

# Water Supply Issues Report

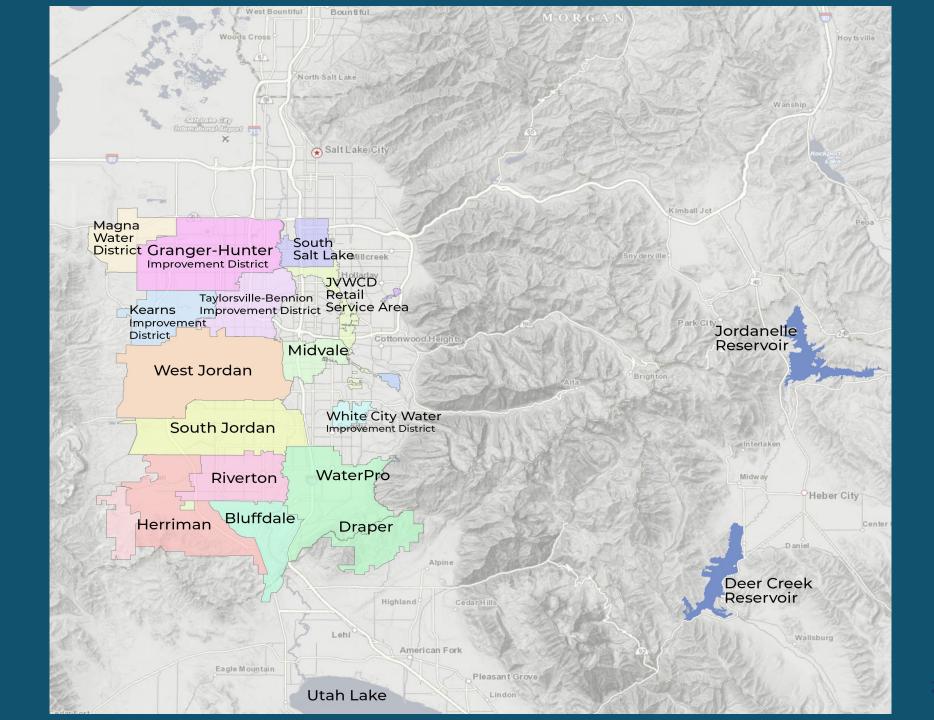
Bart Forsyth General Manager Salt Lake County Council June 21, 2022

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

- Bluffdale City
- Department of Corrections
- Draper City
- Granger-Hunter Improvement District
- Herriman City
- Hexcel
- 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
- Willowcreek Country Club

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

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



## JVWCD Board of Trustees







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# JVWCD'S KEY SERVICES

# Delivering Water

- Manage increasingly complicated water supply
- Treat water to exceed regulatory requirements
- Maintain growing and aging infrastructure



- Promote efficient use of water through incentives, programs, and ordinances
- Encourage landscaping appropriate for Utah
- Develop a water conservation ethic



- Identify most costeffective water supply alternatives
- Plan and support water projects decades in advance of demand
- Secure funding for longterm water development projects



# TOPICS TO BE ADDRESSED

- Drought
- Changing climate conditions
- Water conservation
- Water efficiency standards
- Integration of Water and Land Use Planning
- Capital infrastructure needs
- Water supply planning

