



# Salt Lake County Water Use and Preservation Element

### Office of Regional Development

Regional Planning and Transportation

December 04, 2025 Jordan River Watershed Council





## **Project Team**



**Lisa Hartman** 

ASSOCIATE DEPUTY MAYOR OF REGIONAL OPERATIONS

SALT LAKE COUNTY



**Christine Richman** 

PRINCIPAL IN CHARGE

GSBS CONSULTING



**Keith Larson** 

WATER ENGINEER

BOWEN COLLINS & ASSOCIATES



**Helen Peters** 

DIRECTOR OF
REGIONAL PLANNING &
TRANSPORTATION

SALT LAKE COUNTY



**Garrett Stone** 

PROJECT MANAGER and PLANNER

GSBS CONSULTING



**Rochelle Plaizier** 

WATER

BOWEN COLLINS & ASSOCIATES



**Ryan Anderson** 

MUNICIPAL SVCS AND PLANNING PROGRAM MANAGER

SALT LAKE COUNTY



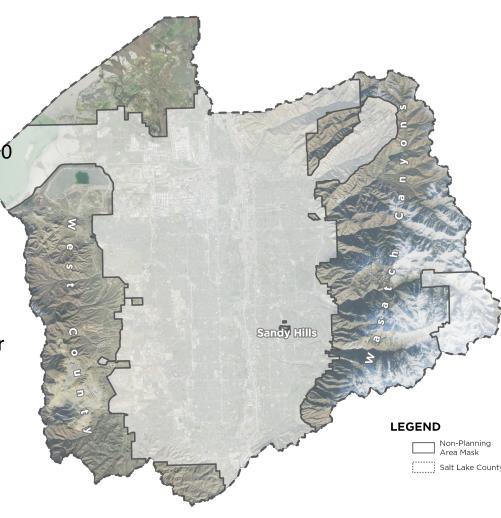


## Purpose

To update Salt Lake County's Wasatch Canyons, Sandy Hills, & the West General Plans with a Water Conservation Element that complies with Utah Code §17-27a-403 (SBs 110 [2022] and 76 [2023]).

#### This plan will:

- Consider impacts of water resources on current and future development
- Coordinate land use and water planning for Unincorporated Salt Lake County
- Identify strategies to reduce water use







### **Water Element Vision**

Salt Lake County envisions a future where water sustains thriving communities, healthy ecosystems, and resilient economies and is managed as a shared resource through integrated partnerships, planning, innovation, and stewardship to ensure abundance for future generations.





## **Water Element Goals**



#### Align Growth with Sustainable Water Futures

Guide land use, housing, and infrastructure decisions so that future development patterns reflect available supplies, conserve water at the parcel and system level, and protect long-term resilience.



#### **Safeguard Source Waters and Natural Systems**

Treat the Wasatch Canyons, the Great Salt Lake, and local aquifers as living infrastructure that are protected and valued for water supply, ecological health, and climate resilience.



#### **Build a Culture of Water Stewardship**

Advance water conservation as a community ethic through education, land use controls, and partnerships that normalize efficiency and water-wise landscapes in homes, businesses, agriculture, and public spaces.



#### **Lead by Example in County Operations**

Demonstrate innovation and accountability by embedding conservation into County facilities, properties, and infrastructure; reduce operational demand and model best practices to prove what's possible.



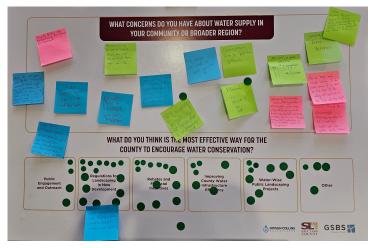


## **Engagement**

We implemented a multi-channel engagement process to gather feedback from residents across the planning areas

- Launched a project website with surveys, FAQs, and interactive maps for public input.
- Conducted in-person outreach through tabling at community events, including the Save Our Great Salt Lake Symposium; placed interactive boards at County building
- Developed and boosted social media posts targeting residents in unincorporated SLCo and neighboring communities.
- Convened coordination meetings with water providers, irrigation companies, and other stakeholders.









## **Existing Conditions**

Wasatch Canyons General Plan - 2020 SLCo West General Plan - 2022 Sandy Hills General Plan- 2023

This Element considers current community vision and goals expressed in each document to broadly guide county-wide decisions.

