

# Clean Water Act Basics: An Overview of Core Programs



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# AGENDA



- ..... Introduction
- ..... History of Act
- ..... Goals of Act
- ..... Act & Jordan
- ..... Resources

## Why are we focusing on the CWA?

- Structure for discussing what you want to do with your rivers, lakes, and wetlands.
- Starting point to consider, but by no means an end point. Other federal laws; other state laws, etc.
- Will discuss CWA tools, and then discuss different ways you may see them applied to the Jordan River.

## What is the CWA not so good at?

- Protecting and restoring in-stream and riparian habitat.
- Dealing with flow/quantity issues.
- Others?







# 1972 Clean Water Act

## 1972 Federal Water Pollution Control Act Amendments (Clean Water Act):

- Consistent national floors of protection.
- Many programs “delegated” to states.
- Amended several times since 1972, most recently in 1987.

# Clean Water Act Vision

Restore and maintain the chemical, physical and biological integrity of Nation's waters



# Select Clean Water Act Goals



- All waters “fishable and swimmable” by 1983
- Eliminate pollution discharged to water by 1985
- No discharge of toxics in toxic amounts



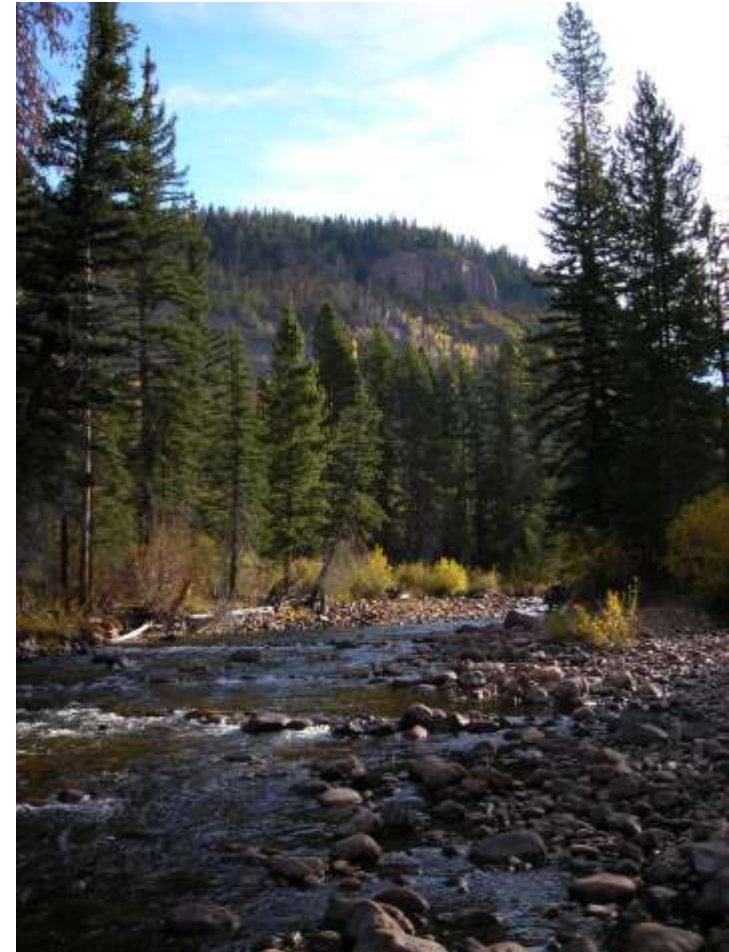
How would you make these goals specific to your watershed?



# Map of CWA Core Programs

Many programs in CWA. Today we'll map out a few core programs:

- Water quality standards
- Pollution discharge permits
- 319 nonpoint source program
- Impaired waters program
- Select funding pools

