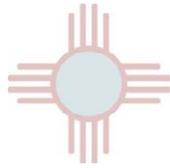
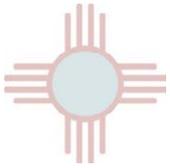


Introduction to Water Quality Standards

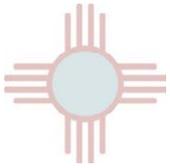




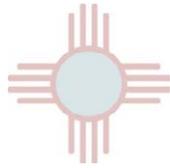
Objective

- **Provide an introduction to developing water quality standards (WQS) for submission to EPA**
 - **Designated Uses**
 - **Water Quality Criteria**
 - **Antidegradation Policy & Implementation Methods**
 - **Water Quality Certification**
 - **Other Components**



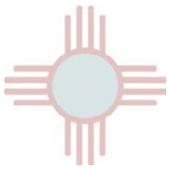


Objective

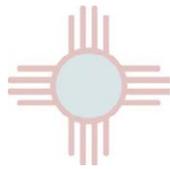


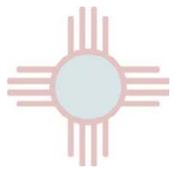
- **Regulatory and Programmatic Requirements**
- **WQS Adopted by a Tribe Become Effective Under the Clean Water Act (CWA)**
 - **After EPA has approved the Tribe's TAS application and the Tribe's WQS**



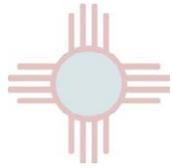


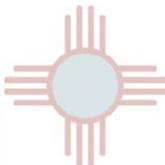
Roadmap





Water Quality Standards



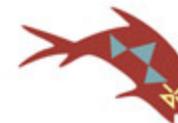


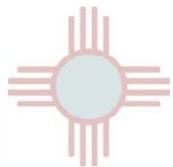
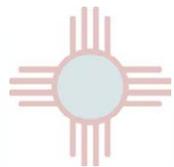
Treatment in a Manner Similar to a State (TAS)



**For WQS and Water Quality Certification Programs
Tribes submit an application documenting:**

- 1. Tribe is federally recognized by Secretary of the Interior**
- 2. Tribe has a governing body carrying out substantial governmental duties and powers**
- 3. WQS program pertains to management and protection of reservation water resources**
- 4. Tribe has capability to administer the WQS program**
- 5. Tribe submits additional documentation required by EPA to support the application**

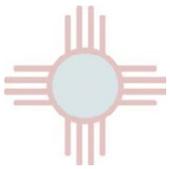




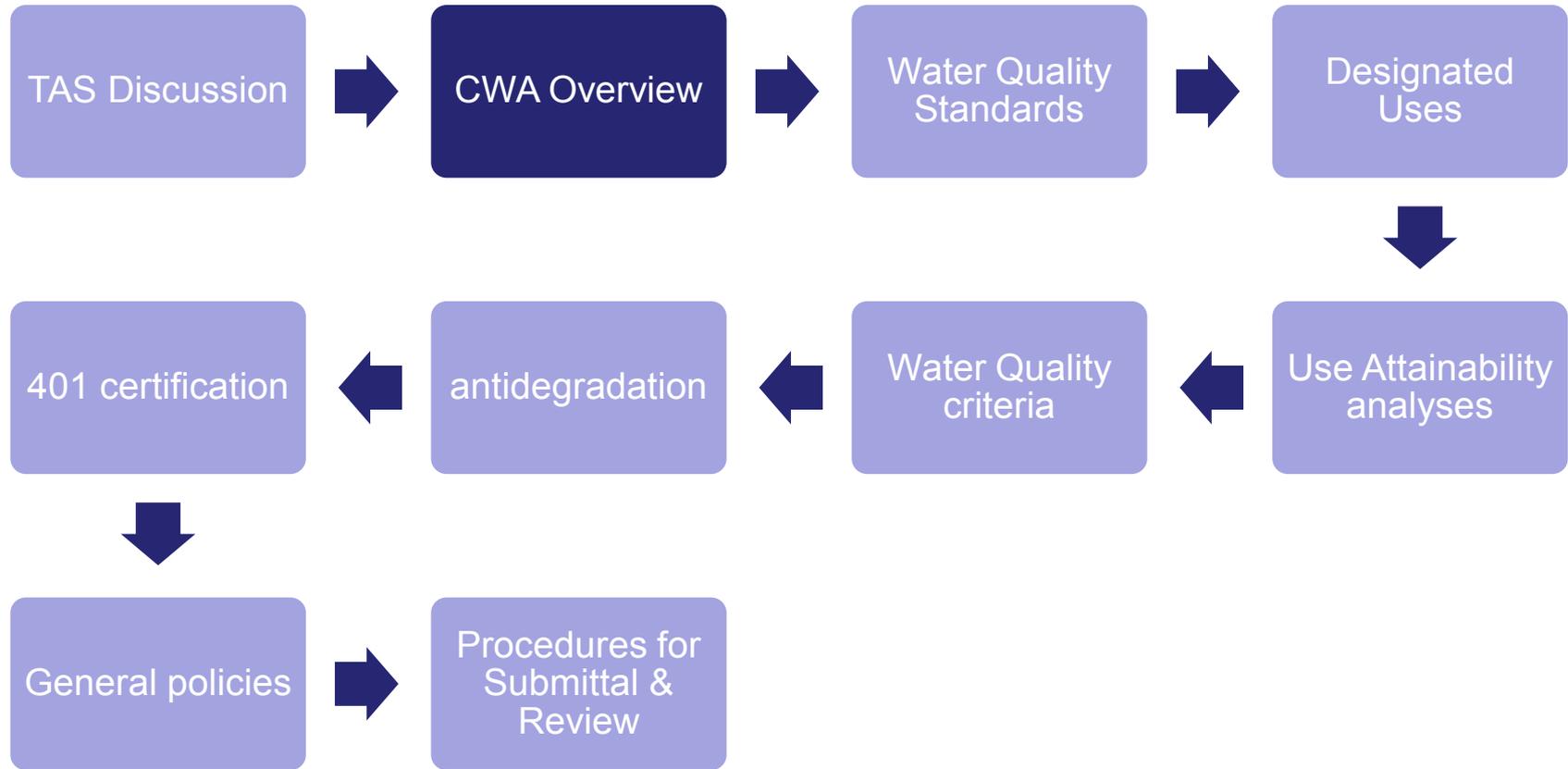
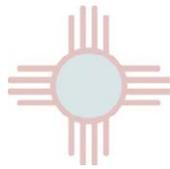
Where to go for more information

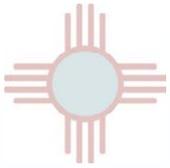
- **Strategy for Reviewing Tribal Eligibility Applications to Administer EPA Regulatory Programs**
 - <http://water.epa.gov/scitech/swguidance/waterquality/standards/wqslibrary/upload/strategy-for-reviewing-applications-for-tas-01-23-08.pdf>
- **Helpful Tips TAS/WQS**
 - Resource Document for this Webcast
- **Treatment in a Manner Similar to a State for the WQS Program (Archived Webcast)**
 - <http://water.epa.gov/learn/training/Tribaltraining/webcasts.cfm>
- **EPA Regional WQS Coordinator**
 - Resource Document for this Webcast



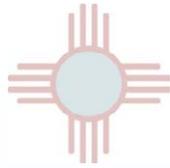


Roadmap



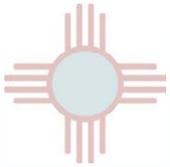


The Clean Water Act

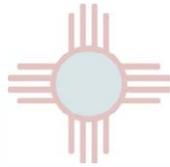


- **Objective: Restore and maintain the chemical, physical, and biological integrity of the nation's waters (Sec 101 (a))**
- **Interim goal: “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water,” wherever attainable (Sec 101 (a)(2))**