Each of these plans already discuss and promote waterwise landscaping. This element will highlight those commitments and supports long-term water supply security for unincorporated County through land use tools

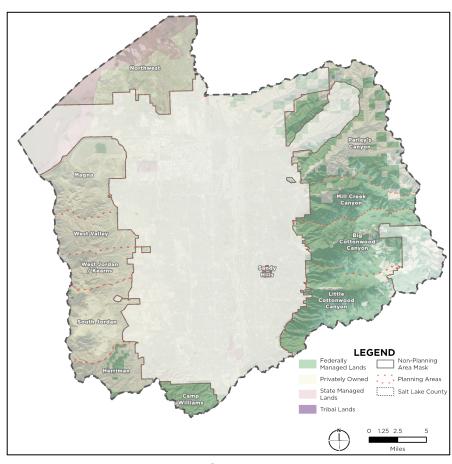


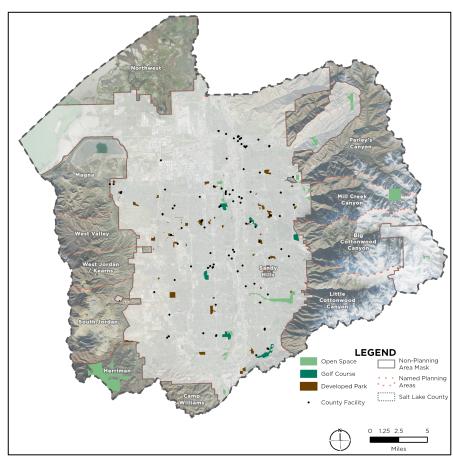




## **Existing Conditions**

Land Ownership and County Park Facilities





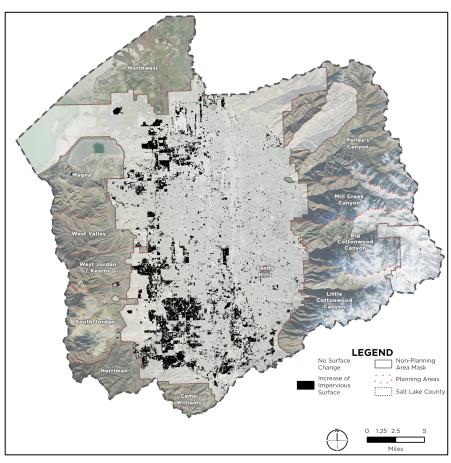
Land Ownership

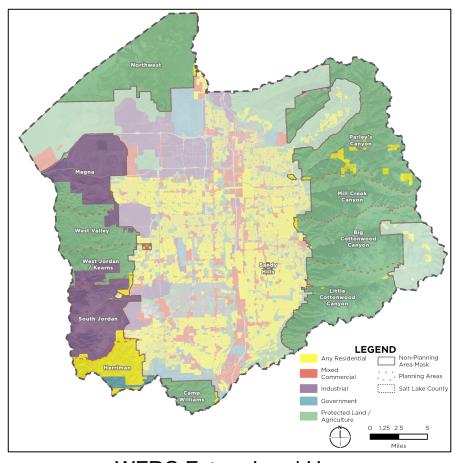
County Park Facilities





## Existing Conditions Growth Areas – Experienced and Projected





Impervious Surface Growth, 2004-2024

WFRC Future Land Use

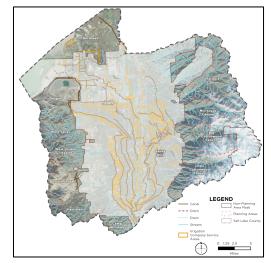




## **Existing Conditions**

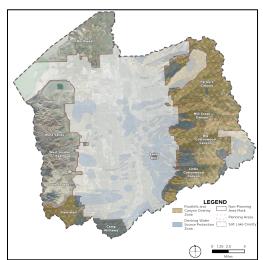
Other Land and Water Elements

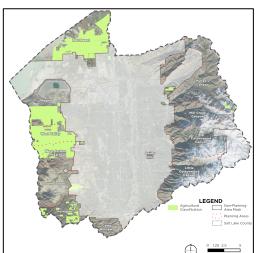
Waterways and Irrigation Systems



Retail Water Providers

FCOZ and Source Water Areas





Agricultural Land Use

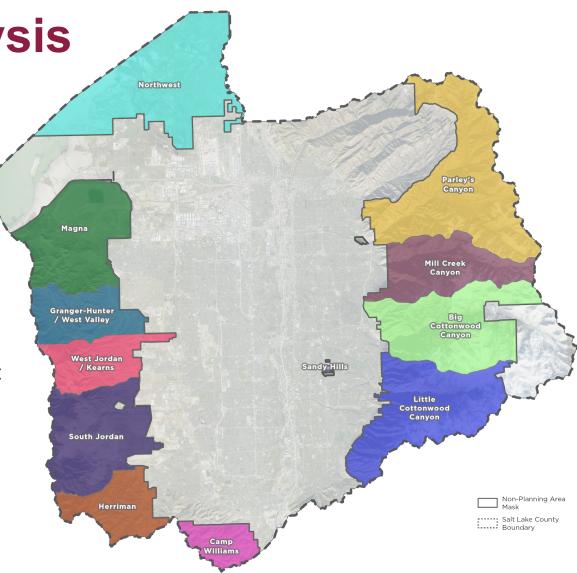




Subarea Analysis

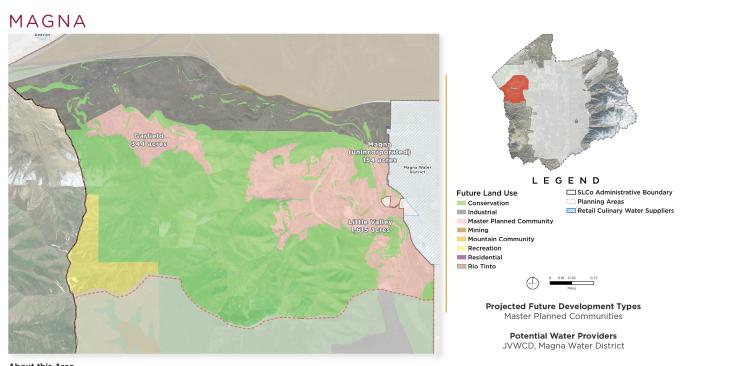
Organized by watershed and retailer boundaries, specific analyses divide unincorporated areas into 11 subareas with tailored evaluations of land use, supply, and conservation conditions.

Given data limits and development constraints, the Northwest (teal) and Camp Williams (purple) areas do not have a dashboard.









