,000)	(25,570,000)	(18,853,000)	(11,522,000)	(17,180,000)
End of Year Capital Projects Fund Balance:		$ 19,658,761	$ 79,373,088	$ 412,281	$ 34,837,649	$ 1,484,778	$ 21,394,321	$ 3,618,151	$ 17,639,696	$ 1,423,887
END OF YEAR CAPITAL FUNDS BALANCE:		$ 30,318,342	$ 87,959,968	$ 9,309,339	$ 42,058,619	$ 5,752,377	$ 28,400,948	$ 8,490,977	$ 28,735,707	$ 11,148,778

Funding the 10-Year Financial Plan (Operating Budgets)



Budget Process

Revenue Stabilization Fund (RSF)



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. 8,600 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

Revenue Requirement

Compares the revenue of Jordan Valley to its expenses to evaluate the level of overall rates

O&M Expenses

Debt Service Payments

Capital Replacements

Reserves

Drives the need for overall water rate adjustments

Cost of Service

Equitably (proportionally) allocates the revenue requirement between each member agency and the retail customers

Base-Extra Capacity Method

Peaking Factors measure extra capacity needs

Changes in cost allocations cause adjustments to member agency water rates

Rate Design

Design cost-based rates to meet the revenue needs of Jordan Valley, along with any other rate design goals and objectives

Uniform Wholesale Rates

Tiered Retail Rates

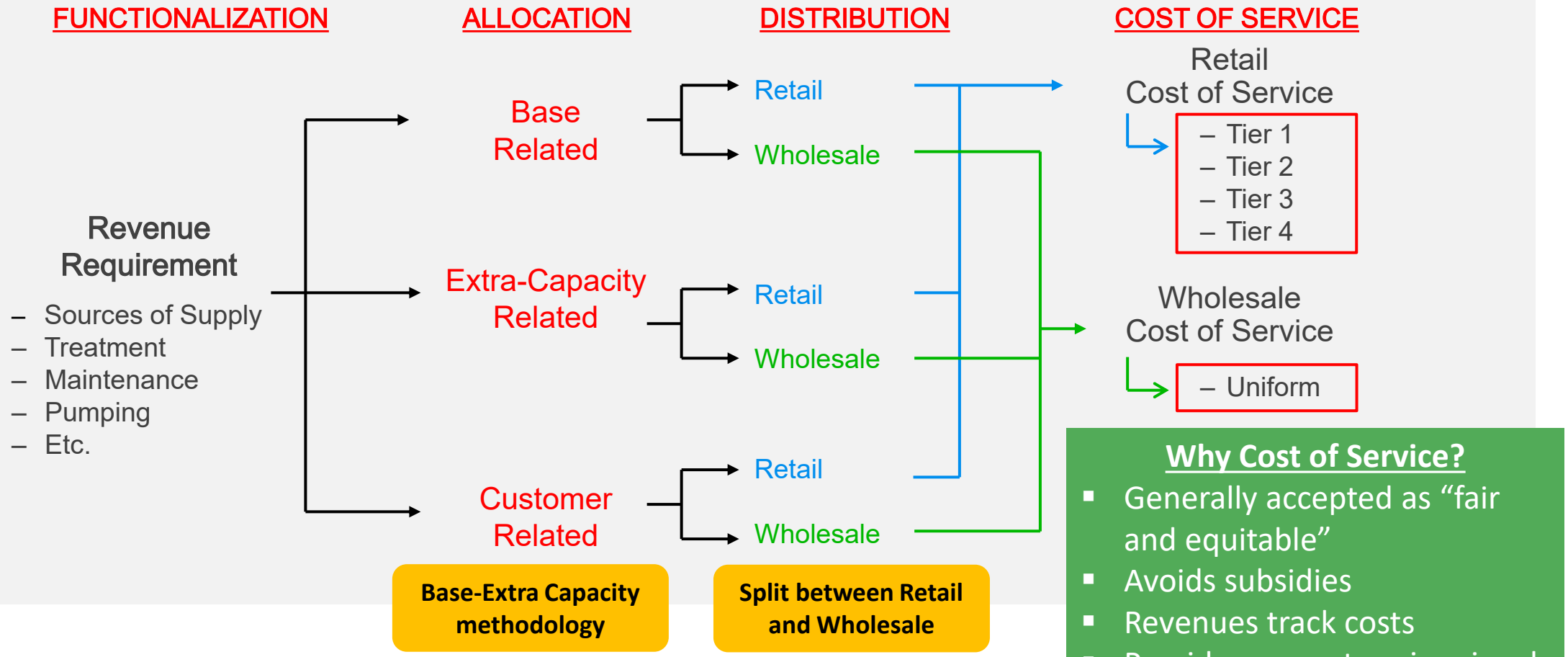
Monthly Base Charge/Flat Fee

REVENUE REQUIREMENT SUMMARY CONCLUSIONS

- Tentatively approved 5.0% overall adjustment to water rates
- Property tax rate increase
- Use $5.7 million of Revenue Stabilization Fund
- Impacting deficiencies:
  - Inflation to operating expenses
  - Capital replacement funding through rates
  - Borrowing and annual debt service payments