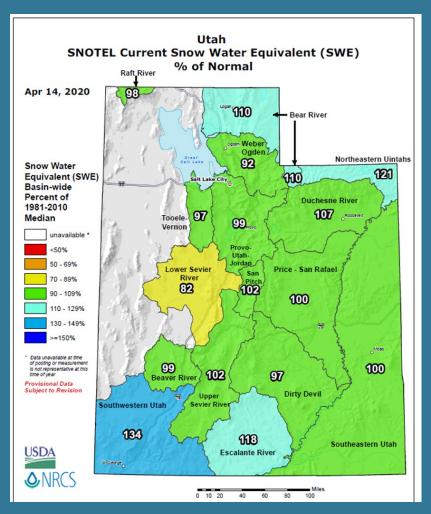


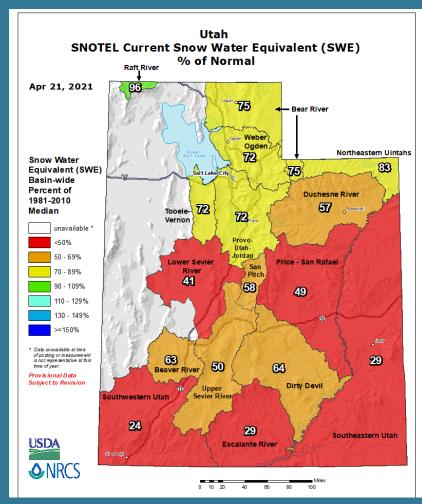
# Drought

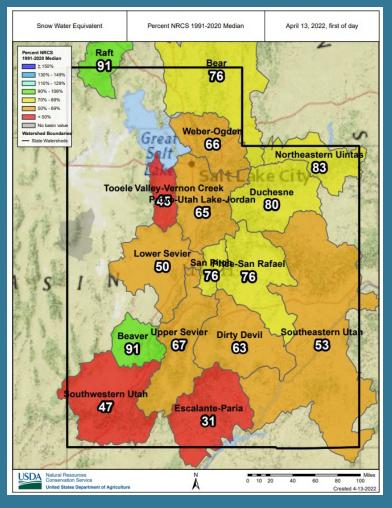




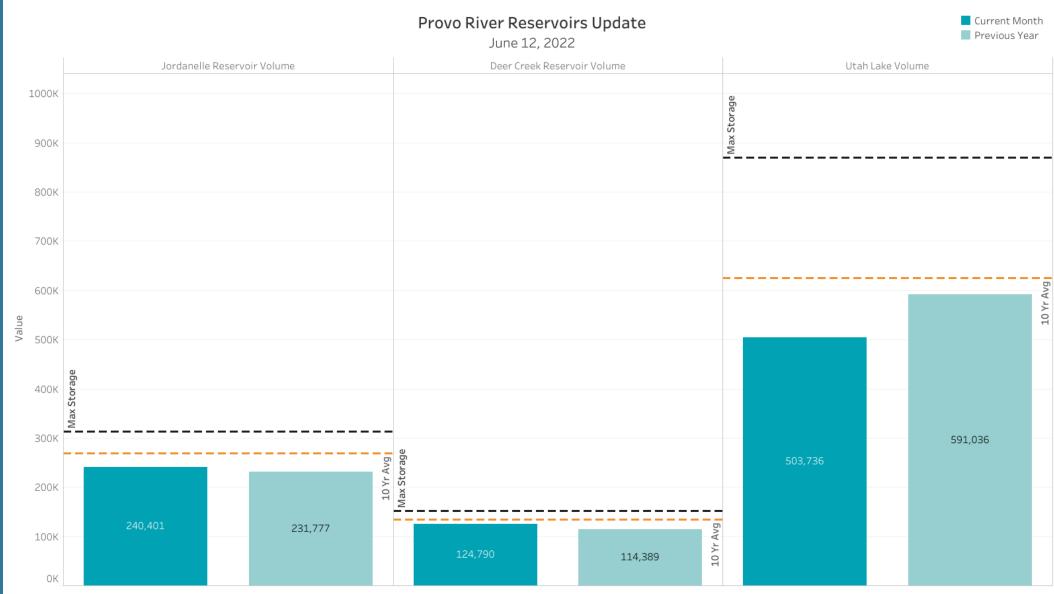
## Snow Water Equivalent % of Median -- Mid April 2020, 2021, 2022





