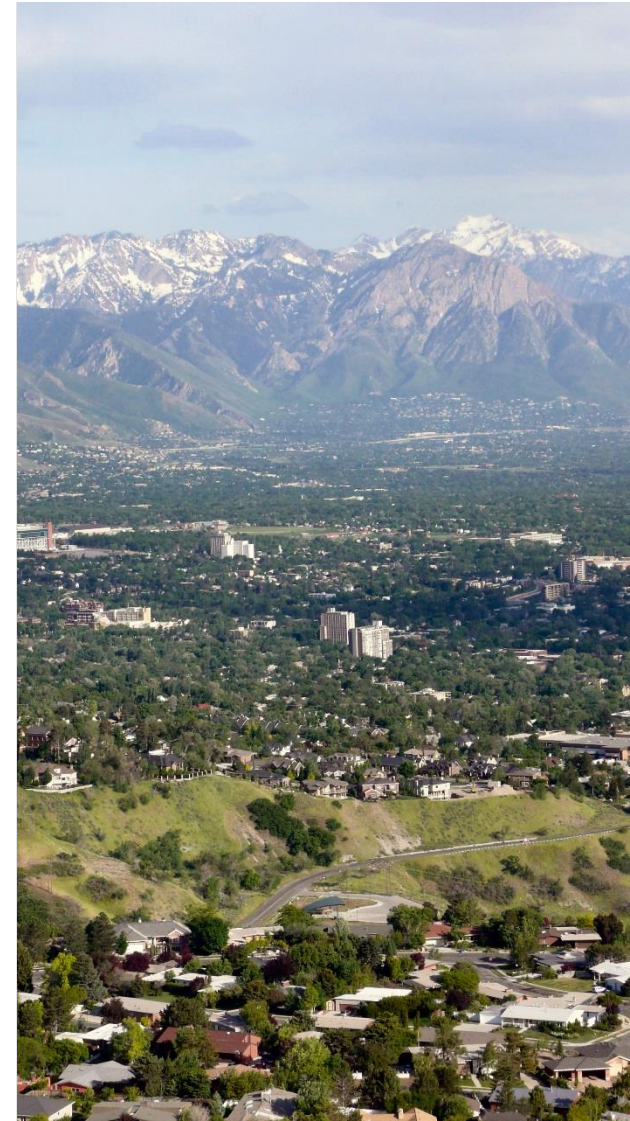


# FR/FA Ordinance Update and required stormwater updates



Presented by Salt Lake County Watershed  
Planning and Restoration Program & DWQ





## SLCo UPDES History

- All entities that discharge stormwater to Waters of the United States must have a NPDES permit to do so.
- SLCo received its UPDES Permit in 1995 with updates in 2001, 2006, 2013 and 2020. Minor updates issued 2023.
- Permit holders must comply with terms of permits or potentially face EPA/DOJ lawsuits including fines, Consent Decrees, etc.
- SLCo has been through three major Stormwater Compliance Evaluation Inspections (Audits) to assess permit compliance.

## SLCo UPDES Audit History

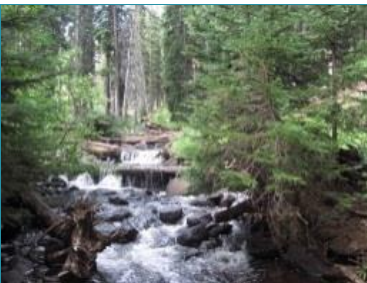
2007 Audit	9 Deficiencies	4 Recommendations
2012 Audit	44 Deficiencies/ EPA fines and Consent Decree	4 Recommendations/ EPA & DOJ Lawsuit
2021 Audit	8 Deficiencies	5 Recommendations

## Changes made to the SLCo Stormwater Program after the 2012 Audit:

- 100% staff turnover
- Change of focus from “skeletal” approach to data-driven best practices approach
- Annual review of what is/isn’t working
- Results based Stormwater Management Plan updates
- Careful attention paid to emerging trends
- Proactive strategies for compliance



Salt Lake County's UPDES Permit UTS 000001 was revised August 16, 2023 as a result of the Jordan River Watershed E. coli TMDL study.



Note: E. coli is the pollutant of concern in this study. Structural and non-structural BMP's must be added to SLCo's stormwater management plan to keep E. coli out of water bodies.