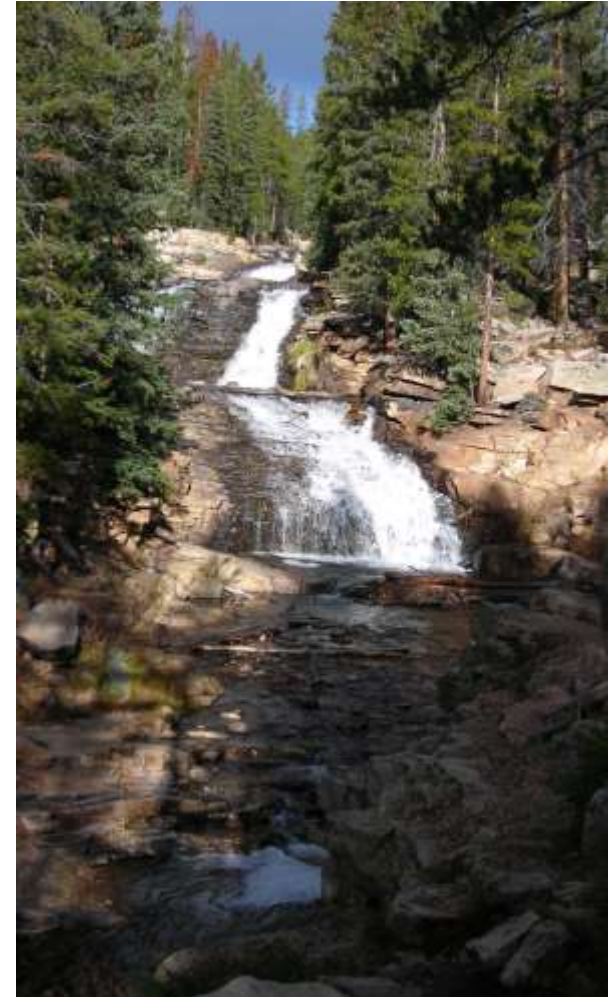


# Water Quality Standards

What do we value?

What are our goals for our rivers?

- Designated uses
- Water quality criteria to protect uses
- Antidegradation policy to keep healthy waters healthy



## Designated uses in Utah

1C	Domestic water supply
2A	Frequent primary contact
2B	Infrequent primary contact
3A	Cold water aquatic life
3B	Warm water aquatic life
3C	Nongame fish and aquatic life
3D	Waterfowl, shorebirds, etc.
3E	Severely habitat-limited waters
4	Agricultural uses
5 a-e	Great Salt Lake (recreation & wildlife)



## Designated uses on the Jordan

1C	Domestic water supply
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# Water quality criteria

**Protective limits tied to uses. Two types:**

Numeric - measurable benchmarks

- maximum acceptable concentration
- min or max acceptable level
- acceptable range

Narrative – describes water quality goals

- desirable biological condition
- “free from” standards

# Antidegradation: keep it healthy!

## Tier 3

Strictly protect “outstanding waters”