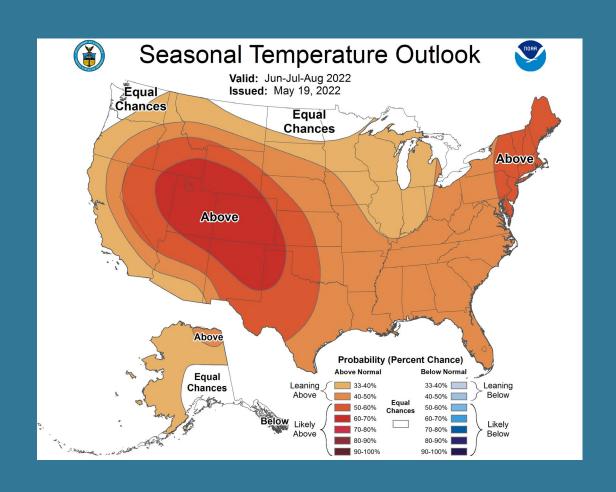


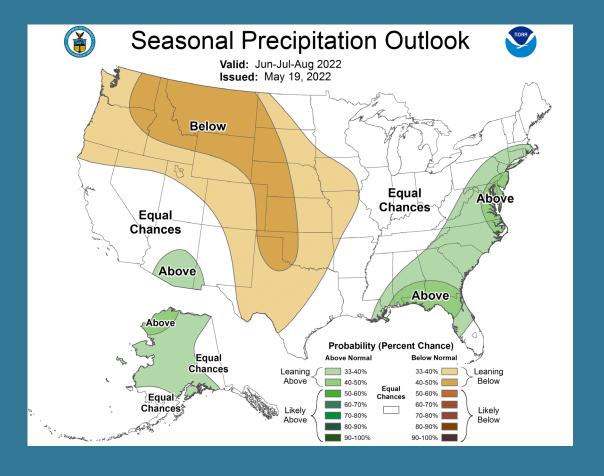






## Temperature and Precipitation Outlook June – August 2022







May 24, 2022

# JVWCD Drought Contingency Plan

Drought Monitoring Committee
Recommendation for 2022
and Water Supply Outlook



# Drought Monitoring Committee Members

#### **Drought Monitoring Committee**

City of Midvale City of Bluffdale **Draper City** Herriman City City of West Jordan City of South Salt Lake Magna Water District Taylorsville-Bennion Improvement District White City Water Improvement District **Granger-Hunter Improvement District** WaterPro/Draper Irrigation **Hexcel Corporation** Willow Creek Country Club South Jordan City Willow Creek Country Club



# 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
			CUWCD Supply Availability (Jordanelle storage of CUP)	PRWUA Supply Allocation (in the Provo River Project)	Salt Lake Valley Groundwater Conditions	Committee Members
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	10
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	4
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	_



Drought and Drought Continency Planning

At the May 11<sup>th</sup> JVWCD Board meeting, the Board approved establishing a Water Supply Restriction Level 1.



# 2022 Drought Messaging

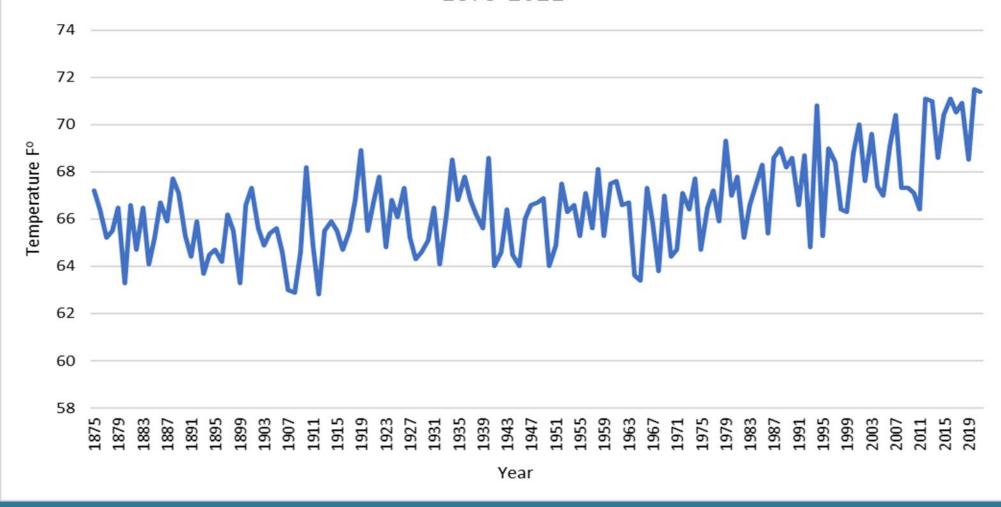
- Drought severity varies across the state of Utah
- Pursue effective and coordinated drought messaging
- Tips (take advantage of incentives)
  - Weekly Lawn Watering Guide (Weekly Lawn Watering Guide Conserve Water Utah)
  - Plan a landscape upgrade
  - Check your sprinkler system for leaks
  - Smart controller rebate
- Goal: Achieve at least a 10% voluntary reduction in water use