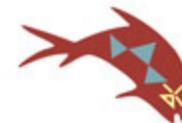


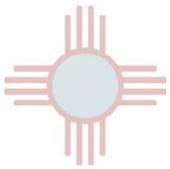
The Clean Water Act



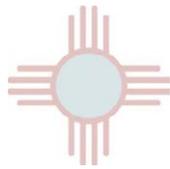
Two Approaches to Pollution Control

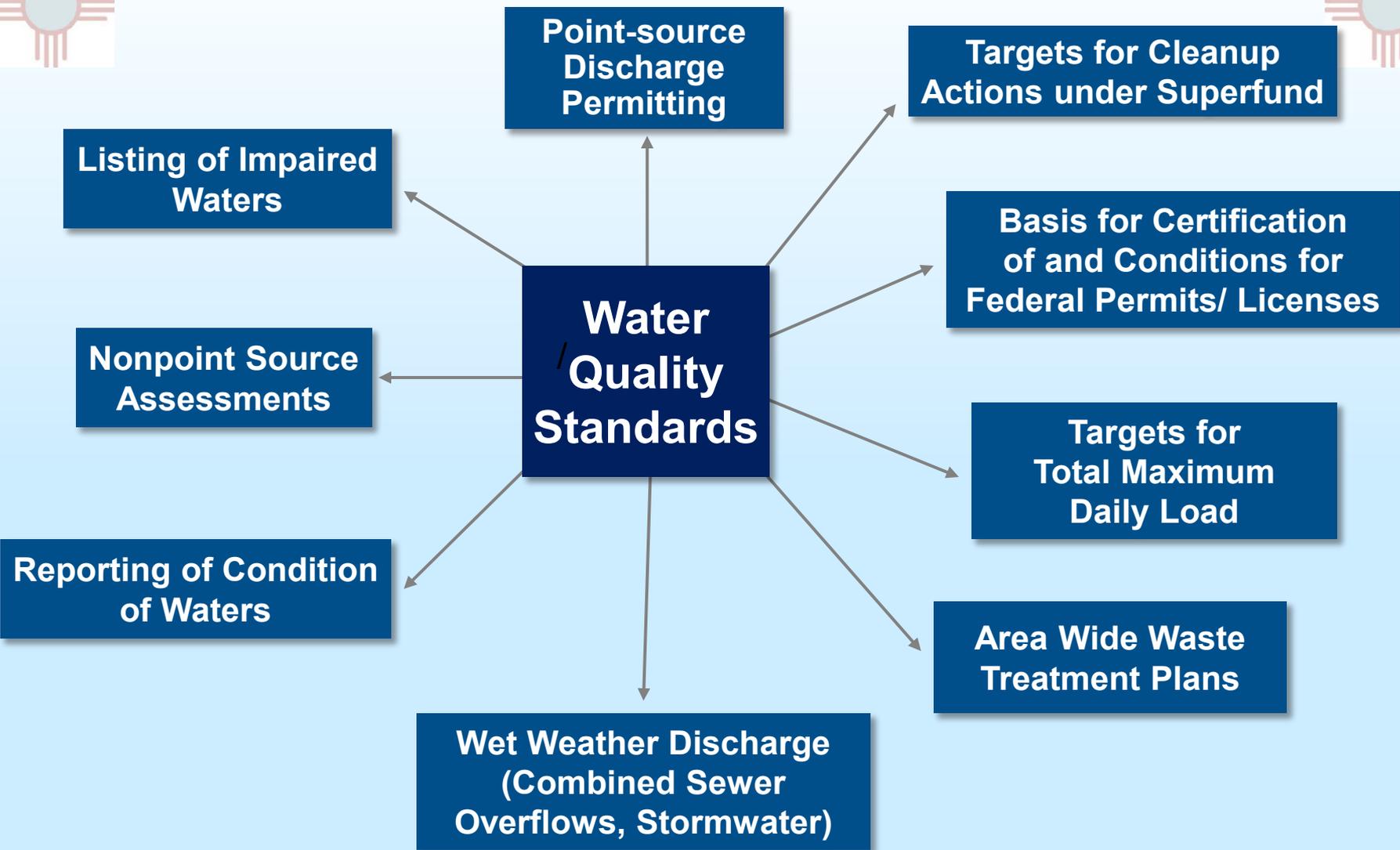
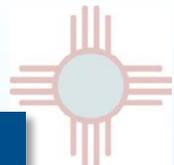
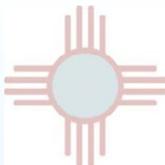
- **Technology-based approach, based on the performance of treatment and control technologies**
 - **Effluent guidelines**
<http://water.epa.gov/scitech/wastetech/guide/index.cfm>
- **Water quality-based approach, based on meeting the WQS for the waterbody**

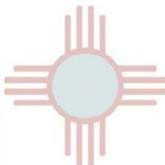




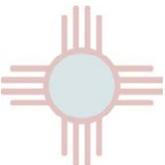
Roadmap





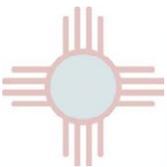


Water Quality Standards

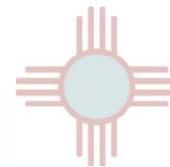


- **40 CFR 131**
- **Establish water quality goals for a waterbody**
- **Provide a regulatory basis for controls beyond technology-based limits**
 - Reporting on water conditions
 - Developing water quality based limits in NPDES permits
 - Setting targets for TMDLs
 - Making decisions regarding 401 certification
 - Making 319 management decisions



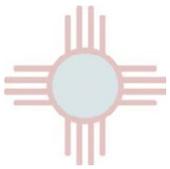


Water Quality Standards

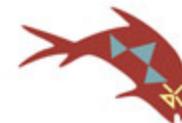
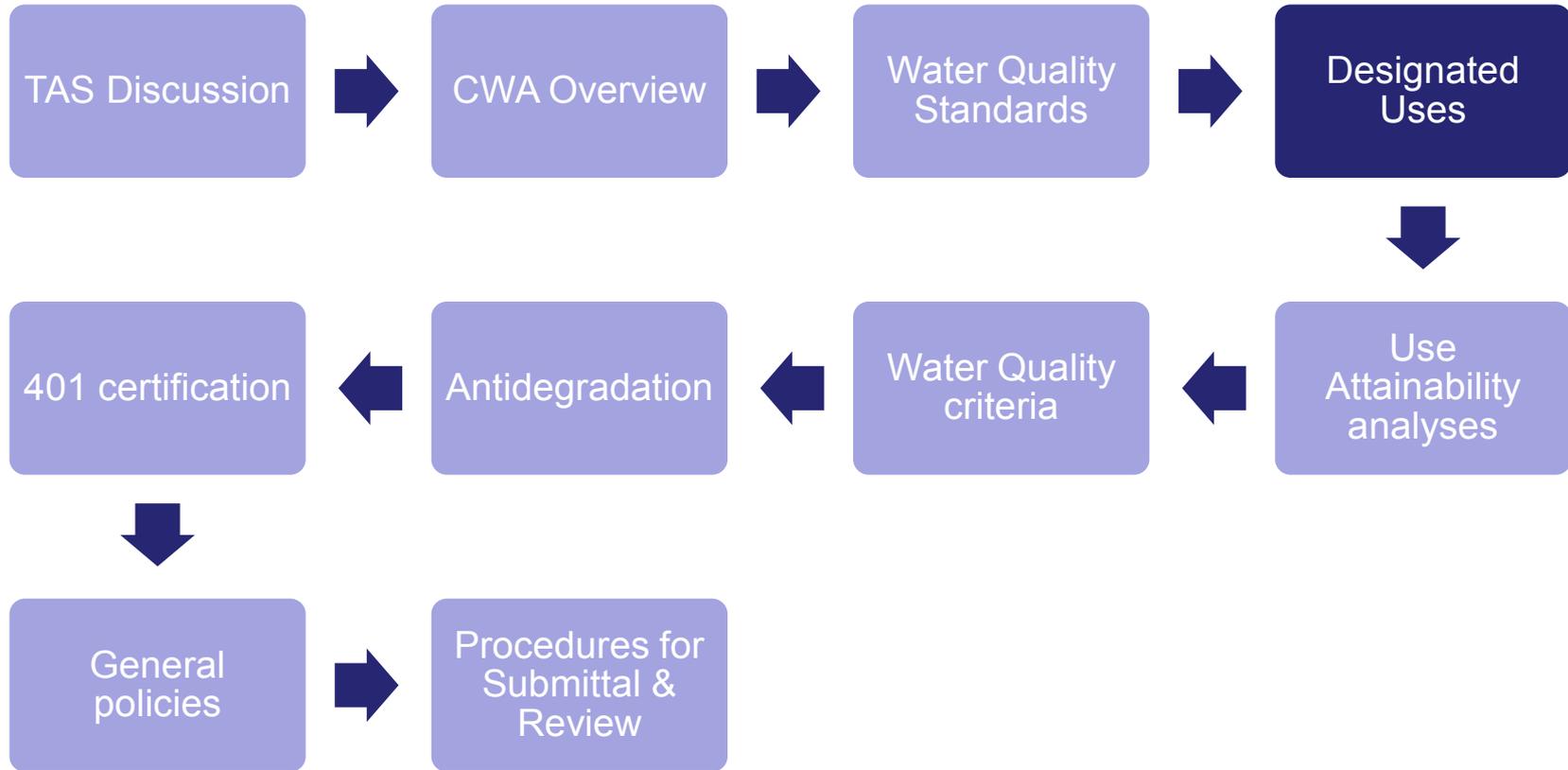
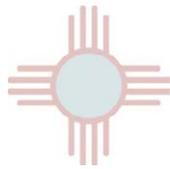


