

Clean Water Act

Utah Lake Kickoff

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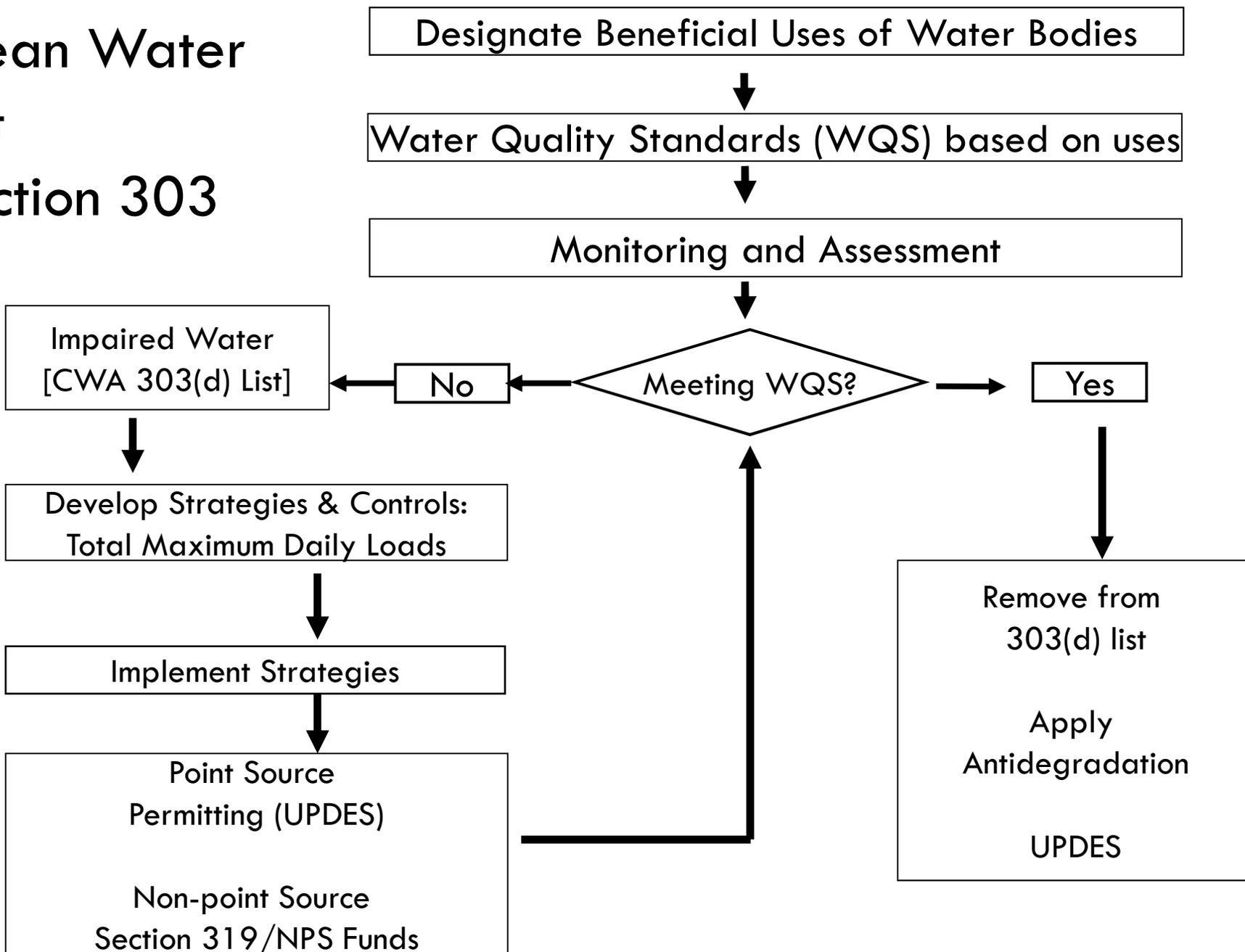
Clean Water Act



GOAL

Restore and Maintain the Chemical,
Physical, and Biological Integrity of
the Nation's Waters