# Changing Climate Conditions

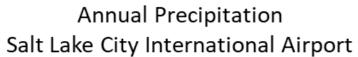


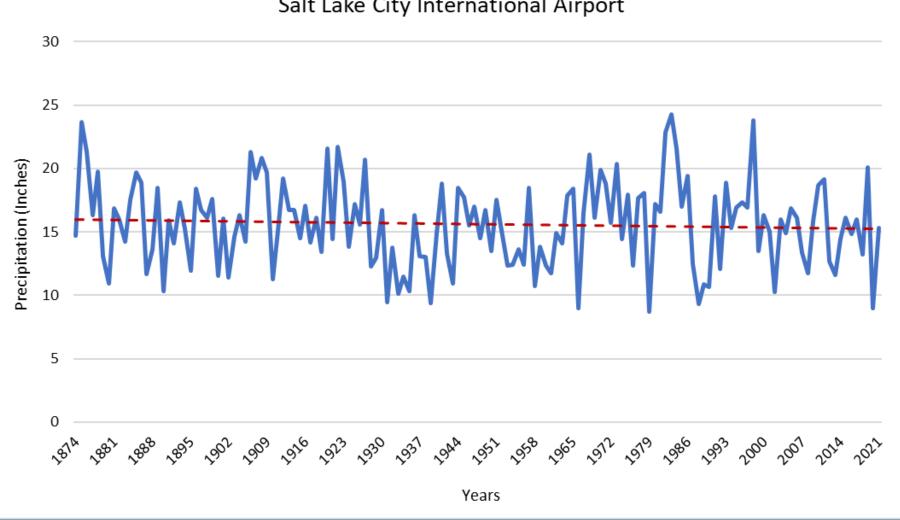


Average Temperature April 15 - October 15 Salt Lake City Area, UT 1875-2021









# Water Conservation





# 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.



#### 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)
- 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.











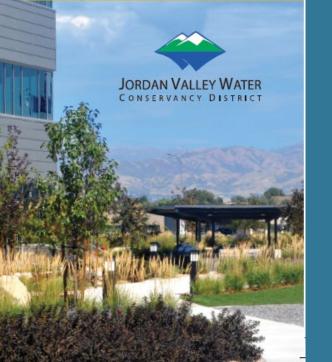




Funding for prominent, water-efficient landscaping projects.