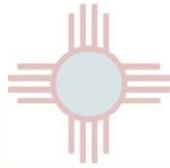
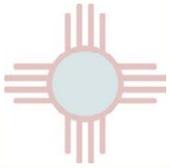
- **Provisions of Tribal and State (or Federal) Law:**
 - **Designated Uses (40 CFR 131.10)**
 - **Criteria to protect the uses (40 CFR 131.11)**
 - **Antidegradation (40 CFR 131.12)**
 - **General Policies (40 CFR 131.13)**
 - **WQS Program within the Great Lakes Basin (40 CFR 132)**





Roadmap

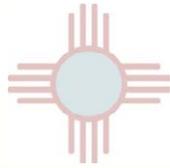
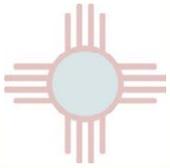




Designated Uses

- **See 40 CFR 131.3(f)**
- **Definitions:**
 - **Regulatory**
 - Those uses specified in Tribal or State water quality standards regulations for each water body or segment, whether or not they are being attained.
 - **Plain language**
 - A concise statement of management objectives and expectations for each of the individual surface waters under Tribal or State jurisdiction.

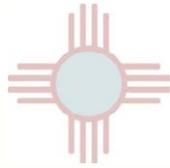
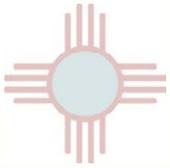




Designated Uses

- **Why are designated uses important?**
 - **Getting WQS right starts with getting designated uses right**
 - **Designated uses determine the criteria needed to protect use**
 - **Criteria are the regulatory basis for management actions like attainment decisions, TMDLs, and NPDES permit limits**



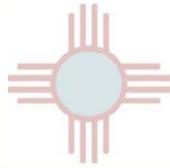
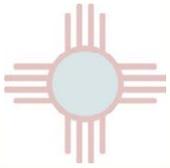


Designated Uses

- **Protection and propagation of fish, shellfish and wildlife***
- **Recreation in and on the water***
- **Public water supply**
- **Agriculture**
- **Industry**
- **Navigation**
- **Others (e.g., ceremonial or cultural)**

*101(a) use





Designated Uses

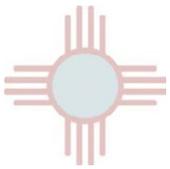
Tribal Example

- **Pyramid Lake Paiute Tribe**
 - **Calls Designated Uses “Beneficial Uses”**
 - **20 different Beneficial Uses, including:**
 - **Cold Freshwater Habitat**
 - **Extraordinary Aesthetic Value**
 - **Primary Contact Ceremonial Use**
 - **Water Contact Recreation**
 - **Others**

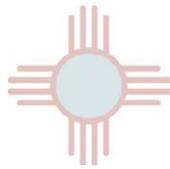


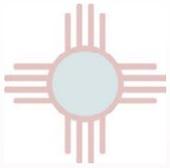
Pyramid Lake Paiute Tribe



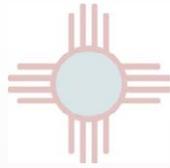


Roadmap





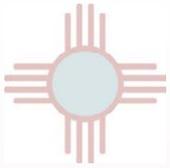
Use Attainability Analyses



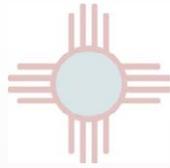
Definition (40 CFR 131.3(g))

- “A Structured Scientific Assessment of the Factors Affecting the Attainment of the Use, Which May Include the Physical, Chemical, Biological, and Economic Factors as Described in 40 CFR 131.10(g)”



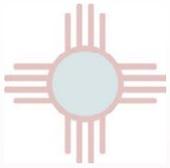


Use Attainability Analyses

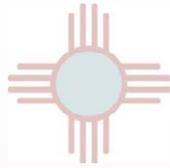


- **Must be conducted when (40 CFR 131.10(j))**
 - Designating uses that do not include CWA 101(a)(2) goals
 - Revising designated uses to remove 101(a)(2) goal uses
 - Adopting sub-categories of 101(a)(2) uses for specific water bodies which require less stringent criteria





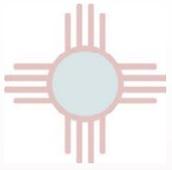
Use Attainability Analyses



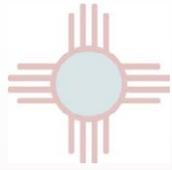
6 factors preventing attainment of a 101(a)(2) use that has not been attained (40 CFR 131.10(g))

- 1. Naturally occurring pollutant concentrations**
- 2. Natural low flow conditions or water levels**
- 3. Human caused conditions or pollutant sources**
- 4. Dams or other hydrologic modifications**
- 5. Natural physical conditions for aquatic life**
- 6. Substantial/widespread economic and social impact**





Use Attainability Analyses



Where to find the “six factors” in detail

http://water.epa.gov/scitech/swguidance/waterquality/standards/uses/uaa/about_uuas.cfm

*Links to more information on UAAs and case studies



Tribal UAA Examples

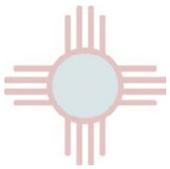
- **Seminole Tribe of Florida**

- **For any waterbody designated Class 3 (agricultural purposes), the Tribe will be required to conduct a use attainability analysis (UAA) pursuant to 40 CFR 131.10 (j)**

