



UTAH DEPARTMENT *of*
ENVIRONMENTAL QUALITY
**WATER
QUALITY**

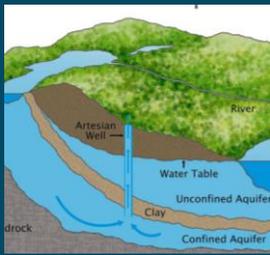
WATER QUALITY BUILDING BLOCK REQUESTS

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Mission

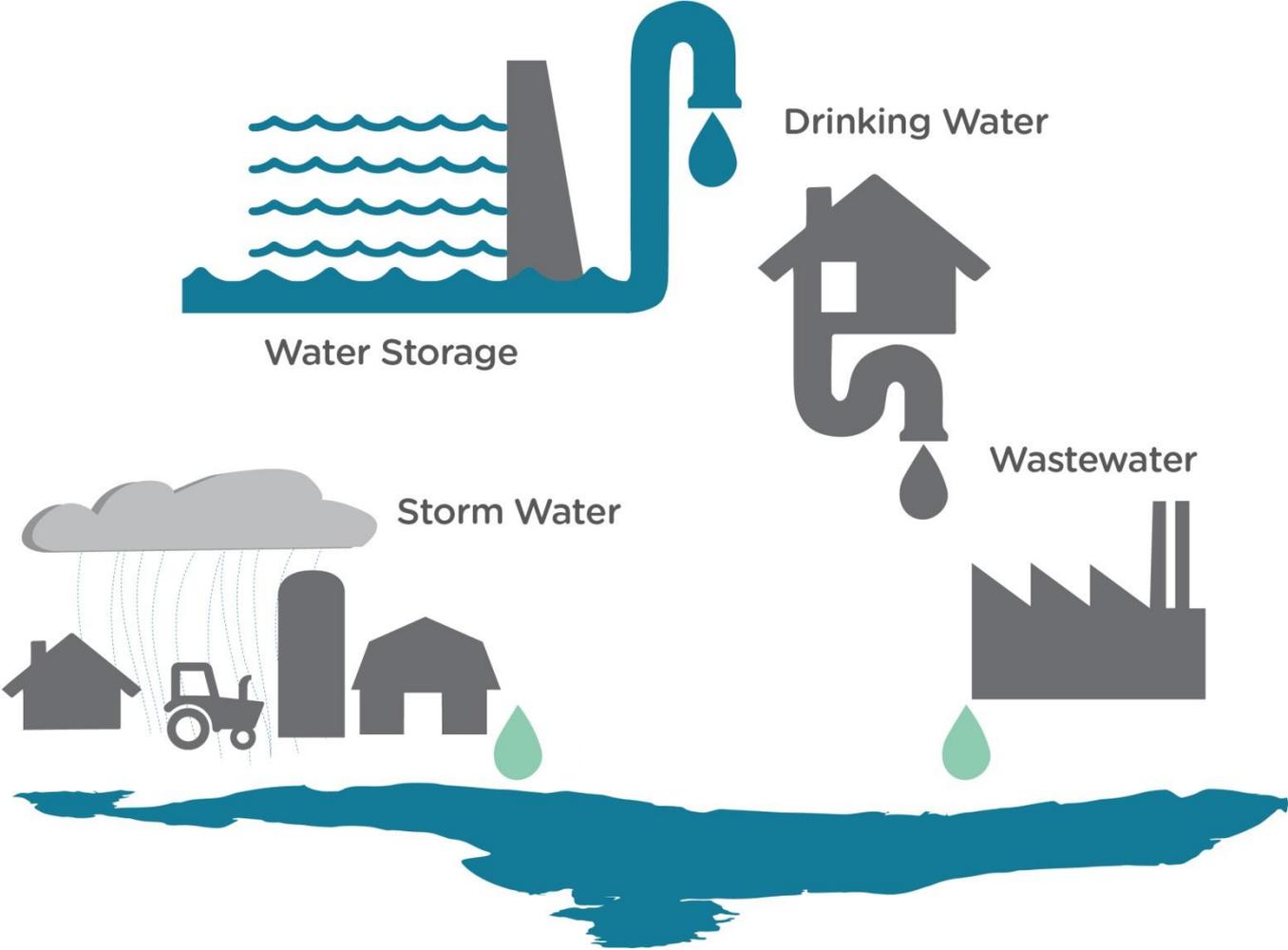
Safeguarding and enhancing Utah's waters through balanced regulation