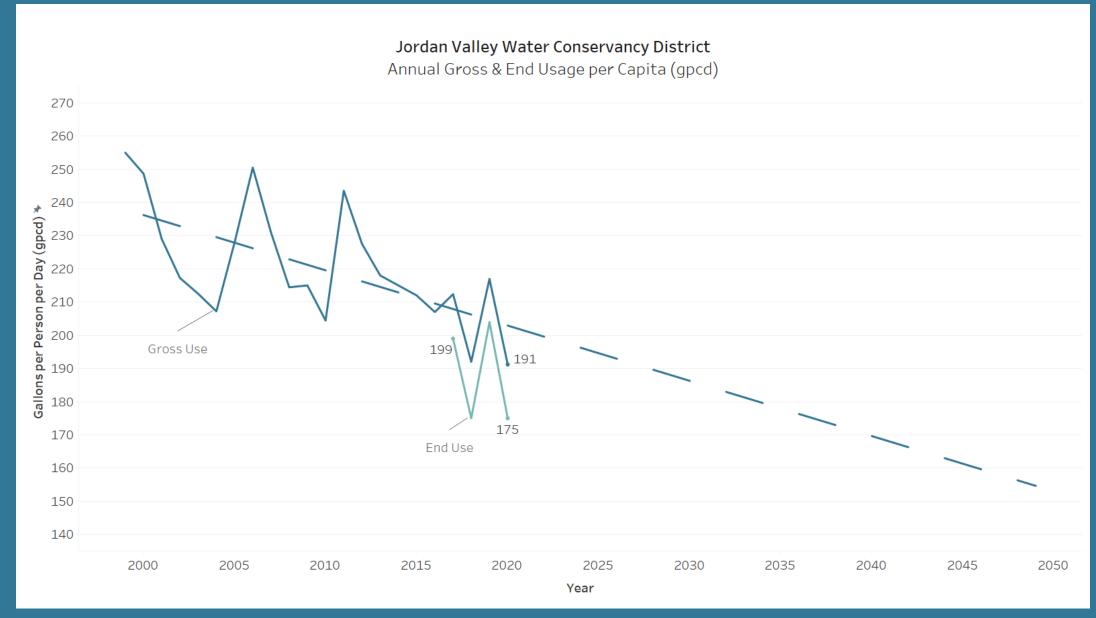




#### Conservation Garden Park







# Water Efficiency Standards



# RESIDENTIAL LANDSCAPE STANDARDS

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



### COMMERCIAL LANDSCAPE STANDARDS

- Outside of active recreation areas, keep lawn to 20% of the total landscaped area.
- Prohibit lawn in park strips, parking lot islands, or other narrow areas that are less than 8 feet wide.
- Keep lawn areas free of obstructions such as trees, signposts, and boulders; and avoid use on steep slopes.
- Drip irrigation is used in planting beds.
- Recommended to have enough plant materials to create at least 50% living plant cover at maturity.
- Submit new landscape projects to the municipality to ensure they meet water conservation requirements and guidelines.
- Certain special purpose landscape areas may receive variances to the standards based on need (ex. stormwater management areas)





# 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 or are in compliance with these standards have shown leadership in planning for the future and building drought-resilient communities.

#### **Adopted**

#### **Herriman City**

- December19, 2020
  - Adopted as City ordinance

#### **Bluffdale City**

- July 14, 2021
  - Adopted as City ordinance

#### South Jordan

May 4, 2021Adopted
as City
ordinance

#### Kearns Metro Township

February 14,2022AdoptedasTownship

ordinance

#### West Jordan

- June 9,2021Adopte
  - Adopted as City ordinance

#### West Valley City

2022
• Adopted by resolution

August 12,

#### **Retail System**

- June 9, 2021
- Adopted as JVWCD policy

# Integration of Water and Land Use Planning



# SB 110: Water As a Part of General Plan



Sponsor: Sen. Mike McKell (passed)

Topic: Requires municipalities to incorporate a water use and preservation element in its General Plan

#### **Impacts to JVWCD Member Agencies:**

- The water use and preservation element to consider: the effect of development on water demand and infrastructure; methods of reducing water demand; and opportunities to modify operations to eliminate water waste, including:
  - Consultation with the water supplier
  - Considering regional conservation goals
  - Reviewing its water conservation plan
  - Making recommendations for water conservation policies and practices including water wise landscaping options and ordinances
  - Considering principles of sustainable landscaping
  - Looking at development trends that reduce the demand for water
  - Etc.

# Capital Infrastructure Needs





Capital Projects Plan 2022 - 2026

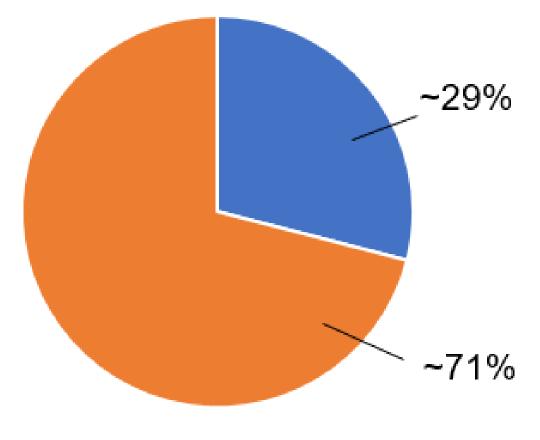
# Total planned expenditures: \$277 million