COST OF SERVICE ANALYSIS

SIMPLIFIED OVERVIEW OF A COST OF SERVICE ANALYSIS

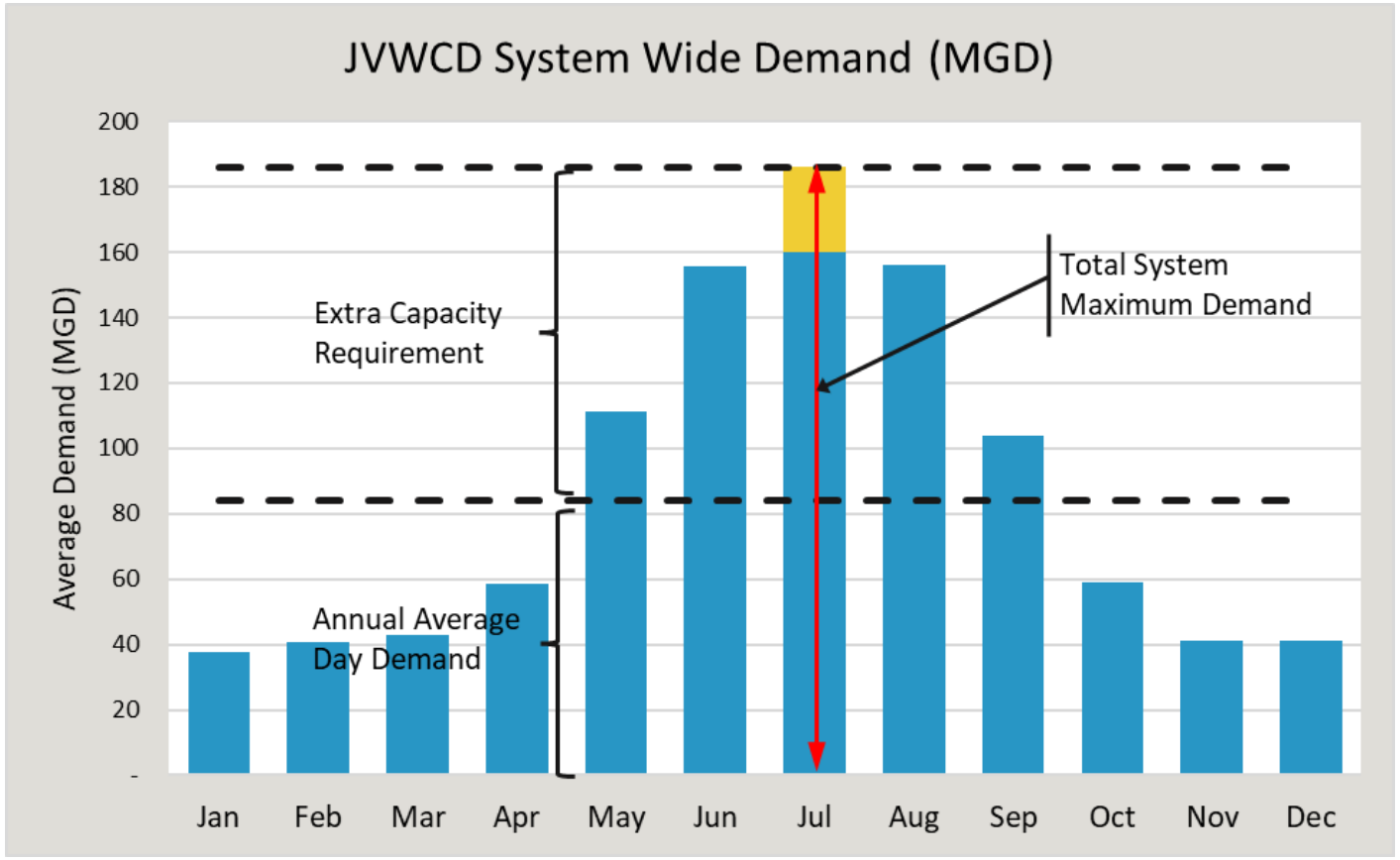


Why Cost of Service?

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

COST OF SERVICE ANALYSIS

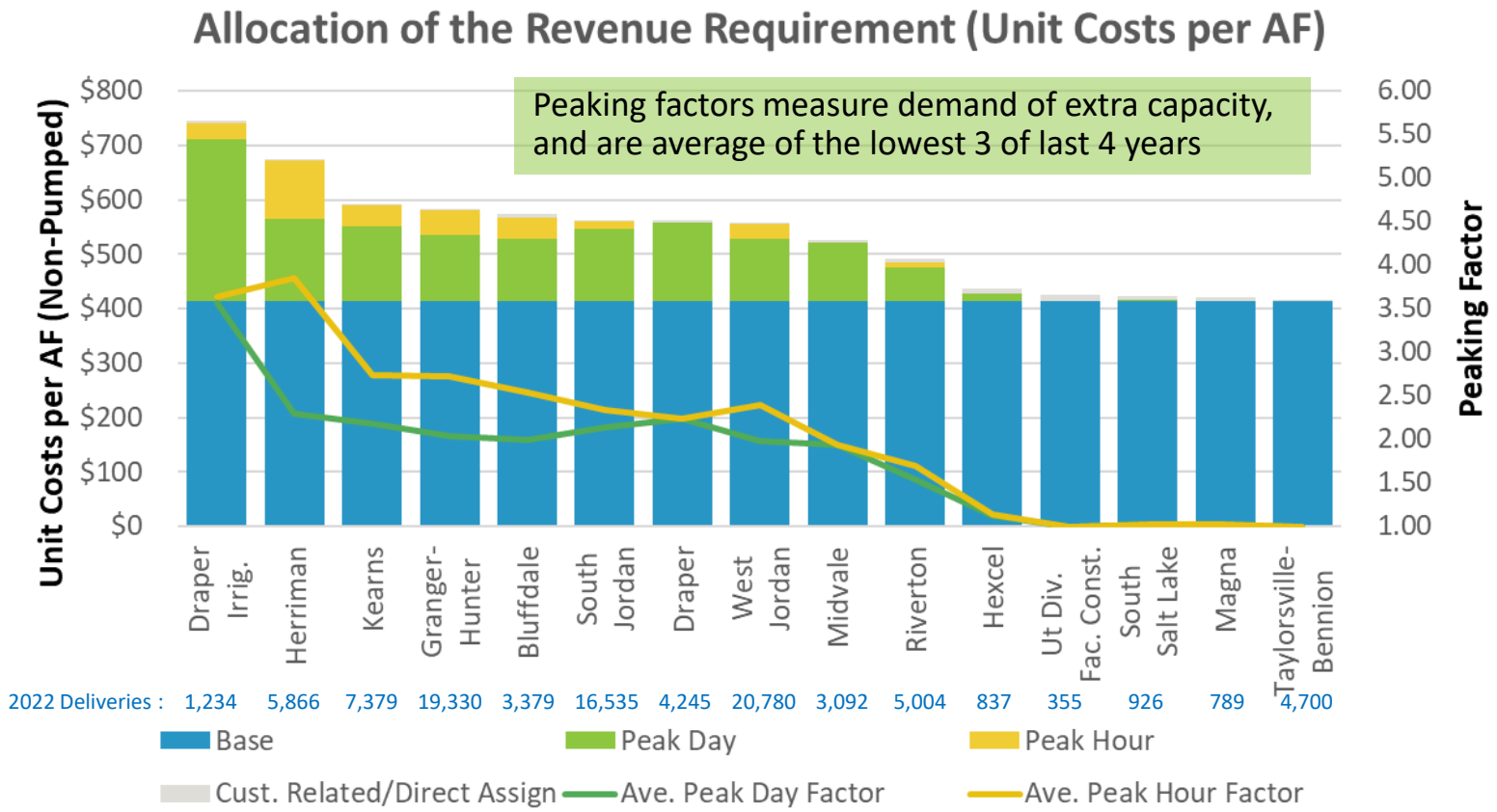
BASE-EXTRA CAPACITY METHOD



	NET REVENUE REQUIREMENT	RATE PER ACRE FOOT
CUST. RELATED & DIRECT ASGN	$1.3 million	Varies
EXTRA HOUR CAPACITY	$3.3 million	$0 - $105
EXTRA DAY CAPACITY	$12.7 million	$0 - $296
BASE	$42.8 million	$413
TOTAL REVENUE REQUIREMENT	$60.1 million	