#### About this Area

Magna anchors unincorporated development in the northwest of the valley. Residential neighborhoods and commercial corridors define the Magna community, but Rio Tinto Kennecott owns most of the unincorporated land west of Magna, Its mining and tailings operations dominate land use, and existing water rights on the property are sufficient for current operational needs; both factors limit opportunities for new development. Growth planned for the foreseeable future will occur on the eastern edge, where the unincorporated area connects with existing neighborhoods. Magna Water District provides culinary and secondary supplies through groundwater and wholesale contracts.

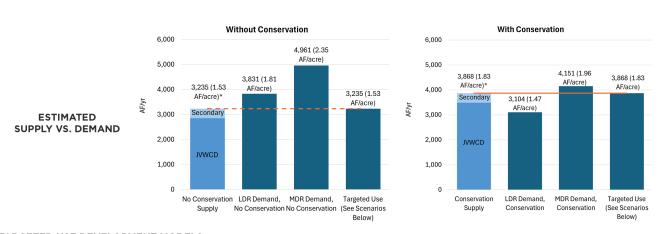
Key considerations for future planning include managing the residential-mining interface, securing reliable municipal water under constrained supplies, and directing redevelopment eastward toward established infrastructure. Coordination with Magna Water District may result in additional secondary water allocation.

#### Take-Aways for Future Development Policy

- Future development should plan to adopt water-saving practices to maximize water supply; with compliance, JVWCD-budgeted water increases to 1.65 AF/ac.
- Developed areas in the future may have to be offset by or incorporate un-irrigated open space to meet the per-acre allocated water budget.