# Capital Project Expenditures



Replacement Projects (funded by rates)

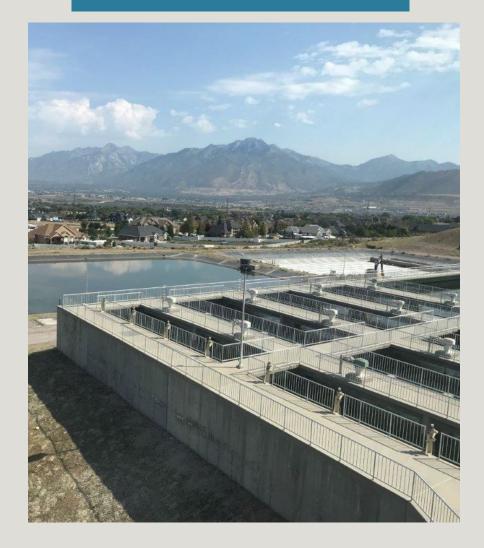
New Infrastructure (funded by debt)



Repair and Replacement of Existing Infrastructure \$81.3 Million



Facility Upgrades (Seismic or Functional Improvements)
39.4 Million





New Capacity
Projects
Needed for
Growth
\$152.7 Million

#### **Expand JVWTP**



New storage tanks



#### New booster pump station



**Equipment wells** 

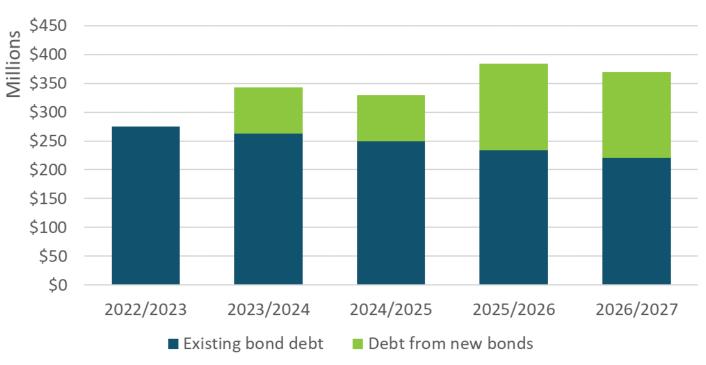