Rivers and Streams	Lakes/Reservoirs	Wetlands	Ground Water
			
14,250 perennial miles 171,760 total miles	1,552,078 acres	510,359 acres	Extensive aquifer systems

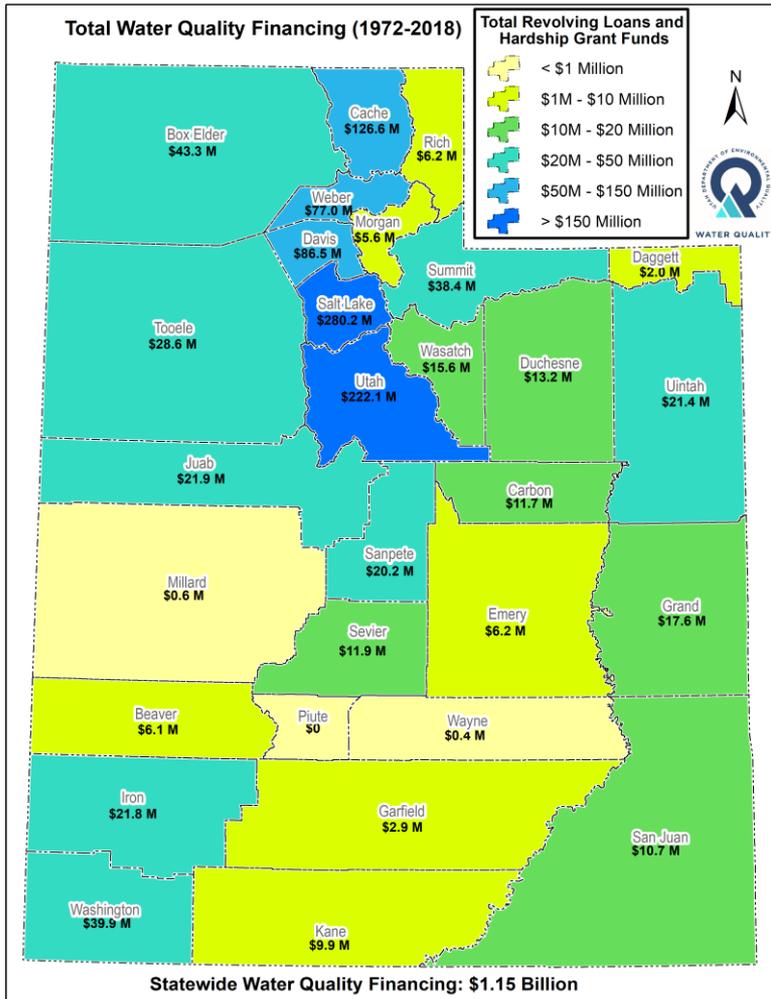
- Permits
 - 487 UPDES permits regulate the discharge of 110 billion gallons/year
 - 4,000+ storm water permits
 - 50 ground water permits
- Develop water quality standards protective of Utah's waters
- Monitor and assess 4,000 sites
- Respond to 50 – 100 incidents per year
- Finance wastewater and sewer projects