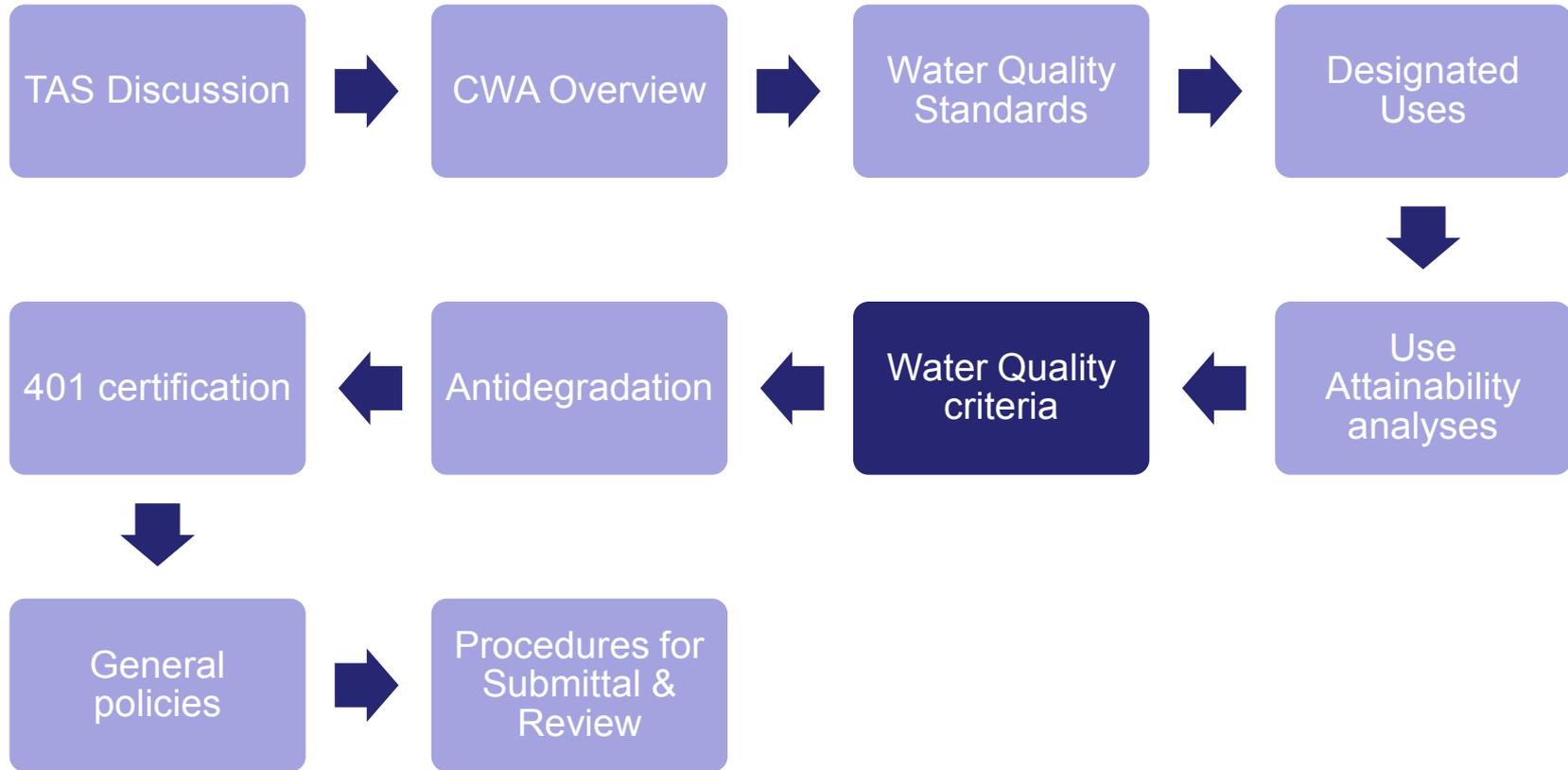
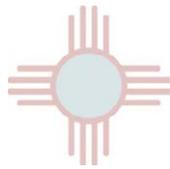


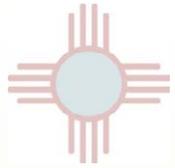
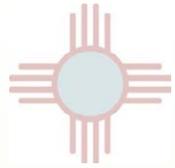
Seminole Tribe of Florida





Roadmap

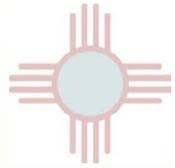




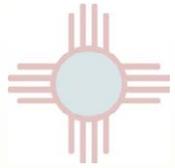
Water Quality Criteria

- **40 CFR 131.3**
 - **A numeric value (e.g., magnitude, duration and frequency) or narrative statement**
 - **Represent a level of water quality that supports a particular use**
 - **When criteria are met, water quality will protect the designated use**





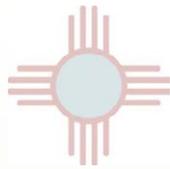
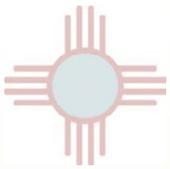
Water Quality Criteria



1 Word...2 Meanings

- **Scientifically defensible guidance developed and published by EPA per CWA Sec 304(a)**
 - Basis for Federal promulgation when necessary
- **Adopted part of State/Tribal WQS**
 - Sec 303(c)



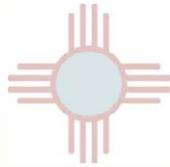


Water Quality Criteria

Requirements (40 CFR 131.11; CWA Sec 510)

- **Must adopt criteria that protect the designated use:**
 - Based on a sound, scientific rationale
 - Sufficient parameters to protect designated use
 - Must support most sensitive use
(for waters with multiple use designations)
- **May be more stringent than EPA's recommendations**



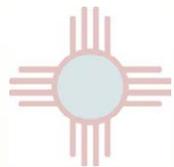


Water Quality Criteria

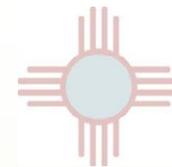
Forms (40 CFR 131.11(b))

- **Should adopt numeric criteria based on:**
 - 304(a) guidance
 - 304(a) guidance modified to reflect site-specific conditions
 - Other scientifically defensible methods
- **Should adopt narrative criteria:**
 - Where numeric criteria cannot be established
 - Or to supplement numeric criteria





Water Quality Criteria

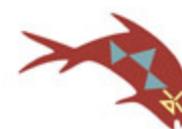


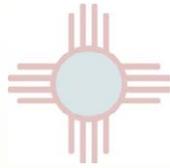
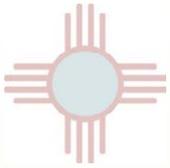
Types

- Aquatic Life Criteria
- Human Health Criteria
- Bacteria Criteria
- Biological Criteria
- Nutrient Criteria
- Others



Pyramid Lake Paiute Tribe





Water Quality Criteria

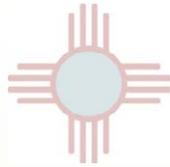
Pyramid Lake Paiute Tribe Narrative Example

- **Bioaccumulation**: toxic pollutants shall not be discharged as a result of human activities at levels that will bioaccumulate in aquatic resources to levels that are harmful to human health or aquatic life.