COST OF SERVICE ANALYSIS

BASE-EXTRA CAPACITY METHOD



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TOTAL REVENUE REQUIREMENT	$60.1 million	

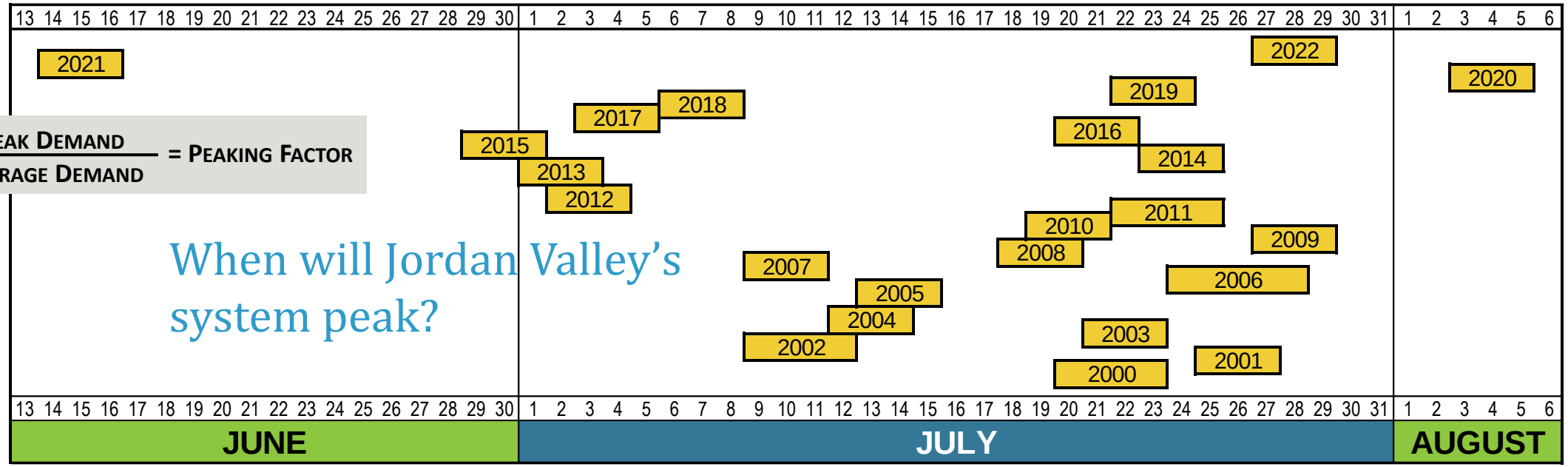
2023 Annual Member Agency Meeting

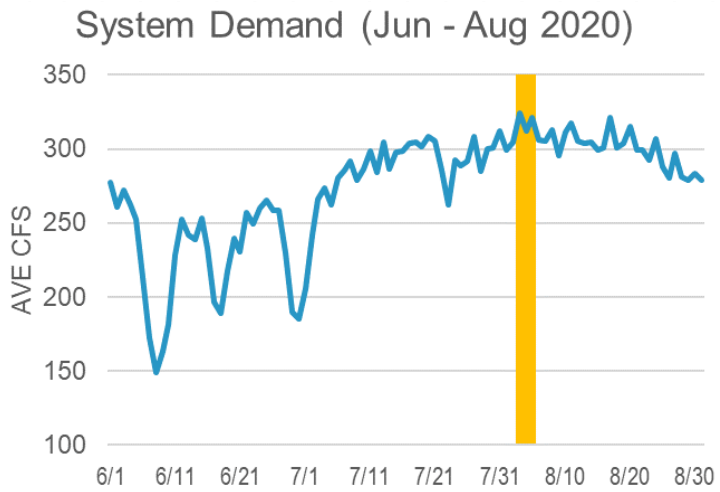
Financial Plan, Water Rates and Methodology

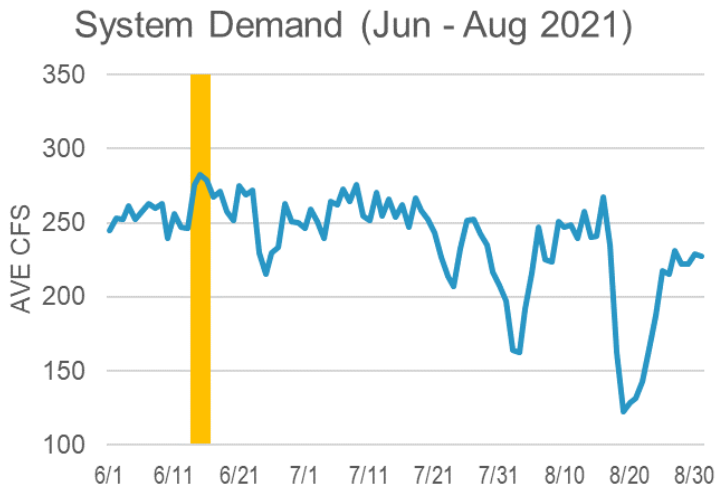
Peaking Factors

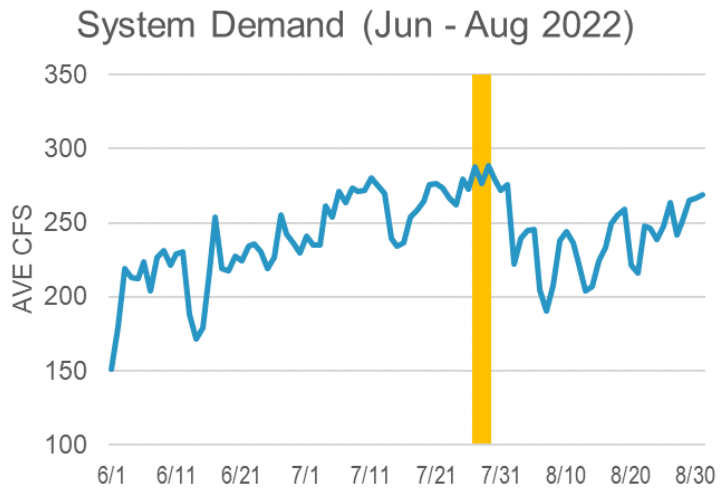
$$\frac{\text{Peak Demand}}{\text{Average Demand}} = \text{Peaking Factor}$$

When will Jordan Valley's system peak?