Water Infrastructure



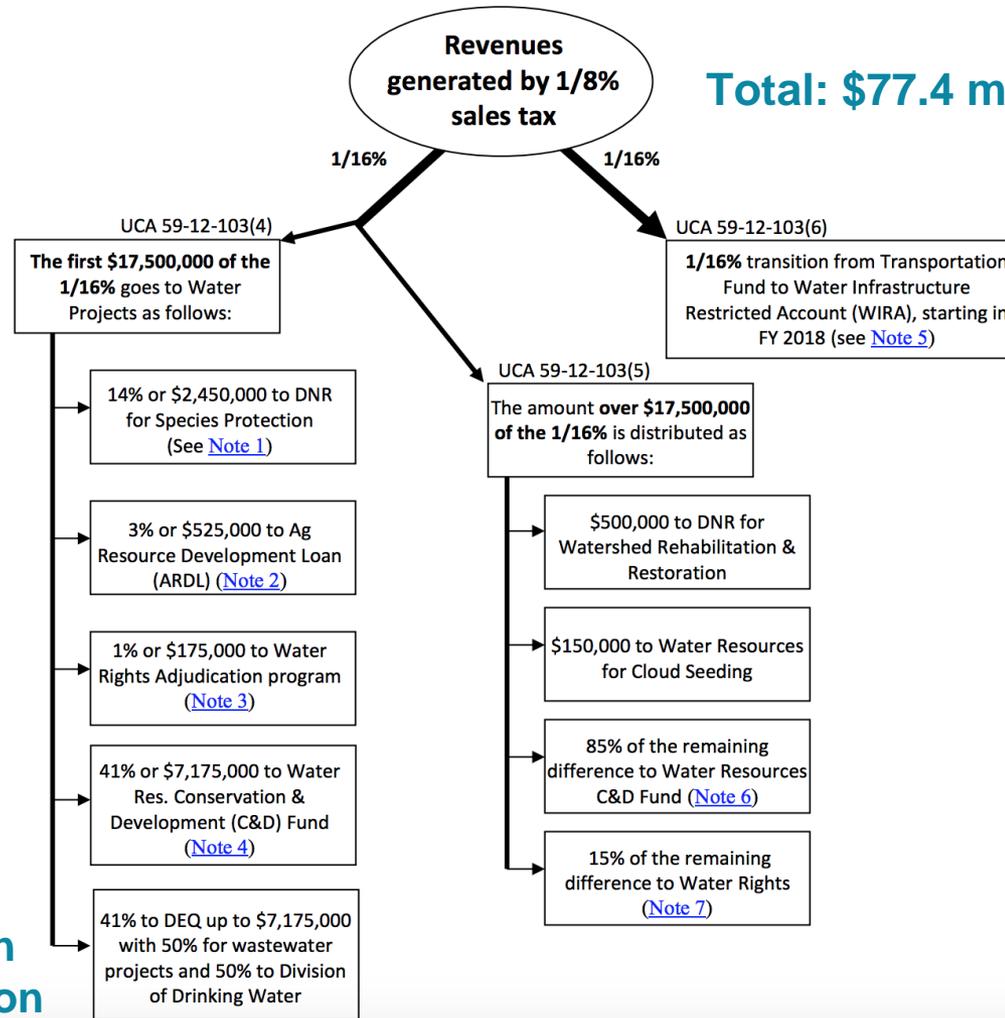
Water Infrastructure Financing



- Water infrastructure financing since 1983: ~\$1 billion
- Wastewater and sewer infrastructure projected needs through 2025: ~\$1 billion
- Recent projects and authorizations
 - Moab WWTP
 - Salem City WWTP
 - Logan WWTP
 - Provo City WWTP
 - Central Valley Water Reclamation Facility
 - South Salt Lake City

Sales Tax Financing Water Infrastructure

Total: \$77.4 million



Water Quality: \$3.5 million
Drinking Water: \$3.5 million



Harmful Algal Bloom Response - 2018



166

Unique sites monitored.