Clean Water Act Section 303



Designated Uses: Utah Lake

1	Domestic water systems
1C	Protected for domestic purposes with prior treatment
2	Protected for recreational use and aesthetics
2A	Frequent contact recreation (swimming, water skiing)
2B	Infrequent contact recreation (boating, wading)
3	Aquatic wildlife
3A	Cold water species of game fish and associated food chains
3B	Warm water species of game fish and associated food chains
3C	Nongame fish and other aquatic life and associated food chains
3D	Waterfowl, shore birds and other water-oriented wildlife, including associated food chains
3E	Severely habitat-limited waters
4	Agricultural uses including irrigation of crops and stock watering
5	Great Salt Lake. Primary and secondary contact recreation, aquatic wildlife, and mineral extraction.
5A	Gilbert Bay
5B	Gunnison Bay
5C	Bear River Bay
5D	Farmington Bay
5E	Transitional waters along the shoreline of the GSL

Water Quality Standards



- Water Quality Standards = beneficial uses + numeric criteria + narrative standards
- Numeric criteria
 - ▣ The maximum concentration of a pollutant that a waterbody can contain and still support its beneficial uses
- Narrative standard
 - ▣ statement of unacceptable conditions in and on the water

What are Nutrient Standards?

Nutrient standards establish pollutant concentration limits that protect water bodies for their designated uses



Aquatic life



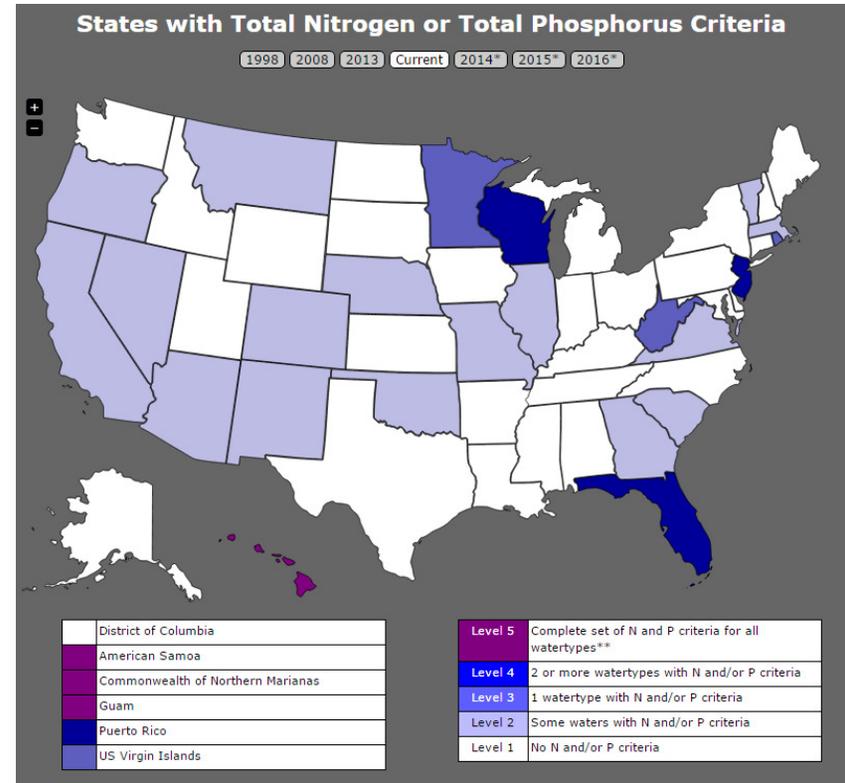
Aesthetics



Livestock



Recreation



Numeric Nutrient Criteria: Utah

- EPA proposed ecoregional standards in 2004
 - ▣ TP: 0.01 – 0.03 mg/L
 - ▣ TN: 0.3 – 0.5 mg/L
- Utah's alternative approach to nutrient reduction
 - ▣ Numeric nutrient criteria for headwaters
 - ▣ Modest technology based limits phased over 10 – 15 years
 - TP in effluent of 1 mg/L
 - TIN in effluent of 10 mg/L (??)
 - ▣ Science-based site-specific standards for receiving waters
 - 10 – 15 years to develop defensible science

Utah's Narrative Standard



*It shall be unlawful, and a violation of these regulations, for any person to discharge or place any waste or other substance in such a way as will be or may **become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste**; or cause conditions which **produce undesirable aquatic life** or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce **undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects**, as determined by bioassay or other tests performed in accordance with standard procedures.*