JORDAN VALLEY WATER CONSERVANCY DISTRICT

2023 Annual Member Agency Meeting

2023/2024 Tentative Water Rates

2023/2024 Water Rates

5.0% OVERALL ADJUSTMENT TO WATER RATES

MEMBER AGENCY (Rate per Acre Foot)	PUMP ZONES	2022/2023 RATES	2023/2024 RATES	$ CHANGE	% CHANGE
Bluffdale	JVWTP	$565.38	$568.28	$2.90	0.5%
Draper City		532.54	559.55	27.01	5.1%
Draper Irrigation		772.01	743.26	(28.75)	-3.7%
Granger-Hunter	B North	557.28	581.29	24.01	4.3%
Herriman	C South, D South	630.53	671.14	40.61	6.4%
Hexcel Corp.	B North	420.72	434.26	13.54	3.2%
Kearns	B North	561.53	588.73	27.20	4.8%
Magna Water	B North	397.14	418.54	21.40	5.4%
Midvale		501.34	523.68	22.34	4.5%
Riverton	C South	483.59	487.60	4.01	0.8%
South Jordan	B North/South, C South, D South	532.79	560.44	27.65	5.2%
South Salt Lake		408.51	420.17	11.66	2.9%
Taylorsville-Bennion	B North	395.21	413.91	18.70	4.7%
Utah Div. of Fac. Constr. Mgmt.		397.51	418.10	20.59	5.2%
West Jordan	B North/South C South, D South	530.43	556.27	25.84	4.9%
BLOCK 2 WATER RATE	Plus Pumping	$1,094.58	$1,128.52	33.94	3.1%
BCWTP RATE		527.65	517.93	(9.72)	-1.8%

MONTHLY METER BASE CHARGE				
METER SIZE	22/23 RATES	23/24 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	22/23 RATES	23/24 RATES	$ CHANGE	% CHANGE
B North	$22.92	$22.43	$(0.49)	-2.1%
B South	41.60	40.36	(1.24)	-3.0%
C South	57.93	56.36	(1.57)	-2.7%
D South	99.74	91.91	(7.83)	-7.9%
JVWTP	29.58	29.58	0.00	0.0%

Water Rate Design & Remaining Timeframe

- 2023/2024 water rates:
  - Monthly base charge/flat fee
  - Pumping costs are directly assigned (zones)
  - Uniform wholesale rates – Block 1 and Block 2
  - Tiered retail rates
- Tentative water rates were approved 4/12/2023
- Public hearing is scheduled 5/10/2023 at 6:00 p.m.
- Final water rates to be approved/adopted 6/7/2023
- Effective 7/1/2023

2023 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 2023/2024 water rates.

2023 Annual Member Agency Meeting
Financial Plan, Water Rates and Methodology

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

Jordan Valley Water

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

External Influences

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

5.0% 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 contract
- Actual annual water deliveries
- Extra-capacity peak day/hour flows
- Number of meters and meter capacity
- Conservation goals

+/- 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

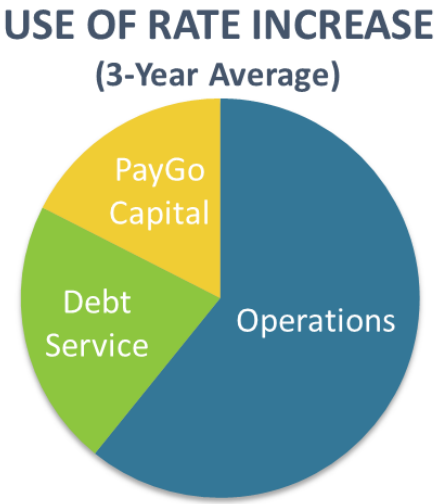
2023 Annual Member Agency Meeting
Financial Plan, Water Rates and Methodology

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 Jordan Valley
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 5.0% overall adjustment to rates followed by 2.0-4.5% 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



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 5.0% 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
  - 5.0% adjustment for overall system
  - Wholesale – Member Agency range from -3.7% to 6.4%
  - Retail – retail customers receive 7.2% adjustment
- Pumping costs are directly assigned (zones)

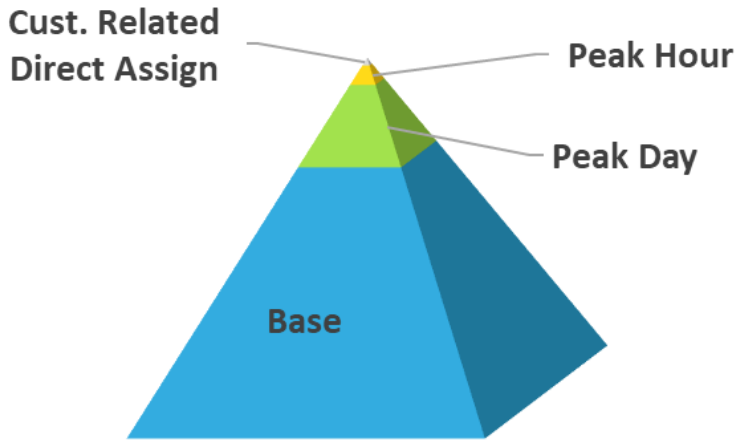
BASE-EXTRA CAPACITY METHOD

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)