58

water bodies visited



1,000

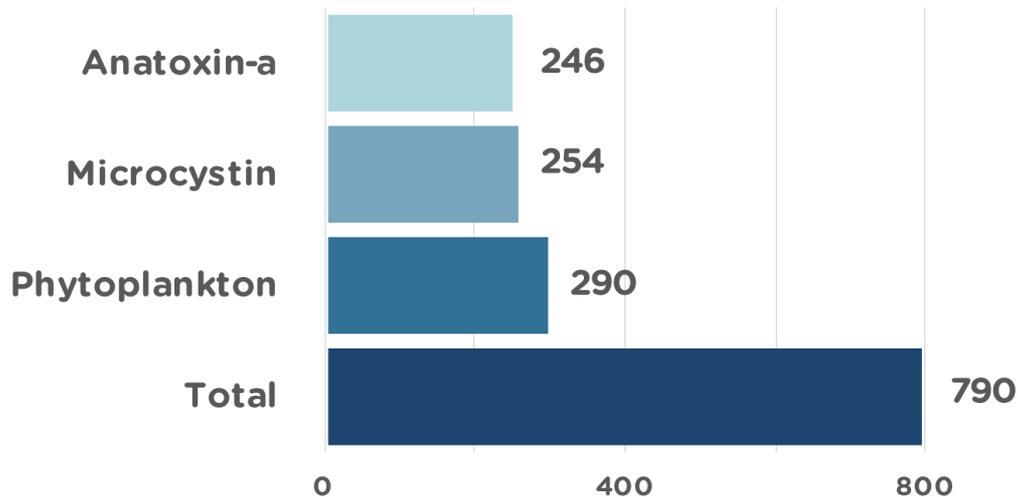
Phycocyanin measurements taken



20K

Miles driven

Samples collected



Recreational advisories

- 25 water bodies
- 10 of 13 Local Health Departments

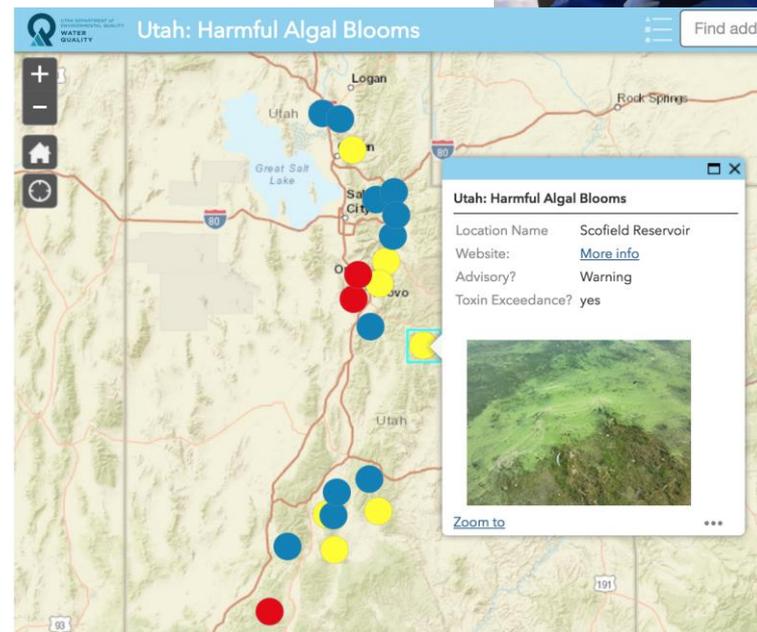
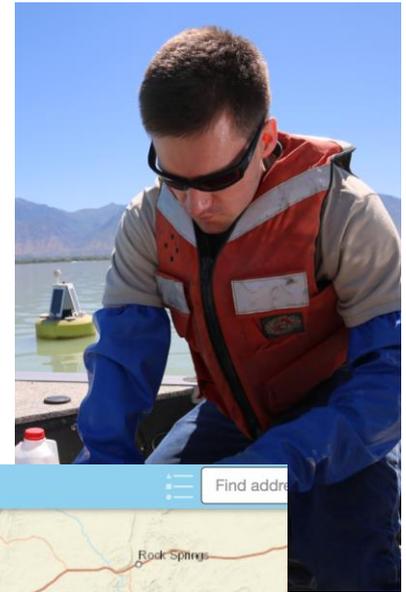
Livestock/irrigation advisories

- 2 water bodies
- Utah Dept. of Agriculture and Food

HAB Response Program

Funding Request: \$200,000 (ongoing)

- Proactive monitoring of high-risk waters
- Trained personnel available for bloom response
- Provide Local Health Departments with timely data
- One-stop location for bloom related information



North Fork Virgin River TMDL

- E. coli impairment in Zion National Park
- TMDL completed and implemented (2016-2018)
- Recent data shows water quality below standard



Trailhead outhouse



Chamberlain Ranch grazing management plan



Changes in grazing practices



Irrigation water management

Targeted Water Quality Studies

Funding Request: \$1,000,000 (one-time)

- Targeted studies to support scientifically defensible regulatory decisions
- Competitive process focused on priority issues specific to Utah
- Preserves nonpoint source funding for projects

Current Funding Situation

- No dedicated funding for studies
- Studies compete with Utah's hardship and nonpoint source projects
- Increased demand for infrastructure/nonpoint source funding exceeds available monies.