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## Tier 2

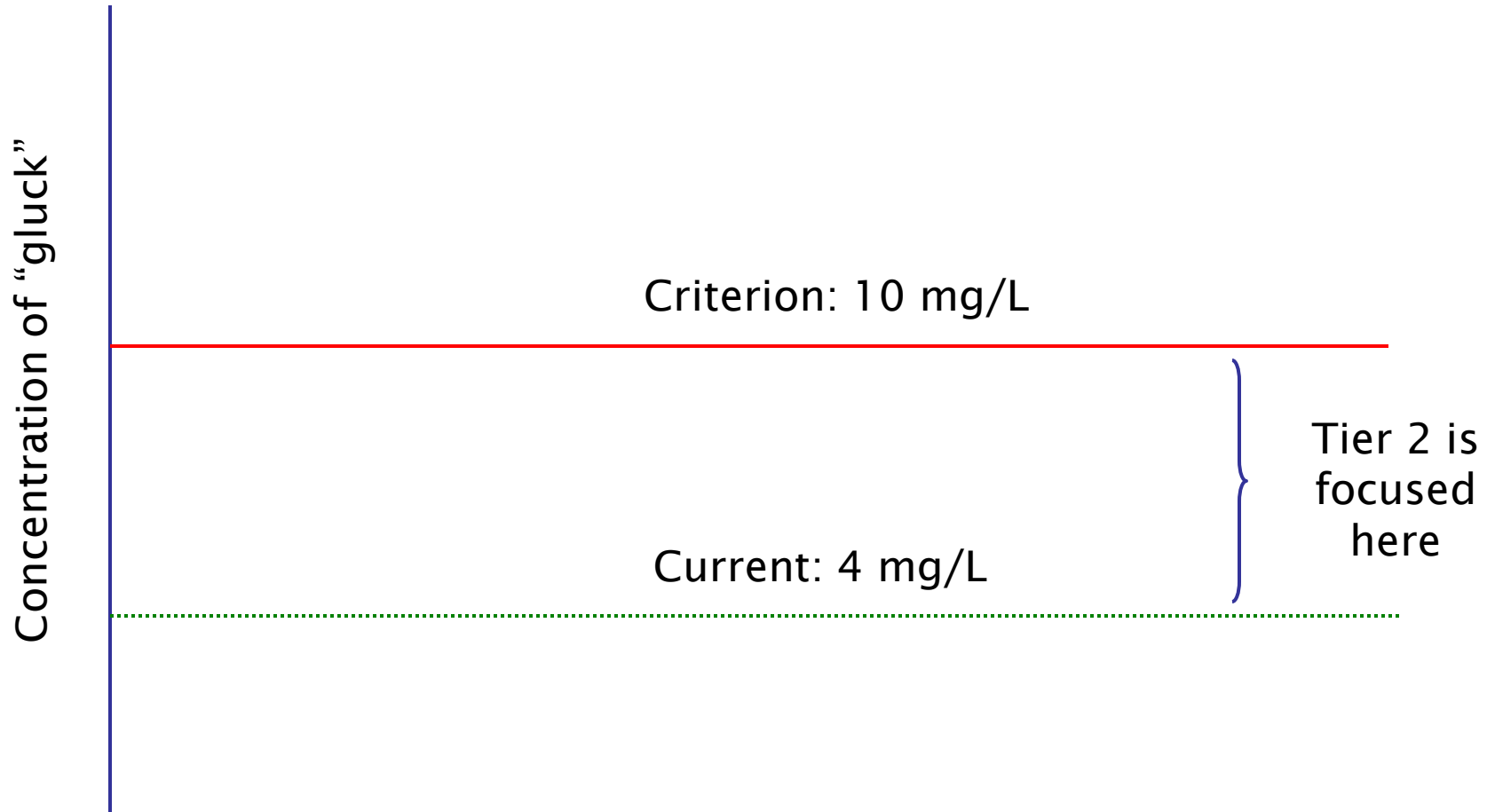
Limit degradation of good water quality

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## Tier 1

Maintain and protect all existing uses

# Antidegradation: Tier 2 protections





# Uses for Water Quality Standards

- Make sure the “uses” of your local creek protect what’s important to community.
- Set appropriate goals for restoration.
- Protect higher quality waters from unnecessary degradation.
- Use uses/criteria to explain the “why” of things like TMDLs.



# Point Source Discharge Permits

How do we limit industrial pollution? Sewage?