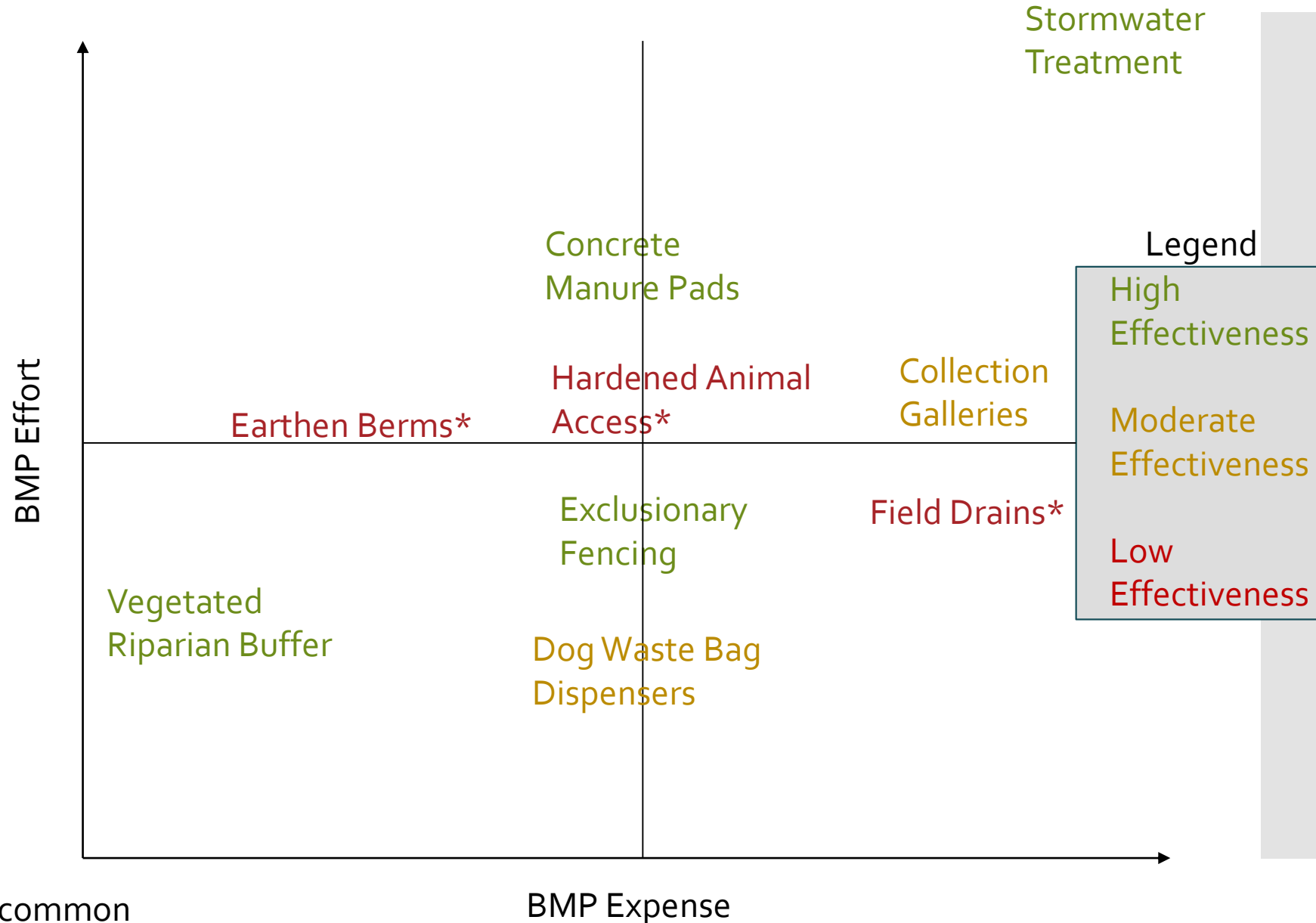
### Point Source:

- Construction Stormwater
- Municipal Stormwater

### Non-Point Source

- Onsite Septic
- Agricultural Livestock
- Agricultural Canals
- Domestic Pets
- Wildlife/Nuisance Species
- Recreationists/Unhoused populations

# BMPs listed in Table 9 of the Jordan River E. coli TMDL



\*BMP not listed in Table 9 but are common practices in livestock keeping

Stream Buffer BMP effectiveness with specific sources of E. coli listed in the Jordan River E. Coli TMDL: Main Report, pg 67, Appendices A-I



Point Source:

- Construction Stormwater
- Municipal Stormwater

Non-Point Source

- Onsite Septic
- Agricultural Livestock
- Agricultural Canals
- Domestic Pets
- Wildlife/Nuisance Species
- Recreationists/Unhoused populations

Vegetated Buffer BMP/Effectiveness

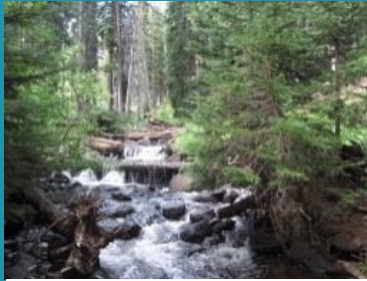
- Yes/High
- Yes/High
- Yes/High
- Yes/High
- No/NA
- Yes/High
- Yes/Moderate
- Yes/High\*