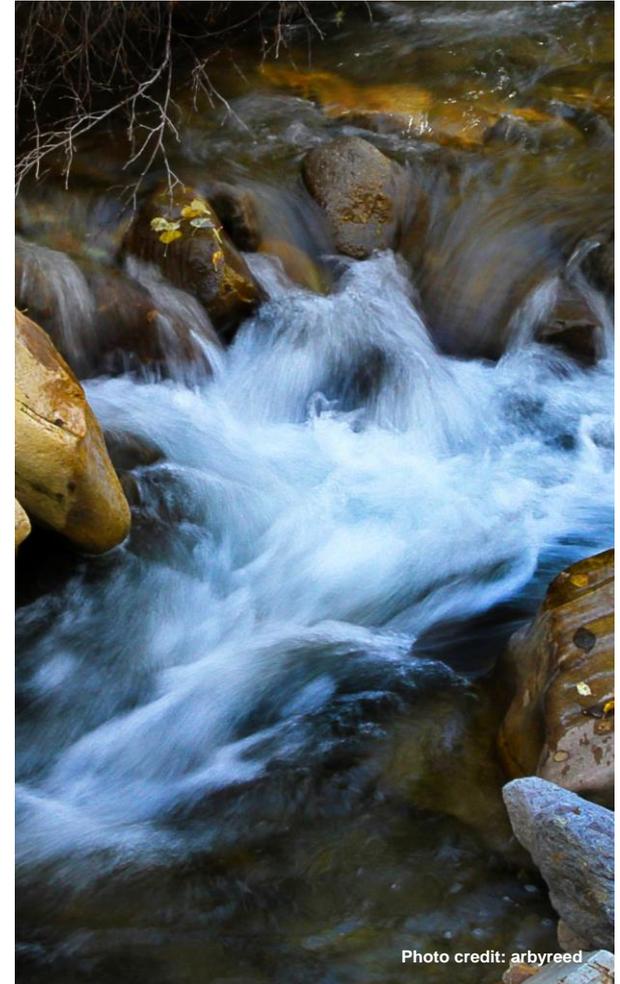
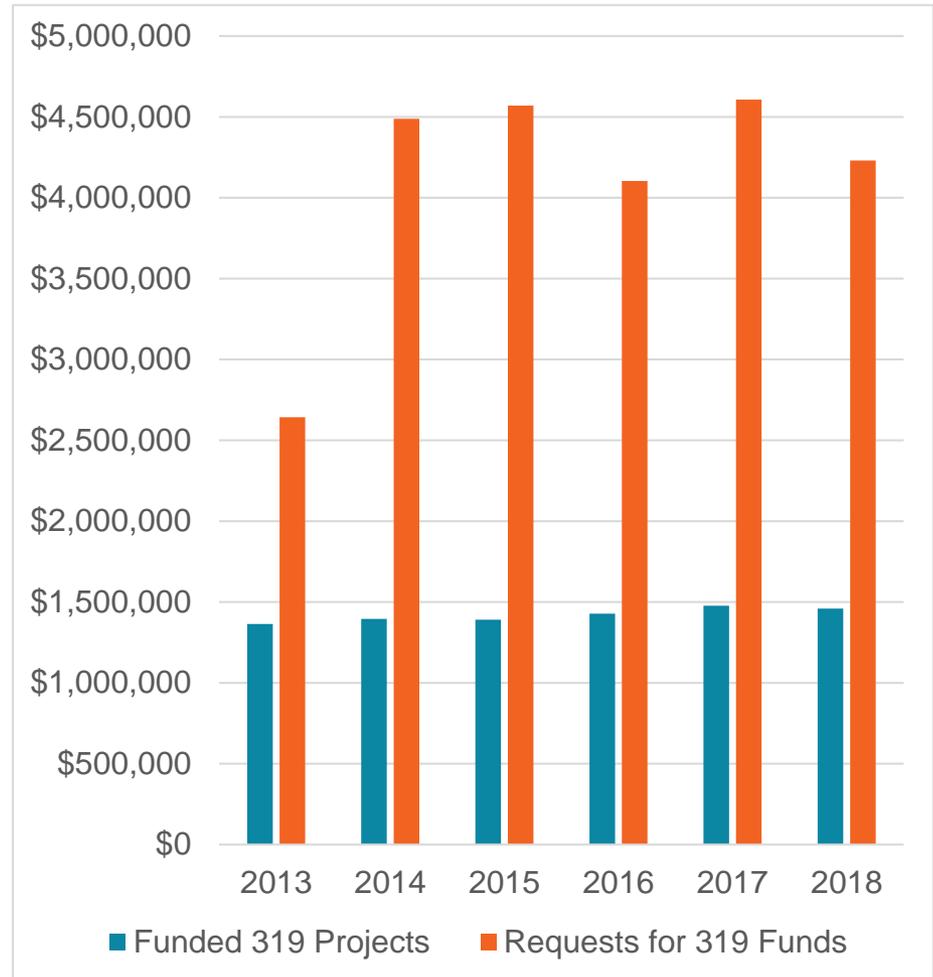