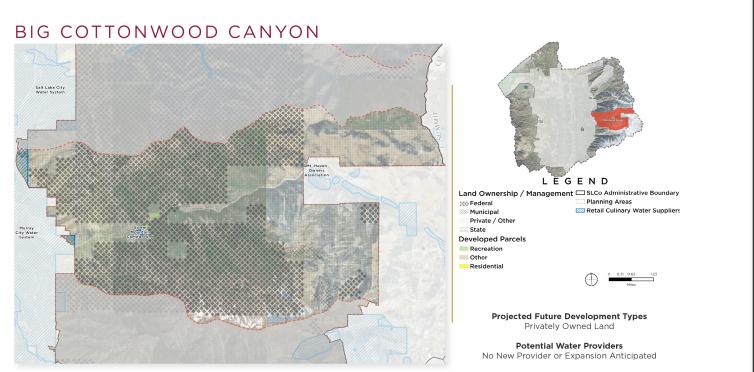
#### TARGETED USE DEVELOPMENT MODELS

	WITHOUT CONSERVATION			WITH CONSERVATION		
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 1	SCENARIO 2	SCENARIO 3
LOW DENSITY RESIDENTIAL	78%	0%	34%	31%	0%	50%
MEDIUM DENSITY RESIDENTIAL	0%	60%	34%	64%	85%	50%
NON-IRRIGATED OPEN SPACE	17%	35%	27%	0%	10%	-5%
IRRIGATED OPEN SPACE/PARKS	5%	5%	5%	5%	5%	5%
TOTAL WATER REQUIREMENT (AF/ACRE)	1.53	1.53	1.53	1.83	1.80	1.83
TOTAL NUMBER OF RESIDENTIAL UNITS	4,937	11,911	8,873	14,622	16,932	13,037

- Without conservation, potential development will be significantly restricted. If JVWCD conservation practices are adopted by future development, water supplies from JVWCD may be increased up to 1.65 AF/ac, otherwise JVWCD supplies will be limited to 1.35 AF/ac.
- Magna Water has planned to provide up to 382 AF of additional secondary water for future, unincorporated growth. This will be in addition to the supply
  potential from JVWCD.
- If residential areas develop consistent with the West General Plan's future land use map, through Master Planned Communities or Planned Unit Developments,
  lot sizes could be reduced to roughly ¼-acre while remaining within projected water budgets, assuming conservation measures are in place. In areas planned
  for more intensive MDR patterns, water supply may place practical limits on total build out.
- Housing densities greater than ¼-acre lots are modeled to result in water demand higher than supply. However, the County may consider clustering mid- to
  high-density residential housing and utilizing non-irrigated open space to maximize housing potential with available water supplies.
- Future development types will likely be mixed. The table and figures show possible development scenarios for development with and without adopted
  conservation policies.







#### **About this Area**

Big Cottonwood Canyon includes the ski resorts of Brighton and Solitude, the incorporated Town of Brighton, and small clusters of cabins and subdivisions in the lower canyon. Salt Lake County's land use authority applies only to the unincorporated areas; the Town of Brighton administers its own land use and governance. Most of the canyon is national forest, with recreation, residential enclaves, and resort operations defining current land use. Big Cottonwood Creek provides a major share of Salt Lake City's municipal water supply. Steep topography, avalanche hazards, and watershed protections constrain development in the unincorporated canyon; future investment will most likely occur within incorporated resort areas. Water reliability depends on snowpack and long-term climate conditions.

Key considerations include protecting water quality, coordinating with the Town of Brighton on shared jurisdiction areas, and addressing transportation and infrastructure needs without adding pressure to the watershed.

#### Take-Aways for Future Development Policy

- Existing water service providers do not have the capacity to expand service for new development.
- · Any future development will need to be approved on a case-by-case basis after completing a detailed analysis of water availability.





WATER SERVICE	SEASONAL or	NUMBER OF	SOURCE	AVERAGE HISTORIC	SERVICE EXPANSION
PROVIDER	YEAR-ROUND USE	CONNECTIONS		PRODUCTION (AF)	FEASIBLE?
Storm Mountain Campground	Seasonal	1 User	Well or Spring	Unknown	No

#### Area with Additional Demand Potential

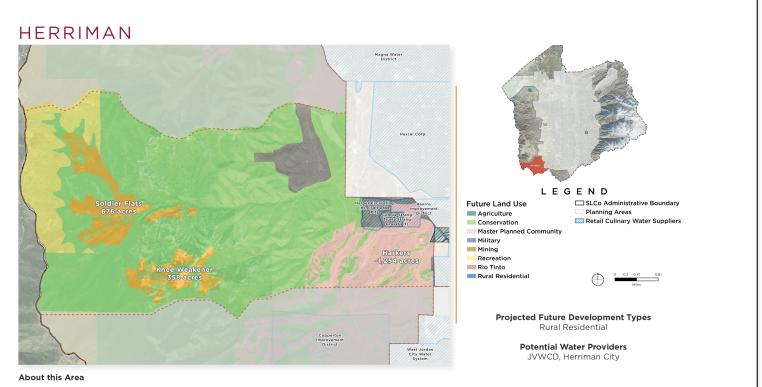
- Of the 2,330 acres of undeveloped privately owned land, approximately 154 acres (6.6%) are developable in the future. Reasons that development would not be feasible include:
  - · Extreme slopes (greater than 30%) and
  - Distance from an existing water system (+2 miles away).
- The one existing water service provider in the area is designed for a single
  user, Storm Mountain Campground, and has limited interest in or capacity
  for expanding to other users.