Pyramid Lake Paiute Tribe



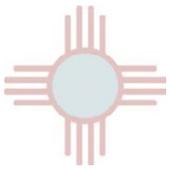


Water Quality Criteria

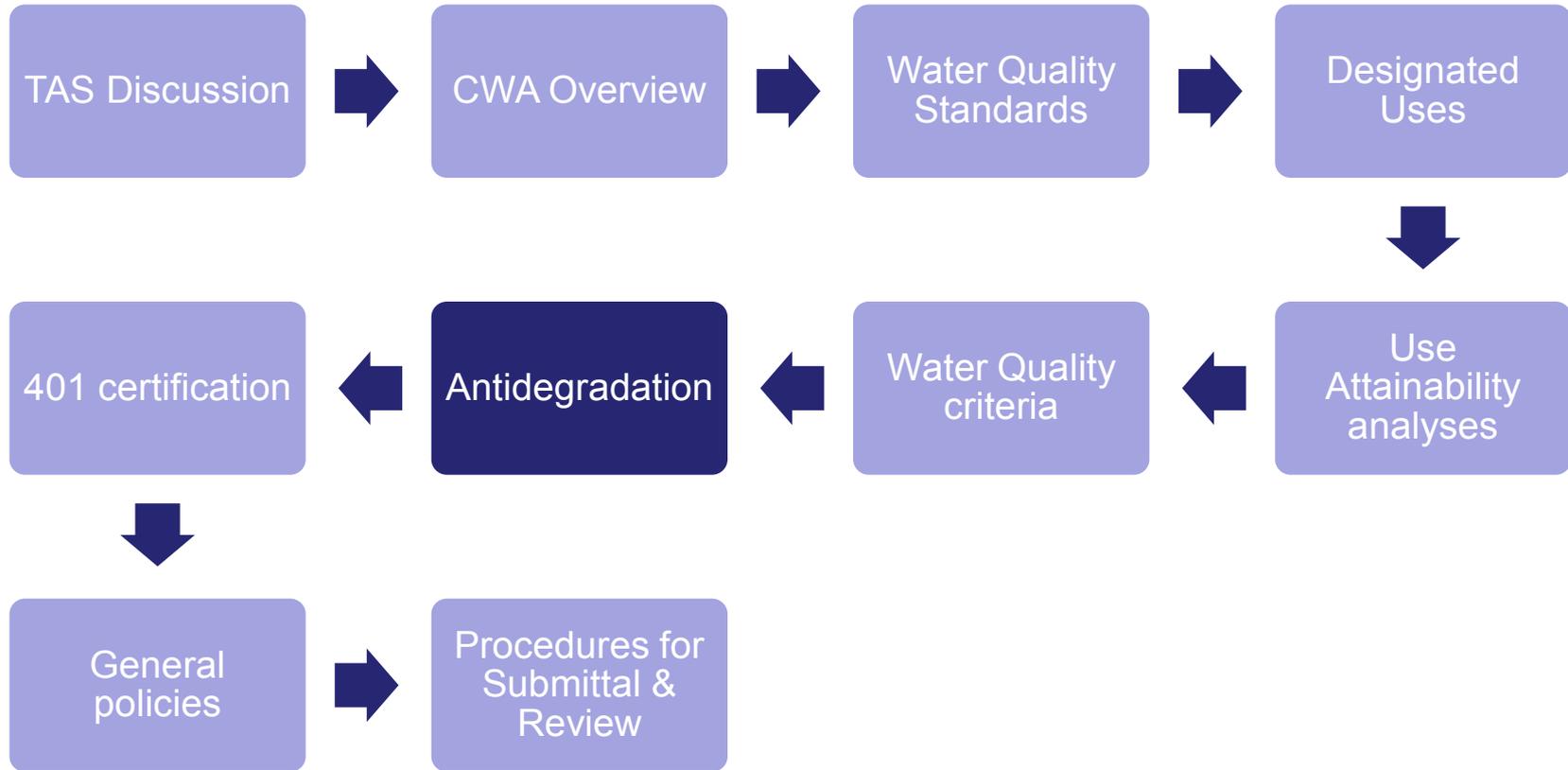
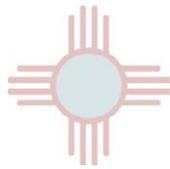
Pyramid Lake Paiute Tribe Numeric Example

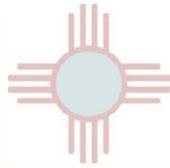
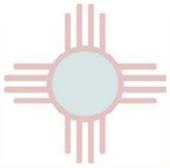
<u>Parameter</u>	<u>Water Quality Criteria</u>	<u>Beneficial Uses</u>
Chlorides (mg/L)	Single Value: ≤ 28 Average: ≤ 20	Aquatic Life, Water of Special Ecological Significance
Dissolver Oxygen- water (mg/L)	Single Value: Nov-Jun: ≥ 6.0 Jul-Oct: ≥ 5.0	Aquatic Life, Water of Special Ecological Significance
Fecal Bacteria <i>E. coli.</i> (No./100 ml)	Annual Geo. Mean ≤ 126 Single value: ≤ 410	Primary Contact Ceremonial Use, Water Contact Recreation



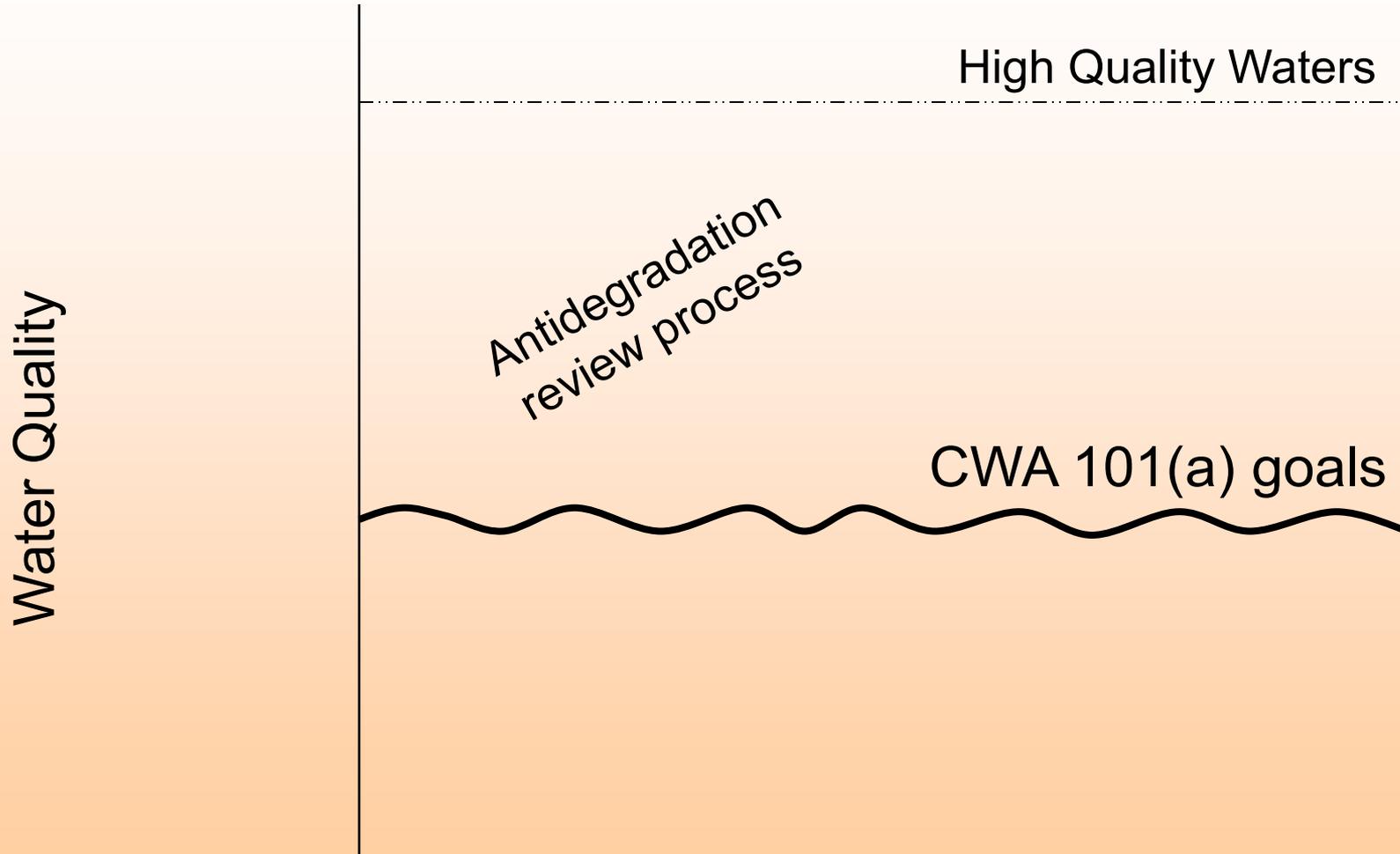


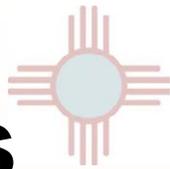
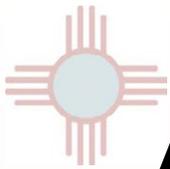
Roadmap





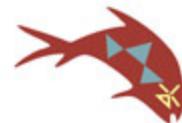
Antidegradation and WQS

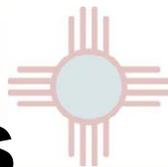
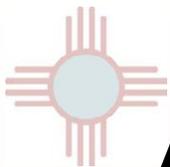