Utah Rule 317-2-7

UTAH'S 303(D) ASSESSMENT METHODOLOGY



2016

Integrated Report

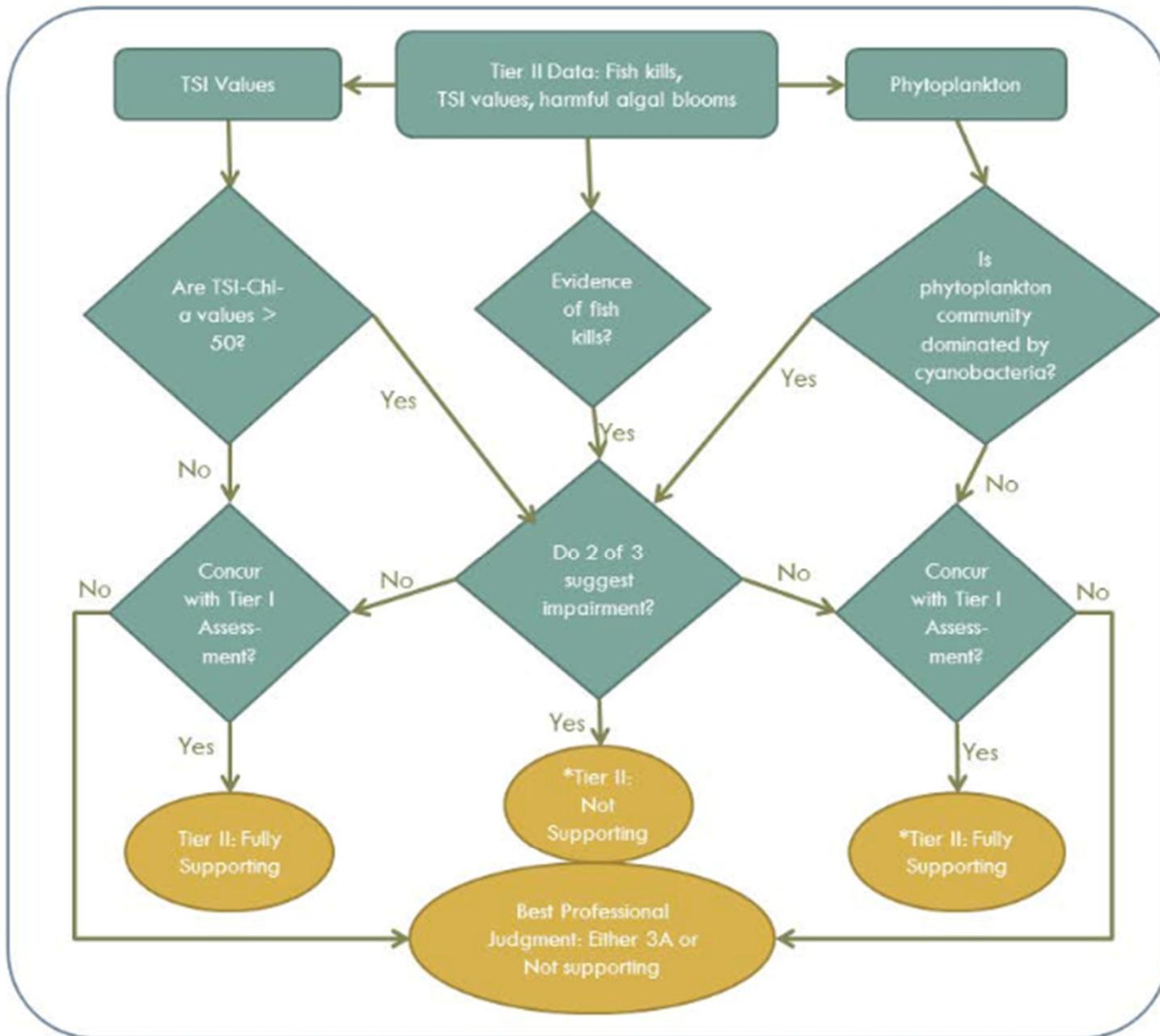
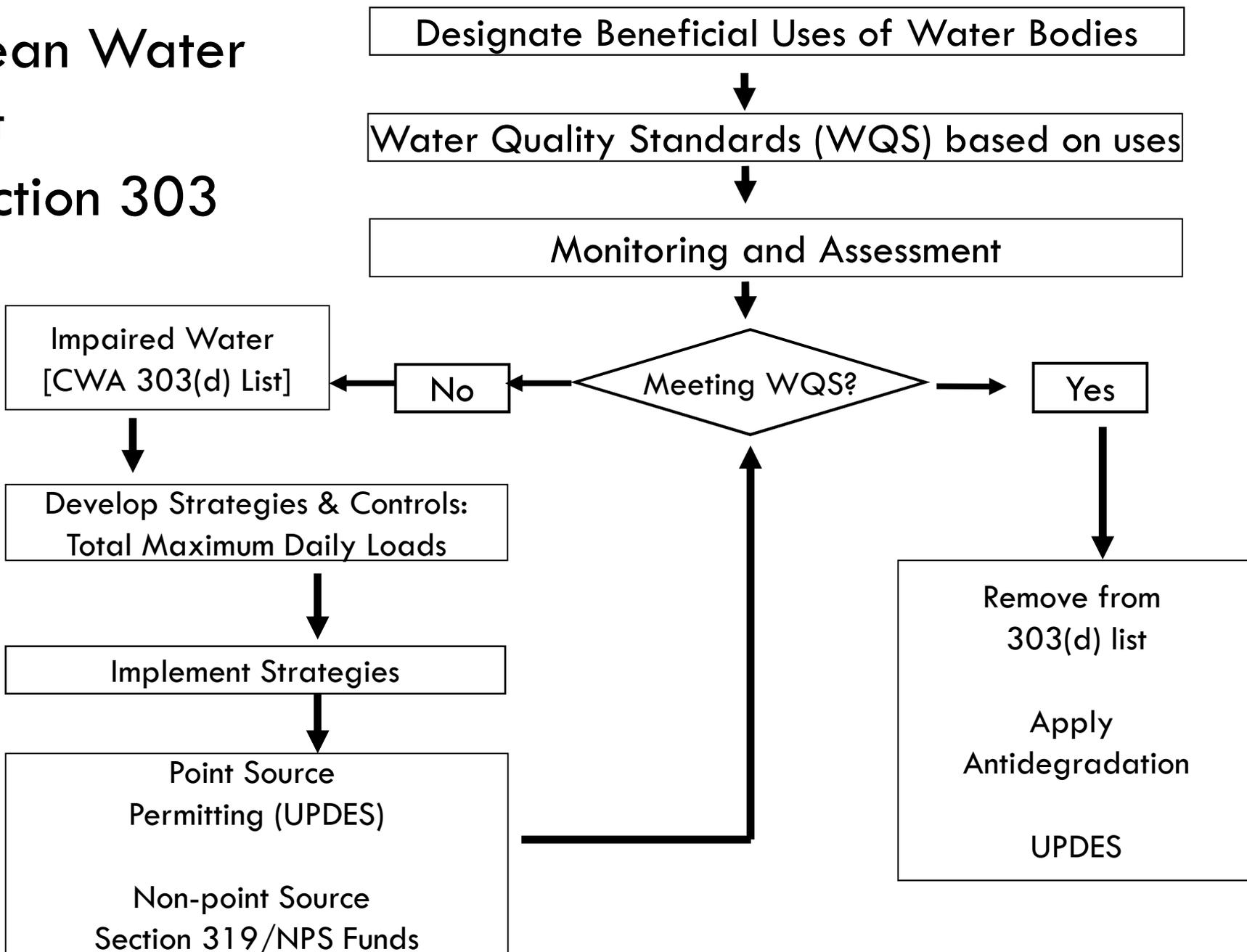