#### **Discussion and Conclusions**

- The only existing water service provider is small and does not have the capacity to expand water service to future development.
- Future development will be limited by topography and access to water systems. Development of new groundwater sources will be required for any growth outside of the established water systems.
- Given the site specific restrictions of any development proposed relative to water availability, all future development will need to be approved on a caseby-case basis after completing a detailed analysis of water availability.







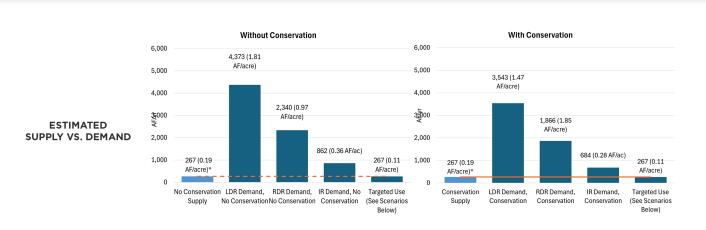
The southwest unincorporated area includes the Hi-Country Estates I and II planned communities, which anchors residential development here. Herriman City, contracting with Jordan Valley Water Conservancy District, delivers water to residents. Rio Tinto Kennecott owns most surrounding lands, which remain in mining use. This restricts new development, leaving eastern-edge parcels as the primary growth path.

Key considerations for future planning include protecting reliable service for Hi-Country residents, coordinating conservation with regional providers, and guiding land transitions at the edge of mining operations in ways that protect neighborhood character and water supply.

#### Take-Aways for Future Development Policy

- Supply in this area is limited by Herriman City's distribution system. Future development will need to utilize large, un-irrigated open spaces to meet water budget.
- Conservation may allow for more units to be planned in these areas, but topography and desire for open space and large lots area may drive development along with available water supply.





#### TARGETED USE DEVELOPMENT MODELS

	WITHOUT CONSERVATION			WITH CONSERVATION		
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 1	SCENARIO 2	SCENARIO 3
LOW DENSITY RESIDENTIAL	6%	0%	0%	8%	0%	0%
RURAL DENSITY RESIDENTIAL	0%	11%	0%	0%	11%	0%
ISOLATED RESIDENTIAL	0%	0%	31%	0%	0%	39%
NON-IRRIGATED OPEN SPACE	94%	89%	69%	92%	89%	61%
IRRIGATED OPEN SPACE/PARKS	0%	0%	0%	0%	0%	0%
TOTAL WATER REQUIREMENT (AF/ACRE)	0.11	0.11	0.11	0.11	0.11	0.11
TOTAL NUMBER OF RESIDENTIAL UNITS	442	206	140	545	206	176

- Water delivery to Hi-Country Estates developments will be limited by water supply and conveyance capacity as available in the Herriman water system. The Herriman Master Plan anticipates providing up to 453 AF/year (0.11 AF/ac), total, for these nearly 4,200 acres at full build out. Existing development in this area already uses approximately 186 AF/year; future development should clearly address water use mitigation strategies.
- As can be seen between the scenarios shown in the table, the number of units that can be developed relies heavily upon irrigated area associated with each unit. Development potential can be maximized by limiting irrigation through policy or zoning decisions.
- Implementing conservation practices in these areas will not increase water supply volumes but will decrease water demand and therefore expand potential
  development opportunities.





## RECOMMENDATIONS





## 1. Reduce Water Demand In New and Existing Developments

Develop a land use ordinance for unincorporated Salt Lake County new development of single-family homes, multifamily development, and commercial that incorporates sustainable landscaping standards, requiring consideration of principles such as:

- Reduction or limitation of traditional lawn or turf;
- Promotion of site-specific landscape design that reduces stormwater runoff and irrigation-related discharge;
- Integration of stormwater Best Management Practices (BMPs) consistent with Salt Lake County's stormwater permit;
- Preservation and use of healthy, climate-appropriate trees and vegetation with low to moderate water demands:
- Reduction of yard waste through efficient planting and maintenance practices; and
- Use of efficient irrigation systems—such as drip irrigation—optimized to deliver appropriate
  water to plant types, with emphasis on drought-resistant trees and plantings, and irrigation
  designs that separate tree and turf zones while limiting turf to active use areas.