Antidegradation Requirements

- **40 CFR 131.12**
- **Tribes and States must develop/adopt an antidegradation policy to protect:**
 - Existing in-stream uses for all waters of the U.S.
 - High quality waters (water quality that is better than the levels necessary to support propagation of fish, shellfish and wildlife and recreation in and on the waters (i.e., CWA 101(a) goals))
 - Outstanding National Resource Waters (ONRWs) designated by the Tribe or State

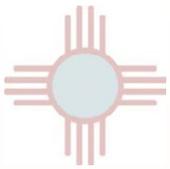




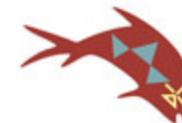
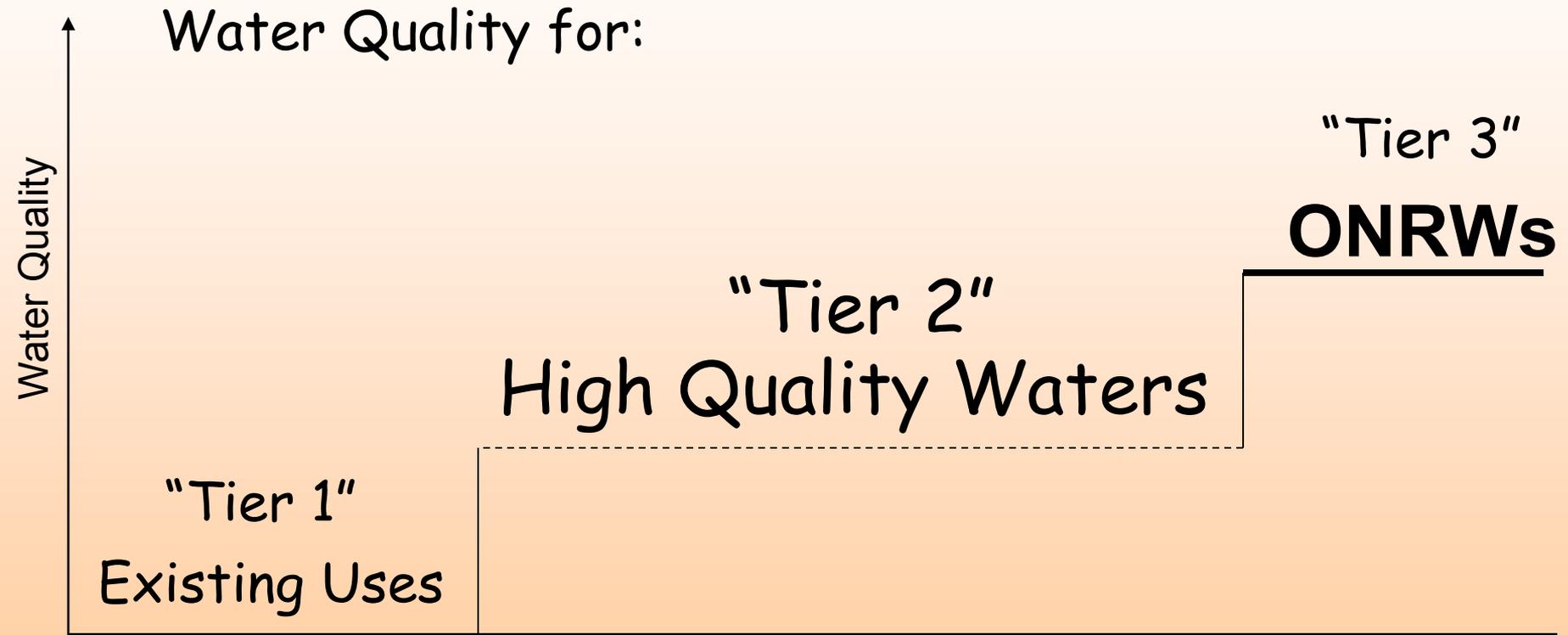
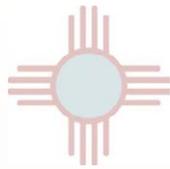
Antidegradation Requirements

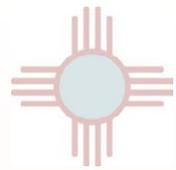
- **Tribes and States must also identify implementation methods. They can be:**
 - Part of their policy regulations, or
 - In other documents, such as a guidance directive
- **Implementation methods should describe**
 - How high quality waters will be identified
 - What activities will trigger an antidegradation review
 - Components of the antidegradation review process



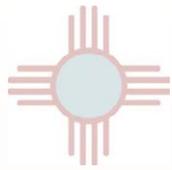


3 Tiers of Antidegradation



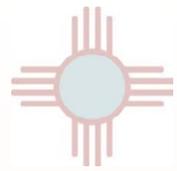


Outstanding National Resource Waters (“Tier 3”)

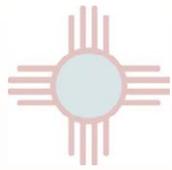


- “Tier 3” protection for ONRWs is the most stringent level of protection.
- What are ONRWs?
 - A Tribe can designate any water body an ONRW
 - List typically includes waters of exceptional recreational or ecological significance
- What does Tier 3 protection mean?
 - No degradation is allowed in ONRWs, except on a short term or temporary basis if allowed by the Tribe’s policy and procedures



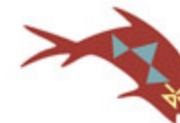


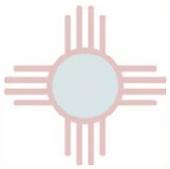
Outstanding National Resource Waters (“Tier 3”)



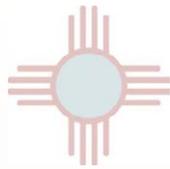
Rice Lake, Wisconsin

Sokaogon Chippewa Community - named all their waters as ONRWs



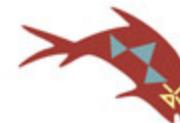


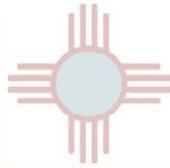
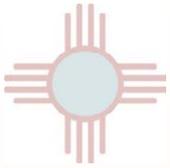
Antidegradation



Seminole Tribe of Florida

- **“The Commission and the Department shall ensure that existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.**
- **Where high quality waters constitute an outstanding National resource, such as waters of exceptional environmental, cultural or recreational significance, that water quality shall be maintained and protected.**
- **Where the quality of waters is better than necessary to support the propagation of fish, shellfish and wildlife and recreation in and on the water, that quality shall be maintained and protected unless ... it is determined that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.**
- **In allowing such degradation or lower water quality, the Commission and the Department shall assure adequate water quality to protect existing uses fully.”**