## Structural BMP's previously employed:

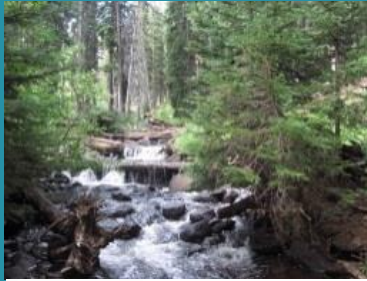
- Oil/Water Separators (9)
- Sediment Basins (7)
- Detention/Retention Basins
- Exclusionary Fencing
- Vegetation Improvements to Riparian areas
- Natural Channel Design Stream Restoration Projects (7)
- Bioengineered Stream Restoration projects (23)
- Public Restroom Facilities
- Constructed Wetlands

## Proposed Structural BMP's:

- Vegetated Stream Buffers (future development)
- Exclusionary Fencing
- Riparian Restorations
- Public Restroom Facilities
- Dog Waste Bag Dispensers
- Grant funded Projects TBD







## Non-Structural BMP's previously employed:

- Mainstream Media ad campaign
- Social media posts
- Bus advertisement
- Signs in parks/poop fairy campaign
- Stream signs
- Stream Care Guide
- 4<sup>th</sup> and 9<sup>th</sup> grade water quality curriculum
- Water Quality Fair (Elementary School)
- Water Science and Engineering Competition (High School)
- Watershed Symposium
- Attendance at community festivals
- Public opinion polling

Despite existing non-structural efforts, polling results and increased numbers of stream impairments indicate additional non-structural BMP's are required

## Proposed Non-Structural BMP's:

- Interpretive signage at County facilities
- Increased dog waste bag dispensers with signage
- "Flag the poop" campaign
- Ordinance update



# Is protection through Non-Structural BMP (ordinance) effective?

A comparison of sub-watersheds in the Jordan River  
Watershed...

# Grants available to assist landowners with BMP installation: Optional BMP for existing development



Agency	Funding Name	Typical Project	Match		
UDAF	Invasive Species Mitigation (ISM)	Noxious and Invasive Weed Control	50%		
				\$1000 payment to landowner as soon as Comprehensive Nutrient Management Plan (CNMP) is written. \$12 per acre payment for 3 years if they follow the plan.	
UDAF	AgVIP	Nutrient Management			
UDAF	Water Optimization	Water Quantity (Savings) Irrigation Improvements	50%		
UDAF	Pollinator Program	Native Plants for Utah Pollinators	Labor (Planting)		
UDAF	Grazing Improvement	Fencing/watering for livestock	50%		
				<a href="https://ag.utah.gov/wp-content/uploads/2023/06/NOFO_LRM-2023_FINAL.pdf">https://ag.utah.gov/wp-content/uploads/2023/06/NOFO_LRM-2023_FINAL.pdf</a>	
UDAF	LeRay McAllister Working Farm and Ranch Fund	Conservation Easements (buyout of development rights)			
NRCS	Environmental Quality Incentives Program (EQIP)	Nearly everything on farm		Payment on a rate per practice	
NRCS	Conservation Stewardship Program (CSP)	Pays people to be better farmers		Payment on a rate per practice	
NRCS	Agriculture management assistance (AMA)	High Tunnels, raised beds, low tunnels, and no irrigation history		Payment on a rate per practice	
NRCS	Inflation Reduction Act (IRA)	Anything that sequesters carbon (climate change) Reduces energy consumption		Payment on a rate per practice	
NRCS	Strategic Fund Pools (EQIP)	Nearly everything on farm		Payment on a rate per practice	
UDWQ	Nonpoint Source (NPS) Funding	Projects related to reducing nonpoint source pollution	40%		

SLCo Watershed staff can assist with applications, installation and/or monitoring on a ranked availability basis

# Summary and Conclusions



- Many SLCo waterways are listed as impaired for E. coli the Jordan River E. coli TMDL.
- FR/FA zoning applies to many of these areas.
- SLCo must implement structural and non-structural BMP's to address the E. coli impairment.
- FR/FA zoning updates requiring riparian buffers will satisfy the non-structural and structural requirements.
- It is Salt Lake County Watershed's expert opinion that SLCo should update zoning ordinance to incorporate protections sufficient to accomplish required pollutant of concern controls and required BMPs because they are effective.
- Implementation of this type of riparian protection will assist with other impairments as well as E. coli.