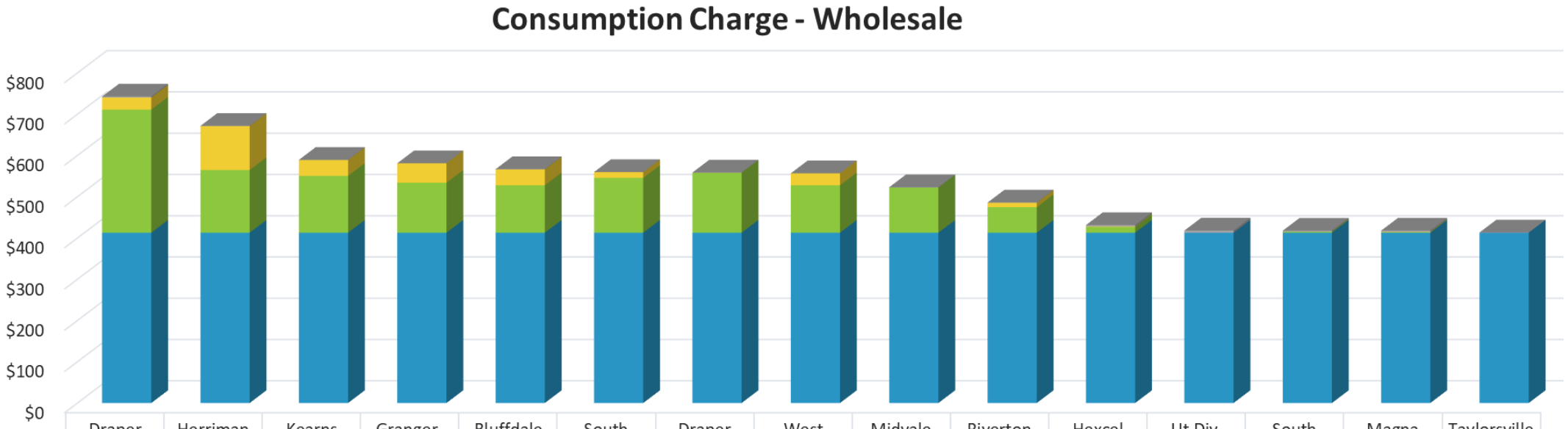
2. **Extra capacity** (peak day, peak hour) – Costs associated with meeting rate of use requirements in excess of average

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)



BASE-EXTRA CAPACITY METHOD

WHOLESALE UNIT COST BY COMPONENT ($/ACRE FOOT)

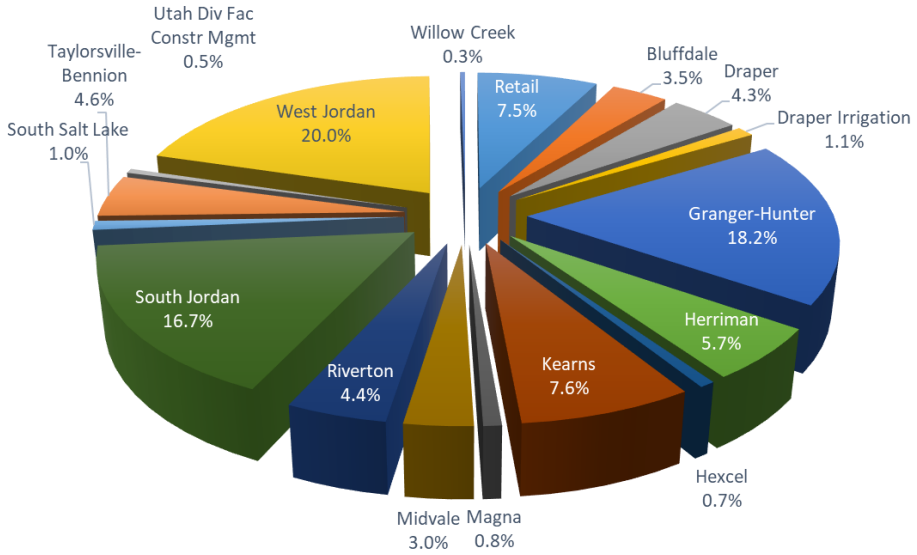


	Draper Irrigation	Herriman	Kearns	Granger-Hunter	Bluffdale	South Jordan	Draper City	West Jordan	Midvale	Riverton	Hexcel Corp.	Ut Div. Fac. Const.	South Salt Lake	Magna Water	Taylorsville-Bennion
Fire/Rev/DA	$2.35	$0.45	$0.33	$0.14	$0.72	$0.15	$0.59	$0.13	$0.83	$0.57	$3.59	$5.17	$2.54	$3.23	$0.55
Extra Hour Capacity	$29.20	$106.52	$38.34	$47.05	$38.39	$14.11	$0.00	$28.86	$0.00	$10.65	$0.96	$0.00	$0.00	$0.62	$0.00
Extra Day Capacity	$298.35	$151.92	$137.76	$121.08	$114.92	$132.64	$145.22	$114.96	$109.32	$61.92	$13.88	$0.00	$2.34	$1.15	$0.00
Base	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70	$412.70

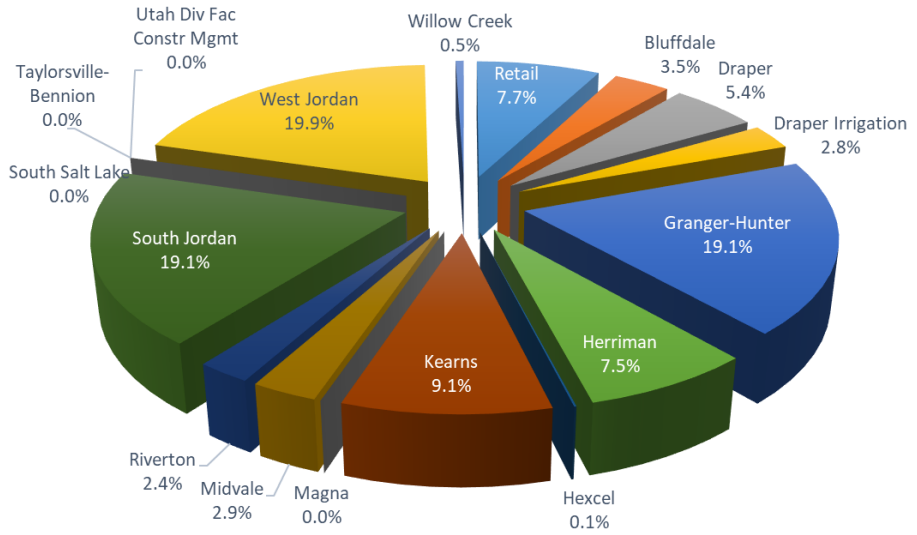
2023 Annual Member Agency Meeting
Financial Plan, Water Rates and Methodology