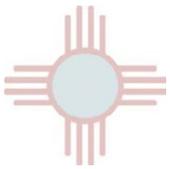




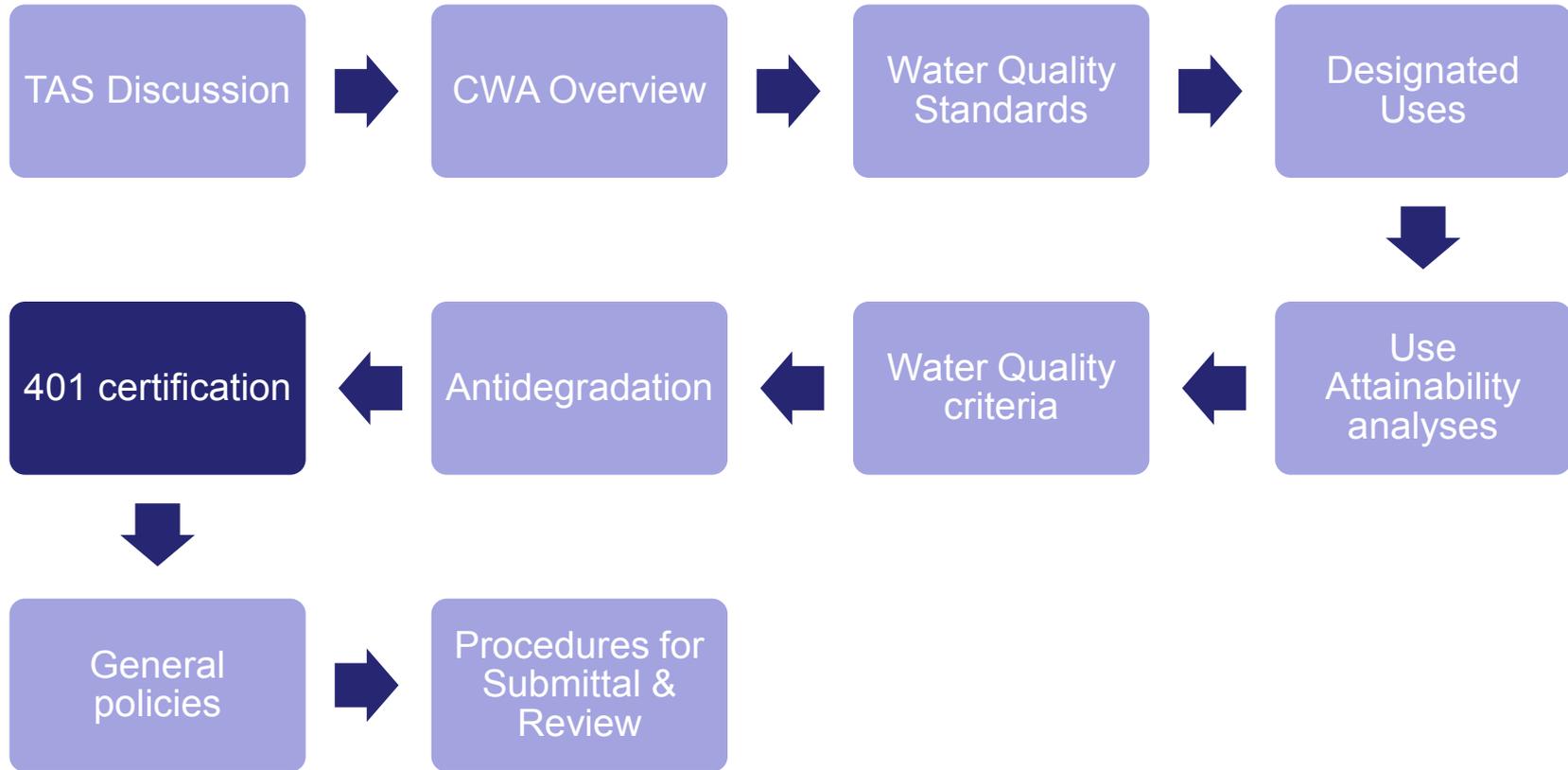
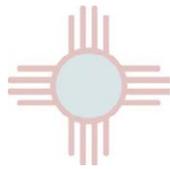
Antidegradation

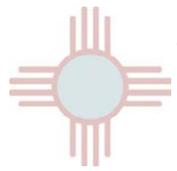
- **If your Tribe is developing or revising antidegradation implementation methods...**
 - **Provide ample evidence, data, and analysis to support how the implementation methods will be consistent with your Tribal policy and CFR 131.12.**
 - **Discuss questions or concerns with your EPA Regional Water Quality Standards Coordinators early on in the process.**



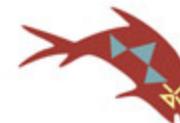
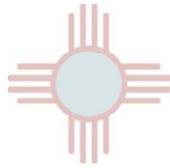


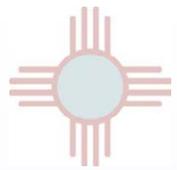
Roadmap



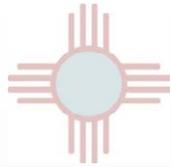


Water Quality Certification (CWA Section 401)



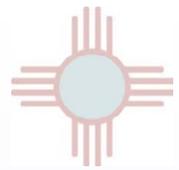


Water Quality Certification (401)

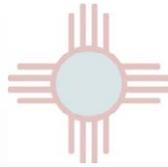


- **No federal permit or license can be issued that may result in a discharge to waters of the United States...**
- **...unless the Tribe or State certifies that the discharge is consistent with WQS and other water quality goals, or waives certification**
- **Tribes that obtain TAS for WQS are eligible to issue section 401 certifications**
- **No 401 cert or waiver means no federal permit or license**





Water Quality Certification (401)



- **What Actions Most Frequently Trigger 401?**

- **CWA Actions**

- NPDES Permits (402)
- Dredge/Fill Permits (404)

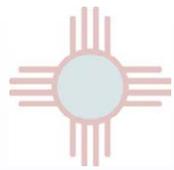


USGS

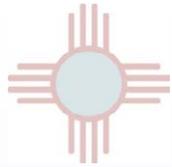
- **Non-CWA Actions**

- Federal Energy Regulatory Commission (FERC) hydropower licenses
- Rivers and Harbors Act Section 9 and 10 permits



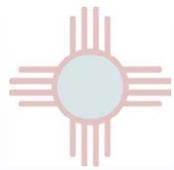


Water Quality Certification (401)

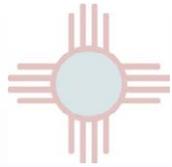


- Provides Tribes with mechanism to require conditions for discharges to reservation waters
- With approved TAS for WQS and 401, Tribes review proposed federal permits and licenses for activities that may result in a discharge
- Tribes certify that discharges comply with WQS or other Tribal laws and provide conditions to include in the permit

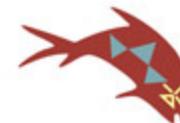


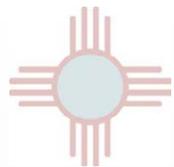


Water Quality Certification (401)

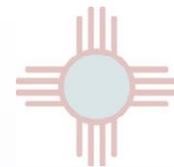


- **Before issuing a certification, the Tribe should conclude the permitted or licensed activity will be consistent with:**
 - Effluent limitations for conventional/non-conventional pollutants
 - WQS
 - New source performance standards
 - Toxic pollutant limitations, PLUS
 - Any more stringent Tribal requirements (i.e., cultural uses)
- **Decision can be based on:**
 - Data from applicant
 - Any other available and reliable data





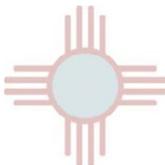
Water Quality Certification (401)



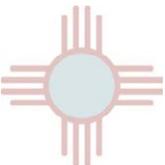
What can a Tribe do under 401?

- **Grant**
 - Indicates activity consistent with standards and other provisions
- **Grant with conditions**
 - Indicates activity consistent only if listed conditions are met
- **Deny**
 - Indicates activity is not consistent with water quality standards and other goals
- **Waive**
 - Tribal agency decides to not act on 401 application request





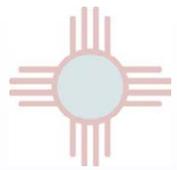
Post Creek Fish Ladder 401 Certification Example



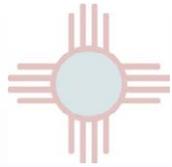
Granted 401 Certification with conditions:

- **Construction during low water**
- **Spill prevention and preparation**
- **BMPs for wetlands/channel protection**
- **Coordinate with Tribe – timing, activities**
- **Stabilization with native vegetation**





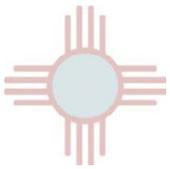
Water Quality Certification (401)