## National Pollutant Discharge Elimination System (NPDES)

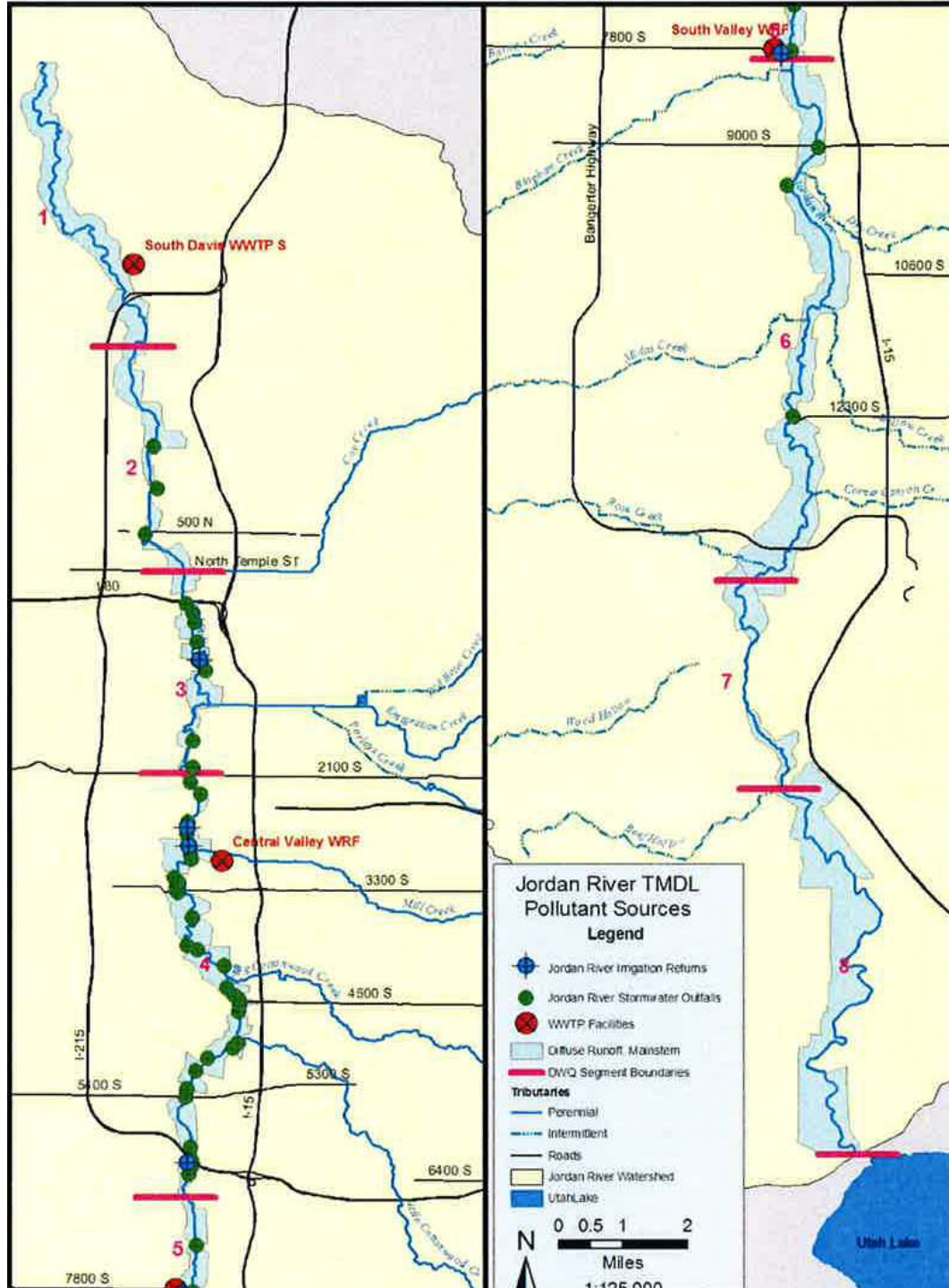
- Municipal and industrial wastewater, stormwater, mining, CAFOs
- Technology-based or water quality based discharge limits.



## NPDES permits in Utah...UPDES!

	Individual	General
Industrial	54	25 active
Municipal	64	68
CAFOs	0	13 aquatic; 46 livestock
Stormwater	3 municipal	1700 construct; 500 industrial; 75 municipal

Numbers approximate from staff estimates.





## Uses NPDES permits

- Get familiar with point source dischargers in your watershed and their permit requirements.
- Look beyond industrial and municipal to issues such as stormwater permitting
  - Understand if/how this impacts your watershed/TMDL
  - Understand how you can help watchdog

# Nonpoint Source Pollution Control: 319

What about runoff from farms? From lawns?