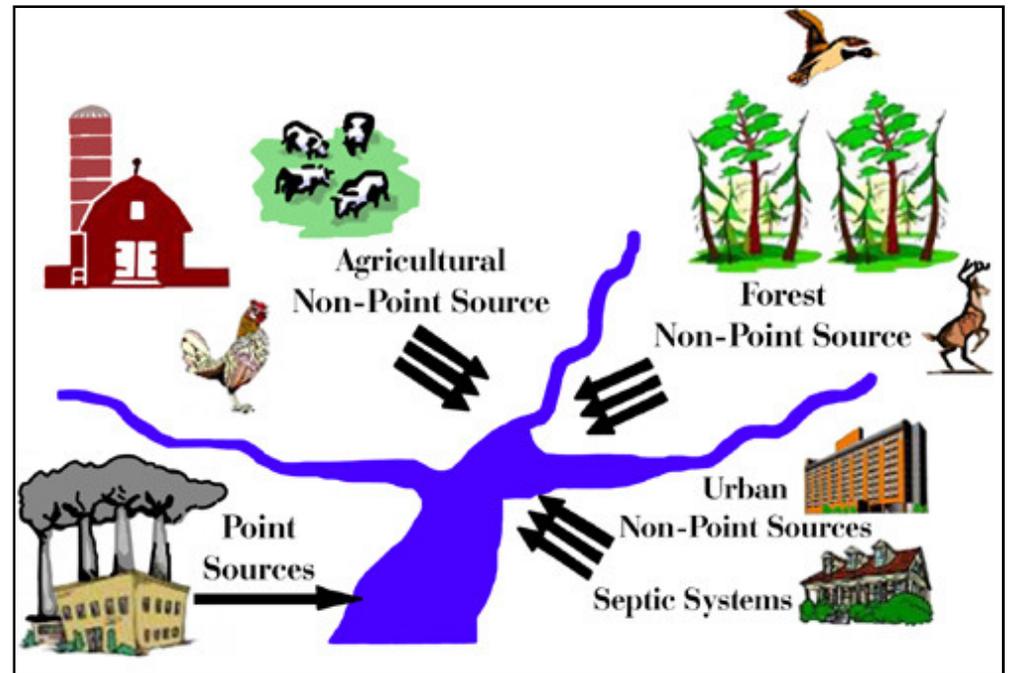
Figure 18. A Flow Chart that Describes the Tier II Assessment Process for Lakes