BASE-EXTRA CAPACITY METHOD

Base Allocation



Peak Day Allocation

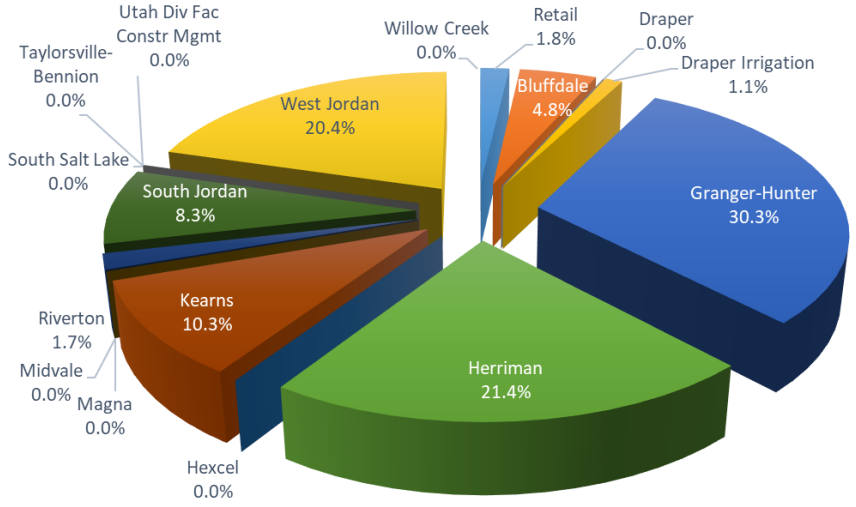


Splitting the Pie

Base Allocation – based on deliveries

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

Peak Hour Allocation



PEAKING FACTORS

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

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

- 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

2023 Annual Member Agency Meeting
Financial Plan, Water Rates and Methodology

PEAKING FACTORS

PEAK DAY

PEAK HOUR

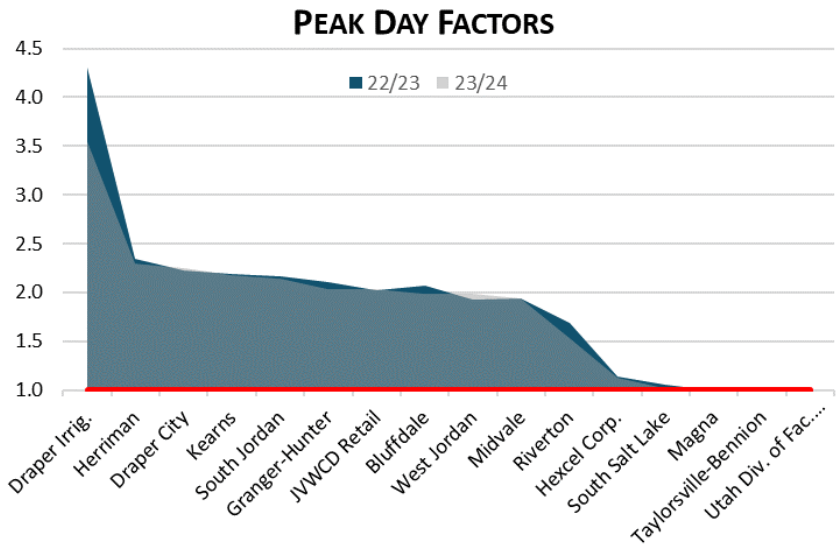
	Actual Peak DAY Factor					Average Peak DAY Factor (for FY)		Actual Peak HOUR Factor					Average Peak HOUR Factor (for FY)	
Peak day period:	7/6-7/8	7/22-7/24	8/3-8/5	6/14-6/16	7/27-7/29	*Average of the lowest 3 of last 4 years*		7/6-7/8	7/22-7/24	8/3-8/5	6/14-6/16	7/27-7/29	*Average of the lowest 3 of last 4 years*	
Member Agency	**2018**	**2019**	**2020**	**2021**	**2022**	**22/23**	**23/24**	**2018**	**2019**	**2020**	**2021**	**2022**	**22/23**	**23/24**
Bluffdale	2.17	2.59	2.02	2.02	1.92	2.07	1.99	3.99	3.29	3.18	2.53	1.92	3.00	2.54
Draper	2.15	2.70	2.25	2.26	2.22	2.22	2.24	2.15	2.70	2.25	2.26	2.22	2.22	2.24
Draper Irr.(WaterPro)	5.51	4.38	5.26	3.29	3.00	4.31	3.56	6.18	4.61	5.26	3.29	3.01	4.39	3.64
Granger-Hunter	2.33	2.27	2.03	2.01	2.07	2.10	2.04	3.64	3.01	2.64	2.80	2.72	2.82	2.72
Herriman	2.62	2.64	2.19	2.23	2.48	2.35	2.30	4.25	4.29	3.61	3.83	4.10	3.90	3.85
Hexcel Corp.	1.22	1.21	1.00	1.24	1.15	1.14	1.12	1.47	1.21	1.00	1.59	1.19	1.23	1.13
Kearns	2.08	2.46	2.20	2.30	2.04	2.19	2.18	3.16	3.23	2.62	2.65	2.94	2.81	2.74
Magna Water	1.00	1.06	1.00	1.00	1.03	1.00	1.01	1.00	1.06	1.00	1.00	1.06	1.00	1.02
Midvale	2.96	2.14	1.78	1.91	2.11	1.94	1.93	10.15	2.14	1.78	1.91	2.11	1.94	1.93
Riverton	1.91	1.89	1.66	1.50	1.43	1.68	1.53	2.56	2.15	1.77	1.76	1.53	1.89	1.69
South Jordan	2.29	2.67	2.11	2.09	2.21	2.16	2.14	2.29	2.83	2.31	2.28	2.42	2.29	2.34
South Salt Lake	1.10	1.06	1.62	1.00	1.00	1.05	1.02	1.34	1.06	1.62	1.00	1.00	1.13	1.02
Taylorsville-Bennion	1.00	1.00	1.01	1.00	1.00	1.00	1.00	1.30	1.00	1.02	1.00	1.00	1.01	1.00
Utah Div. of Fac. Const.	1.00	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.00
West Jordan	1.84	2.45	1.93	2.02	2.00	1.93	1.98	2.71	2.98	2.29	2.56	2.36	2.52	2.40
JVWCD Retail System	2.02	2.25	1.85	2.20	2.04	2.02	2.03	2.23	2.41	2.03	2.32	2.04	2.19	2.13