1. Assessments of problem

2. Establish program for control

- ✓ Voluntary
- ✓ Best Management Practices

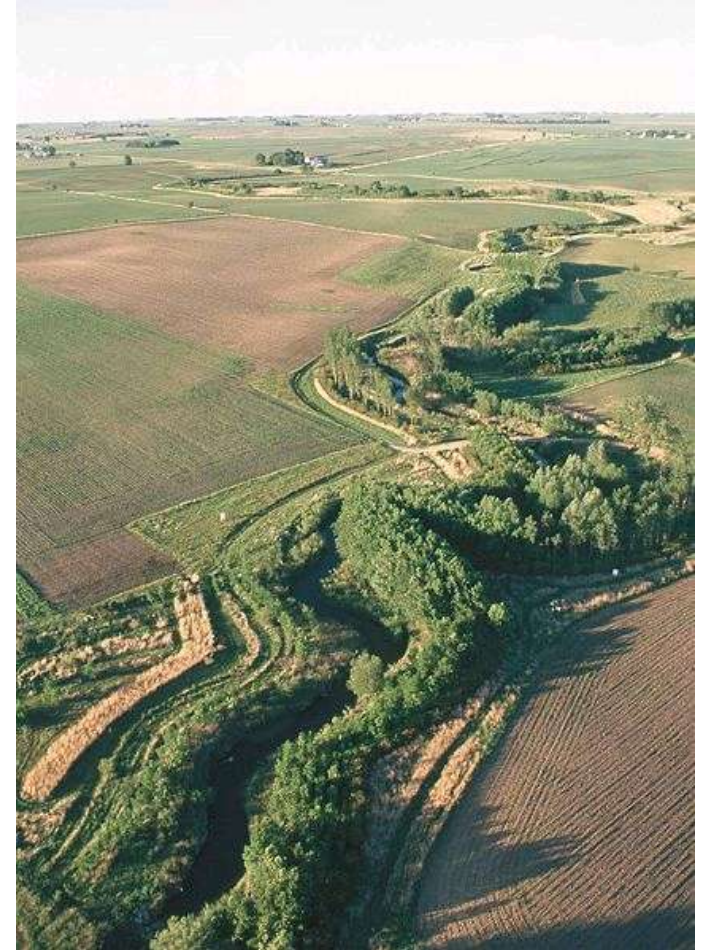
3. 319(h) grants for on-the-ground work

## 319 program in Utah

- EPA granted approx. \$1.7 million to Utah in 2009.
- Roughly \$600,000 used by Division of Water Quality, \$1.1 granted out for nonpoint source control projects.
- Largely TMDL implementation focused

## Uses for 319 program in Jordan

- Money for pollution control and restoration!
- Tracking nonpoint source pollution trends/patterns
- Learning about effectiveness of BMPs
- Others?



# Restoring Impaired Waters: 303(d)

What if we still have troubled waters?

1. Identify waters not meeting standards
2. Prioritize waters for restoration
3. Develop a “Total Maximum Daily Load” to restore





## A Total Maximum Daily Load is...

- A. A calculation of the maximum safe amount of a pollutant for a waterbody.
- B. A plan for cleanup of a polluted river, lake, or coastal water.
- C. A mechanism for bringing many programs and tools to bear on a problem.
- D. All of the above.

# TMDL listings on Jordan

River stretch by mile	Class	Pollutant
0-6.9	2B, 3B, 4	Dissolved Oxygen
6.9-11.4	2B, 3B, 4	E coli, Dissolved Oxygen
11.4-15.9	2B, 3B, 4	E coli, Dissolved Oxygen, Phosphorus
15.9-24.7	2B, 3A, 3B, 4	Salinity/TDS/Chlorides
24.7-26.4	2B, 3A, 4	E coli, Temp, Salinity/TDS/Chlorides
26.4-37.6	2B, 3A, 4	Temperature
37.6-41.8	2B, 3A, 4	Temp, Salinity/TDS/Chlorides
41.8-51.4	4	Salinity/TDS/Chlorides



## Uses for TMDL program

- Driver for data collection and research into/definition of problems
- Educational tool for use with communities
- Forum for bringing many programs to focus on a problem, including \$\$
- Motivator for on-the-ground efforts, changes

# Diverse Funding Programs

Where do all the dollars come from?



- SRF funding
- 319(h) grants
- Tribal set-aside grant
- Wetland grants
- More...



- Clean Water Act online course:  
[www.cleanwateract.org](http://www.cleanwateract.org)
- Clean Water Act Owners Manual
- Utah Division of Water Quality:  
<http://www.waterquality.utah.gov/>
- Jordan Water Quality Stewardship Plan:  
[www.waterresources.slco.org/html/wtrQualSteward/WaQSP\\_Final.html](http://www.waterresources.slco.org/html/wtrQualSteward/WaQSP_Final.html)