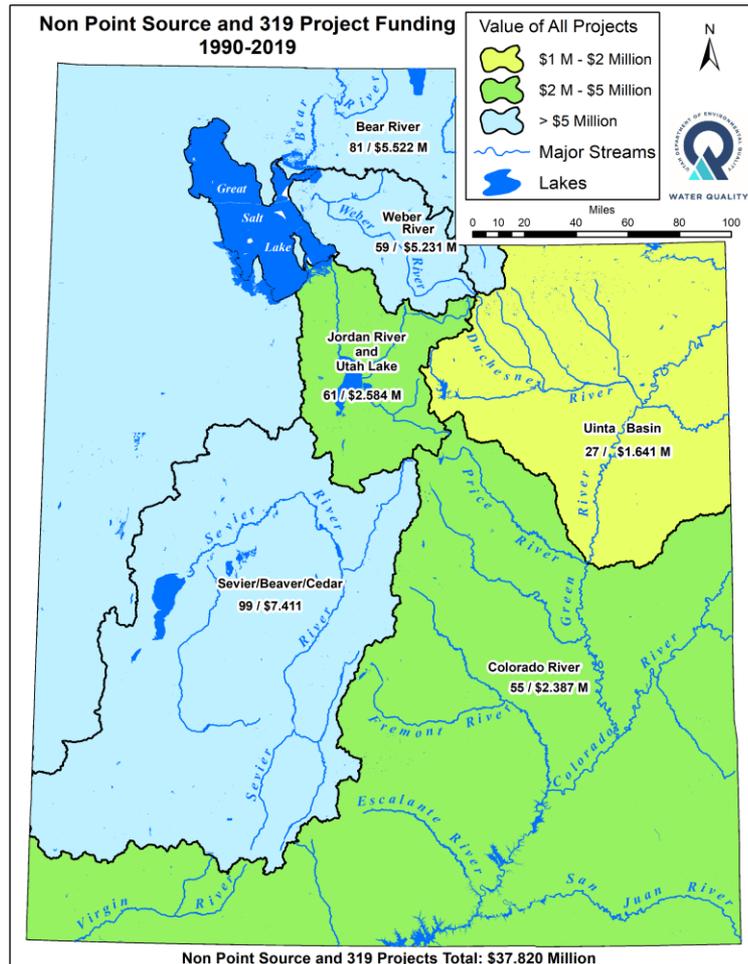