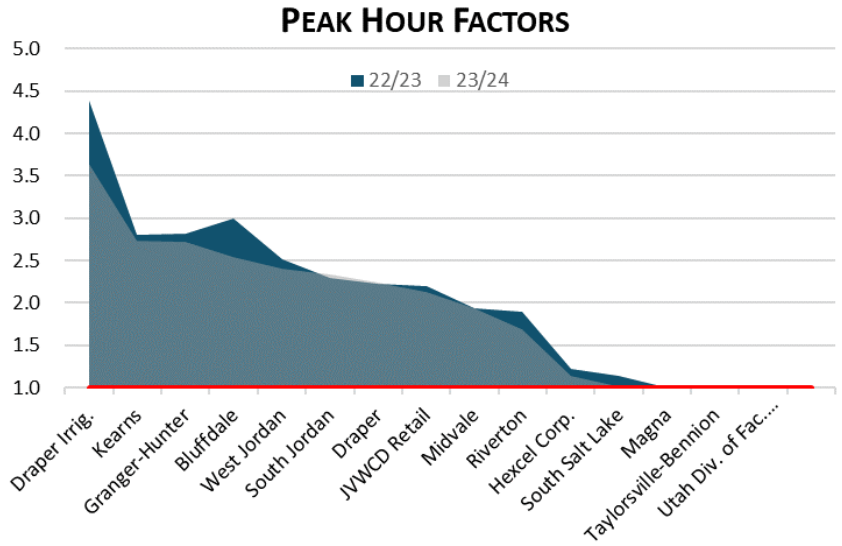
2023 Annual Member Agency Meeting
Financial Plan, Water Rates and Methodology

PEAKING FACTORS

PEAK DAY

Peak Day Factor	22/23	23/24
Draper Irrig.	4.31	3.56
Herriman	2.35	2.30
Draper City	2.22	2.24
Kearns	2.19	2.18
South Jordan	2.16	2.14
Granger-Hunter	2.10	2.04
JVWCD Retail	2.02	2.03
Bluffdale	2.07	1.99
West Jordan	1.93	1.98
Midvale	1.94	1.93
Riverton	1.68	1.53
Hexcel Corp.	1.14	1.12
South Salt Lake	1.05	1.02
Magna	1.00	1.01
Taylorsville-Bennion	1.00	1.00
Utah Div. of Fac. Cons	1.00	1.00





PEAK HOUR

Peak Hour Factor	22/23	23/24
Herriman	3.90	3.85
Draper Irrig.	4.39	3.64
Kearns	2.81	2.74
Granger-Hunter	2.82	2.72
Bluffdale	3.00	2.54
West Jordan	2.52	2.40
South Jordan	2.29	2.34
Draper	2.22	2.24
JVWCD Retail	2.19	2.13
Midvale	1.94	1.93
Riverton	1.89	1.69
Hexcel Corp.	1.23	1.13
South Salt Lake	1.13	1.02
Magna	1.00	1.02
Taylorsville-Bennion	1.01	1.00
Utah Div. of Fac. Cons	1.00	1.00

Cost of Service Analysis - Results

Cost of Service Analysis (COSA) Results – Proposed Adjustment

COSA	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	Proposed COSA Adj 23/24	10 YR AVE
Average Rate Adjust.	**4.0%**	**5.0%**	**4.0%**	**3.5%**	**3.5%**	**1.5%**	**0.0%**	**2.0%**	**3.5%**	**5.0%**	**3.2%**
Bluffdale	2.4%	4.5%	2.3%	2.8%	-1.5%	2.2%	1.8%	2.2%	6.6%	0.5%	2.4%
Draper City	3.7%	1.4%	0.7%	2.0%	3.5%	0.1%	1.9%	2.2%	3.8%	5.1%	2.4%
Draper Irrigation	7.6%	4.1%	3.3%	2.8%	-0.4%	3.2%	-0.5%	12.9%	4.4%	-3.7%	3.4%
Granger-Hunter	3.9%	4.4%	5.7%	3.4%	4.7%	1.8%	-2.3%	0.9%	1.6%	4.3%	2.8%
Herriman	3.7%	2.7%	6.1%	3.3%	2.8%	1.7%	-1.2%	1.7%	3.2%	6.4%	3.0%
Hexcel	3.5%	3.4%	1.3%	3.2%	3.9%	2.1%	-1.9%	1.1%	4.8%	3.2%	2.5%
Kearns	2.6%	3.6%	4.0%	2.0%	4.5%	0.8%	-0.3%	3.7%	3.8%	4.8%	3.0%
Magna	4.0%	1.7%	0.6%	1.3%	3.9%	1.0%	-0.5%	1.6%	2.8%	5.4%	2.2%
Midvale	7.7%	2.8%	-0.7%	2.0%	-0.1%	0.9%	8.6%	8.5%	11.5%	4.4%	4.6%
Riverton	4.4%	-0.7%	5.3%	8.3%	2.6%	9.6%	-3.7%	0.1%	1.4%	0.8%	2.8%
South Jordan	3.5%	4.6%	2.9%	3.2%	0.5%	0.3%	-0.1%	1.0%	3.7%	5.2%	2.5%
South Salt Lake	6.0%	3.4%	1.4%	3.2%	8.3%	2.9%	-5.0%	5.6%	-1.9%	2.8%	2.7%
Taylorsville-Bennion	-4.5%	0.8%	0.8%	1.7%	2.9%	1.3%	-0.3%	1.4%	2.8%	4.7%	1.2%
Utah Div. of Fac. Const.	5.5%	2.9%	2.0%	1.6%	2.0%	0.0%	-0.5%	1.7%	2.7%	5.1%	2.3%
West Jordan	4.4%	6.1%	3.5%	1.7%	3.5%	-0.3%	-0.6%	1.3%	2.5%	4.9%	2.7%
Retail System	5.6%	8.6%	3.1%	5.4%	4.1%	1.0%	2.2%	1.0%	3.5%	7.2%	4.2%

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023

Legislative Issues

Alan Packard
General Manager
April 26, 2023

Water Related or Local District Bills

The 2023 general legislative session included introduction of a record number of water-related bills, including:

- HB 21: Open & Public Meetings Act Amendments (passed)
- HB 22: Local District Amendments (passed)
- HB 33: Water Related Liability Amendments (passed)
- HB 77: Local District Revisions (passed)
- HB 150: Emergency Water Shortages Amendments (passed)
- HB 188: Golf Related Water Modifications (did not pass)

Water Related or Local District Bills, cont.