Clean Water Act Section 303



Total Maximum Daily Load (TMDL)

- The maximum amount (**load**) of a pollutant a water body can receive and still maintain its beneficial uses.
- **Allocates** pollutant loadings among point and nonpoint pollutant sources



http://www.caes.uga.edu/publications/pubDetail.cfm?pk_id=7173

Utah Lake – Jordan River – Great Salt Lake



Farmington Bay



Wetlands and Ponds



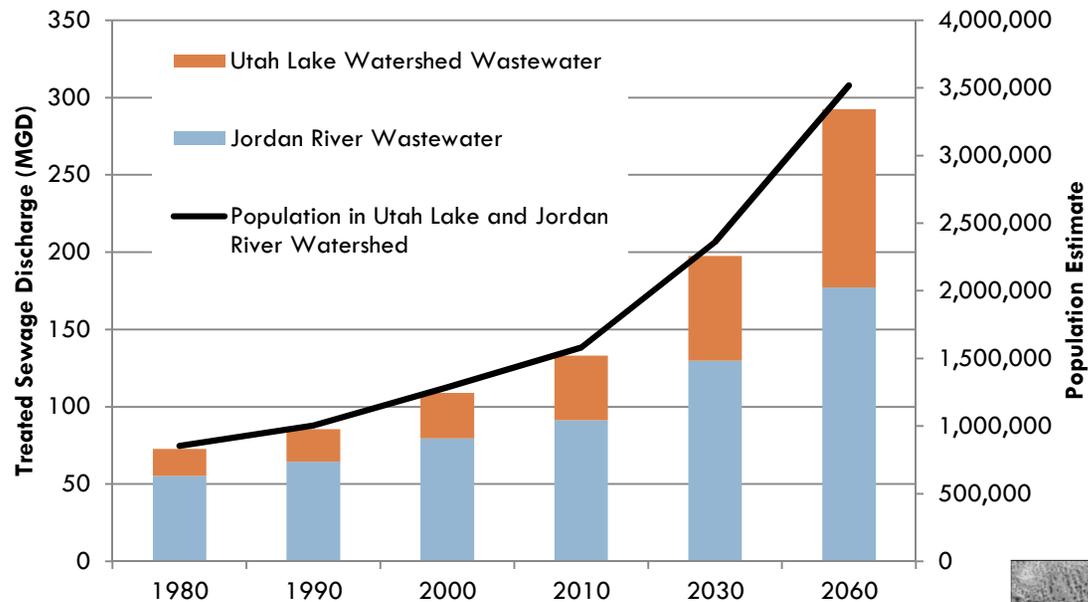
Jordan River



Impounded Wetlands

Utah Lake

Population Growth



Projected Growth from 2010 to 2060

- State of Utah: 115%
- Jordan River Basin: 94%
- Utah Lake Basin: 176%