Photo credit: arbyreed

Nonpoint Source Grant Fund Requests and Available Funding



Septic Density Studies

Challenge: Development pressure in drinking water source protection areas

Local Health Department Need: Evaluation of appropriate septic densities to support balanced permitting

Highest need areas:

- Wasatch County
- Provo Canyon
- Southern Utah County
- Bear Lake
- Garfield County
- Washington County



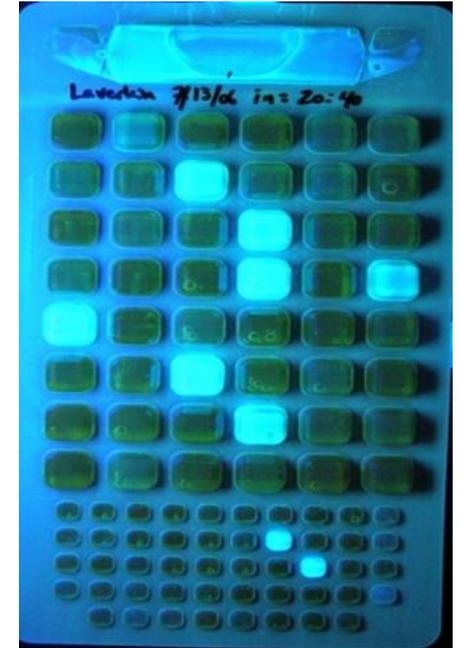
Microbial Source Tracking

Challenge: Unresolved pathogen contamination threatening public health

Need: Analytical tools to determine sources of E. coli (humans, wildlife, domestic animals, and livestock)

Highest need areas:

- Emigration Canyon
- Freemont River, Capitol Reef
- Lindon Marina, Utah Lake
- Jordan River
- Snake Creek



Water Reuse

Challenge: Opportunities and challenges associated with water reuse are unclear

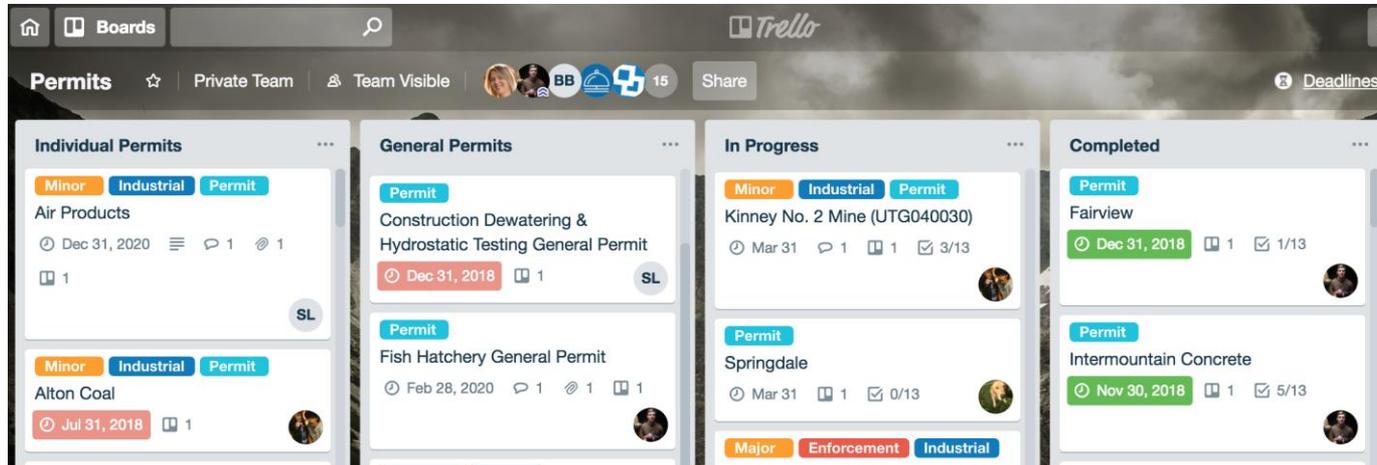
Need: Understanding of the economics, water rights, demand, downstream impacts, regulatory, and public health issues associated with water reuse specific to Utah

Highest need areas:

- Jordan River
- Weber River
- Cedar City
- Provo City



Performance Improvement



- Water Quality Board loan process
- Tracking of employee time and progress by program and activity
- Electronic submission of data (ambient, compliance, and infrastructure needs)
- Automation of water quality assessments
- Nimble work force to align with changing state priorities
- Permit efficiency and accuracy

Protecting Utah's Water Quality & Quality of Life