- HB 207: Compact Commission Amendments (passed)
- HB 217: School Energy and Water Reduction (passed)
- HB 221: Fodder Production System Grant Program (passed)
- HB 272: Water Efficient Landscaping Amendments (did not pass)
- HB 276: Water Supply Amendments (did not pass)
- HB 286: Great Salt Lake Funding Modifications (did not pass)
- HB 307: Utah Water Ways (passed)

Water Related or Local District Bills, cont.

- HB 345: Local District Property Tax Amendments (passed)
- HB 349: Water Reuse Project Amendments (passed)
- HB 450: Landscaping Requirements (passed)
- HB 488: Utah Lake Authority Amendments (passed)
- HB 491: Amendments Related to Great Salt Lake (passed)
- HB 513: Great Salt Lake Amendments (passed)
- HB 538: Water Usage Amendments (did not pass)

Water Related or Local District Bills, cont.

- HB 562: Water Rights Inventory (did not pass)
- SB 34: Water Infrastructure Funding Study (passed)
- SB 53: Groundwater Use Amendments (passed)
- SB 76: Water Amendments (passed)
- SB 118: Water Efficient Landscaping Incentives (passed)
- SB 119: Per Capita Consumptive Use (passed)
- SB 144: Water Instream Flow Amendments (passed)
- SB 158: Local Government Water Amendments (passed)
- SB 190: Utility Shut Off Protection Amendments (did not pass)

Water Related or Local District Bills, cont.

- SB 245: Closed Meeting Amendments (passed)
- SB 251: Secondary Water Metering Amendments (passed)
- SB 252: Conservation Tax Incentive Amendments (did not pass)
- SB 266: Government Records Requests Amendments (did not pass)
- SB 277: Water Conservation & Augmentation Amendments (passed)
- SB 280: Bear Lake Preservation Amendments (did not pass)
- SB 295: Dedicated Infrastructure District Act (did not pass)
- SCR 6: Concurrent Resolution Regarding the Great Salt Lake Elevation Targets (did not pass)

Water Related or Local District Bills, cont.

HB 307: Utah Water Ways **–** (passed)

Sponsor: Rep. C. R. Musselman

Summary: Creates a public/private partnership to promote water conservation throughout the state. Includes $3 million initial and $1 million ongoing funding.

Water Related or Local District Bills, cont.

HB 349: Water Reuse Project Amendments – (passed)

Sponsor: Rep. Casey Snider

Summary: Prohibits approval of certain water reuse projects impacting Great Salt Lake. Exceptions to the prohibition include projects based on federal water rights, projects that include water to replace the reuse water, and projects that submit reuse applications to the State Engineer and the Director of Division of Water Quality prior to November 1, 2023.

Water Related or Local District Bills, cont.

HB 491: Amendments Related to Great Salt Lake – (passed)

Sponsor: Rep. M. Schultz

Summary: Sets up a commission and appoints a commissioner that has oversight responsibility for all things Great Salt Lake, including coordination of the various branches of state government involvement.

Water Related or Local District Bills, cont.

***SB 34: Water Infrastructure Funding Study* –** (passed)

Sponsor: Sen. D. McCay

Summary: Provides for a study of the use of property tax revenue to fund water infrastructure. Dept. of Natural Resources will oversee the study and will assemble a diverse working group. Report on the study, including recommendations, is required to be submitted to applicable legislative committees by October 2024.

Water Related or Local District Bills, cont.

SB 76: Water Amendments – (passed)

Sponsor: Sen. S. Sandall

Summary: Provides additional tools and instruction on coordinating land use and water supply planning. Requires cities and counties to consult with Division of Water Resources in the development of General Plans.

Water Related or Local District Bills, cont.

SB 118: Water Efficient Landscaping Incentives – (passed)

Sponsor: Sen. S. Sandall

Summary: Provides State money for water efficient landscaping incentives ($5 million ongoing) and directs Division of Water Resources to develop rules for funding eligibility and coordination with Water Conservancy Districts to administer the incentive program. Available only to property owners within a municipality that has adopted new construction water efficiency standards.

Water Related or Local District Bills, cont.

SB 119: Per Capita Consumptive Use – (passed)

Sponsor: Sen. M. McKell

Summary: Provides for a new metric for measuring per capita use on a consumption basis. Municipal and Industrial water returned to natural systems as treated wastewater and measurable outdoor irrigation return flow is calculated and credited against M&I per capita use. Provides more consistent basis of comparison with other Colorado River Basin states data and focuses attention on reducing net consumption/depletion.

Water Related or Local District Bills, cont.

SB 277: Water Conservation & Augmentation Amendments – (passed)

Sponsor: Sen. S. Sandall

Summary: Expands purposes for which Water Infrastructure Restricted Account (WIRA) money can be used to include water reuse, desalinization, dam construction, and water conservation in the Colorado River Drainage Basin. Also provides significant funding ($200 million) for agricultural optimization.

PREPARE 60
SECURING UTAH'S ECONOMIC FUTURE

2022 Summary

prepare60.com

More than 90% of Utah's population lives within the four largest water conservancy districts' service areas. The districts are committed to protecting existing water resources, using them wisely, and providing for the future.

365
days worked

264 Billion
gallons of water delivered

$3 Million
issued in water conservation rebates or grants

$225 Billion
gross domestic product protected

3 Million
people served

92,400
water quality tests performed

$12.9 Billion
value of facilities protected and maintained

1.7 Million
jobs supported

CENTRAL UTAH WATER CONSERVANCY DISTRICT

JORDAN VALLEY WATER CONSERVANCY DISTRICT

WEBER BASIN WATER CONSERVANCY DISTRICT

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

H_2O Collective

What is it?

Created by the Utah League of Cities and Towns and Prepare60 to provide meaningful water conservation tools, strategies, and training for local governments

Purpose

To provide a repository of information and support about water conservation that cities and towns can apply in their communities

Current Emphasis

Working on strategies to integrate water use and conservation with land use in municipal planning

JVWCD Contacts

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	Jacob Young
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	Jacob Young	Clifton Smith
Communications, outreach, social media, news, and community relations	Kelly Good	Cynthia Bee
Executive topics and issues	Alan Packard	Jacob Young Shazelle Terry Matt Olsen

JORDAN VALLEY WATER
CONSERVANCY DISTRICT

Annual Member Agency Meeting
April 26, 2023