## 1. Reduce Water Demand In New and Existing Developments

### Consider potential updates to Salt Lake County's Corridor

**Preservation Fund.** Prioritize project rankings that utilize water-wise landscaping plants and design guidelines, and that reduce turf in low-traffic or low-use areas.

**Expand policy 1155 Tax Increment Policy** to include screening criteria that recognize and prioritize projects demonstrating efficient water use and reuse practices. These criteria would provide information for policy makers as they consider proposals that incorporate verified water conservation measures or technologies. This ensures public investments support growth that aligns with long-term supply capacity and strengthens the County's overall resource management framework.





## 2. Modify Local Government Operations to Improve Conservation and Implement Efficient Practices

## County-Wide / Department-Level Standard Operating Procedure (SOP) Audit of Water-Inefficient Practices.

Conduct County-wide and department-level audits of existing irrigation infrastructure to identify:

- Aging or inefficient sprinkler systems;
- Areas lacking drip irrigation for trees and landscaped zones;
- Turf and grass areas without water-efficient delivery systems;
- Irrigation systems that are not equipped with smart technology to track weather conditions or automatically shut off during rain events;
- Opportunities to upgrade to modern, water-smart controllers and systems that support drought resilience and reduced runoff.





## 2. Modify Local Government Operations to Improve Conservation and Implement Efficient Practices

#### **County Turf Audit & Conversion Program.**

Conduct a comprehensive turf audit and consider a phased conversion program to replace non-functional grass with low-water landscapes and efficient irrigation systems. This reduces long-term maintenance and water demand, freeing supply for growth while maintaining quality recreational spaces and demonstrating fiscal and environmental leadership.

#### Water-Wise and Drought Resistant Landscaping.

Incorporate water-wise and drought-resistant landscaping principles into the design and renovation of County facilities to reduce long-term maintenance and irrigation needs. This approach supports responsible resource management, enhances landscape resilience, and demonstrates visible County leadership in sustainable design without constraining project flexibility.





## 3. Support Coordination for Regional Water Conservation Efforts

**Support and promote DWR programs** — such as Utah Water Savers and Flip Your Strip—for residents in Salt Lake County by sharing information through County social media channels, newsletters, and other communication platforms to increase participation in turf replacement and water-wise landscaping efforts.

**Highlight and share Salt Lake County's own successes** with Flip Your Strip at County facilities to demonstrate leadership by example and encourage residents to adopt similar water-efficient landscaping practices.

Continue and expand the use of "Water Wednesdays" on County social media platforms to highlight water conservation tips, programs, and success stories, increasing public awareness and engagement on sustainable use.





## 4. Develop New and Utilize Existing Land Preservation Tools and Resources

Continue to utilize Salt Lake County's Open Space Fund (Salt Lake County Code, Chapter 2.93) to acquire and permanently protect land within sensitive landscapes, such as the Jordan River Parkway corridor, the Great Salt Lake shoreline, foothill and Bonneville Shoreline areas, and other critical riparian or habitat zones, in alignment with the fund's stated purpose of preserving natural open space and ecological resources.





## 5. Protect Water Resources and Great Salt Lake Quality

#### **Enhance Water Quality and Habitat.**

Develop vegetated riparian buffers along perennial and ephemeral streams to reduce erosion, filter pollutants, and improve ecological conditions in waterways such as Rose, Midas, and Butterfield Creeks.

### **Support Compliance with Water Quality Standards.**

Implement riparian corridors along waterways that support Best Management Practices (BMPs) to meet updated UPDES permit requirements and support long-term restoration objectives outlined by the Jordan River E. Coli TMDL study and the Salt Lake County Integrated Watershed Plan.





## 6. Coordinate To Maintain System Integrity And Protection

## Support and promote a consistent coordination framework with irrigation and canal companies

Encourage shared mapping, notification, and consultation procedures to integrate irrigation and storm water systems within areas that are part of the County's Flood Control system, including unincorporated areas and municipalities that contract with the County, into County planning and permitting processes. This improves current practice by creating clear communication channels to mitigate service disruption and ensure early coordination in the event of zoning or land use changes.





## **Steps for Adoption**

### **Planning Commissions**

 Salt Lake County and Mountainous Planning District Planning Commissions
 December 10 / 18, 2025

### **County Council**

 Public Hearing / Second Reading January 2026





# Questions & Comments