# Total Bonds Payable and Anticipated New Bond Issues

#### **Borrowing to Fund Capital Projects**

#### TOTAL BONDS PAYABLE AT YEAR END



#### **Anticipated New Bond Issues**

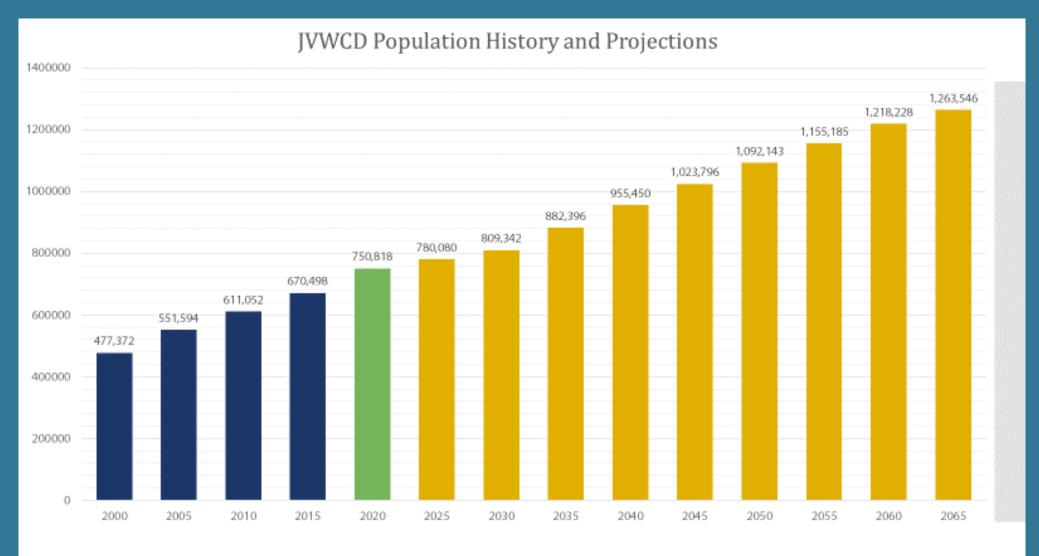
2024: \$80 million

2026: \$70 million

# Water Supply Planning

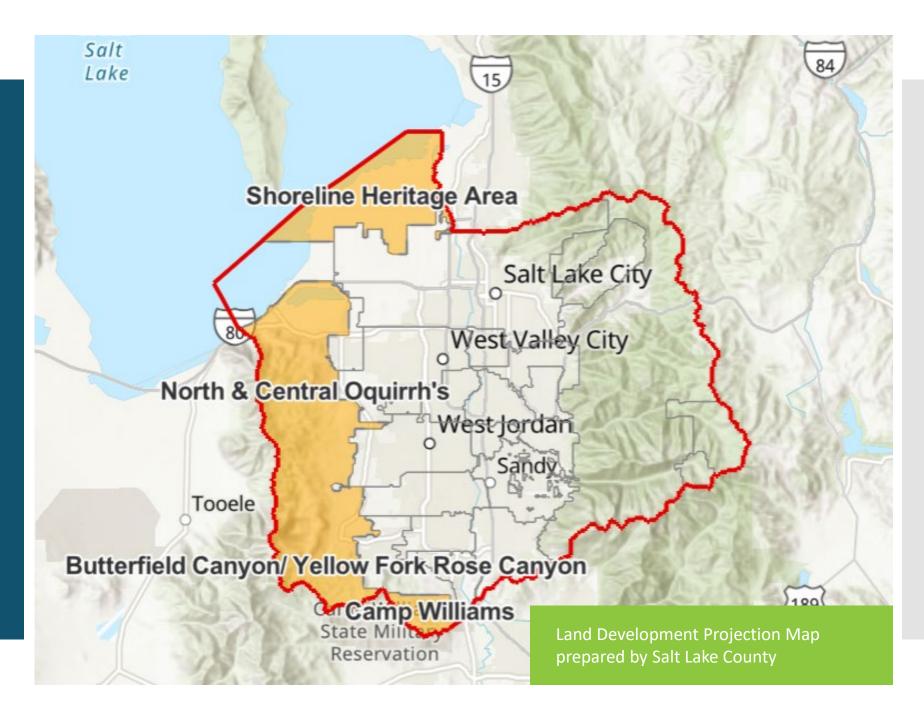






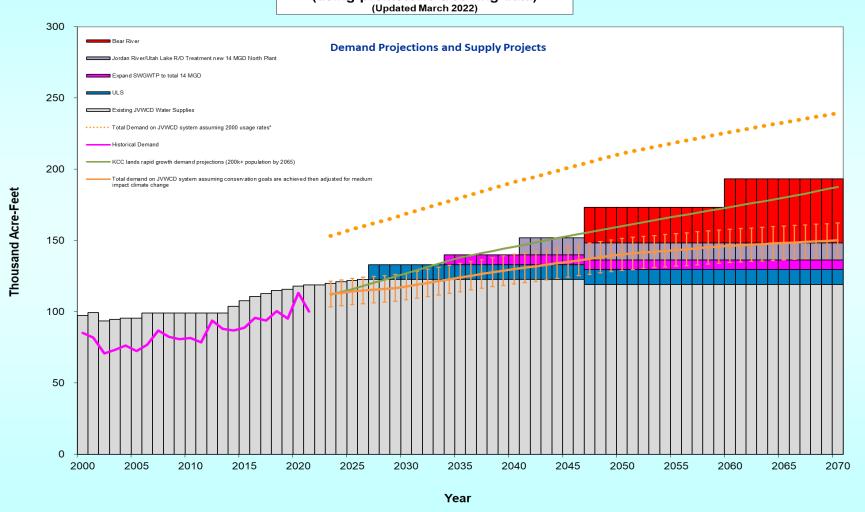
Areas for Potential Service Area Expansion

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











QUESTIONS