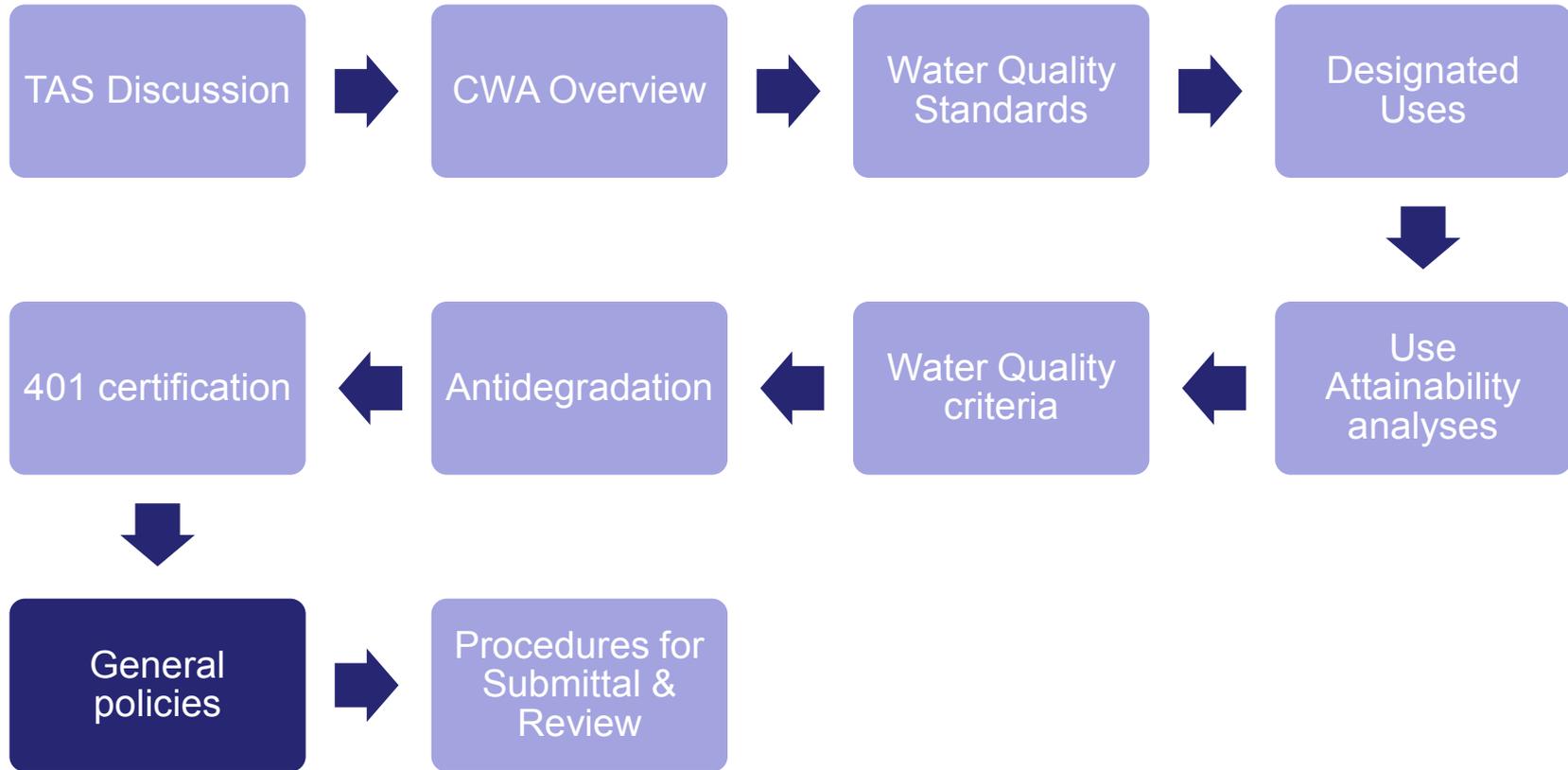
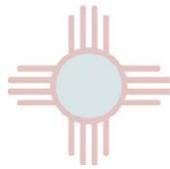
Where to go for more information:

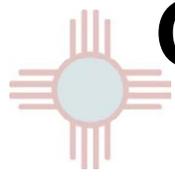
- **Water Quality and 401 Certification**
 - http://water.epa.gov/lawsregs/guidance/cwa/waterquality_index.cfm
- **EPA 401 and Wetlands Website**
 - <http://water.epa.gov/type/wetlands/outreach/fact24.cfm>



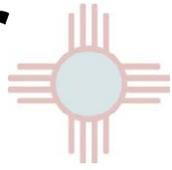


Roadmap

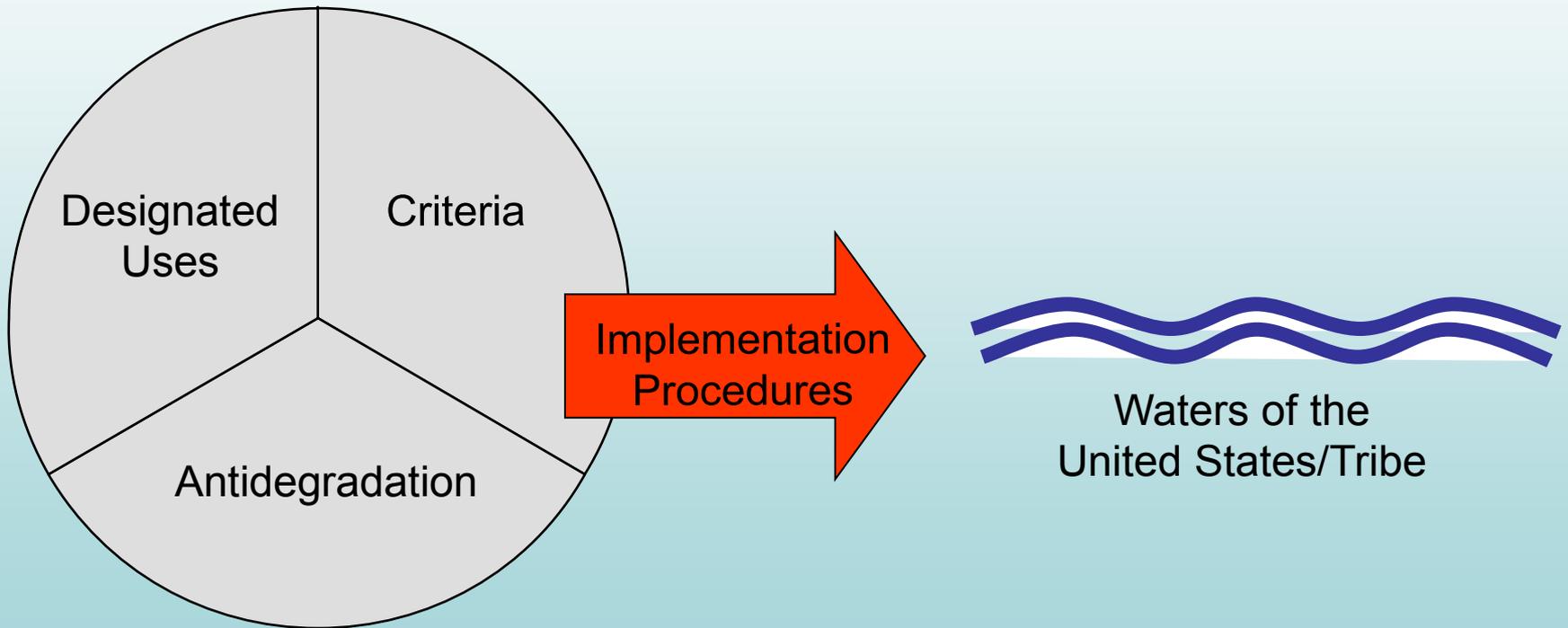


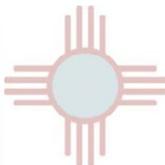


General Policies & Procedures for WQS Submittal & Review



WQS: General Policies



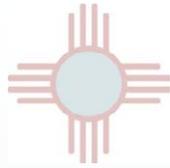


WQS: General Policies



- **40 CFR 131.13**
- **Tribes may include in their standards policies affecting application and implementation, such as:**
 - **Mixing zones**
 - **Low flows**
 - **Variances**
- **Subject to EPA review and approval**

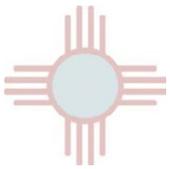




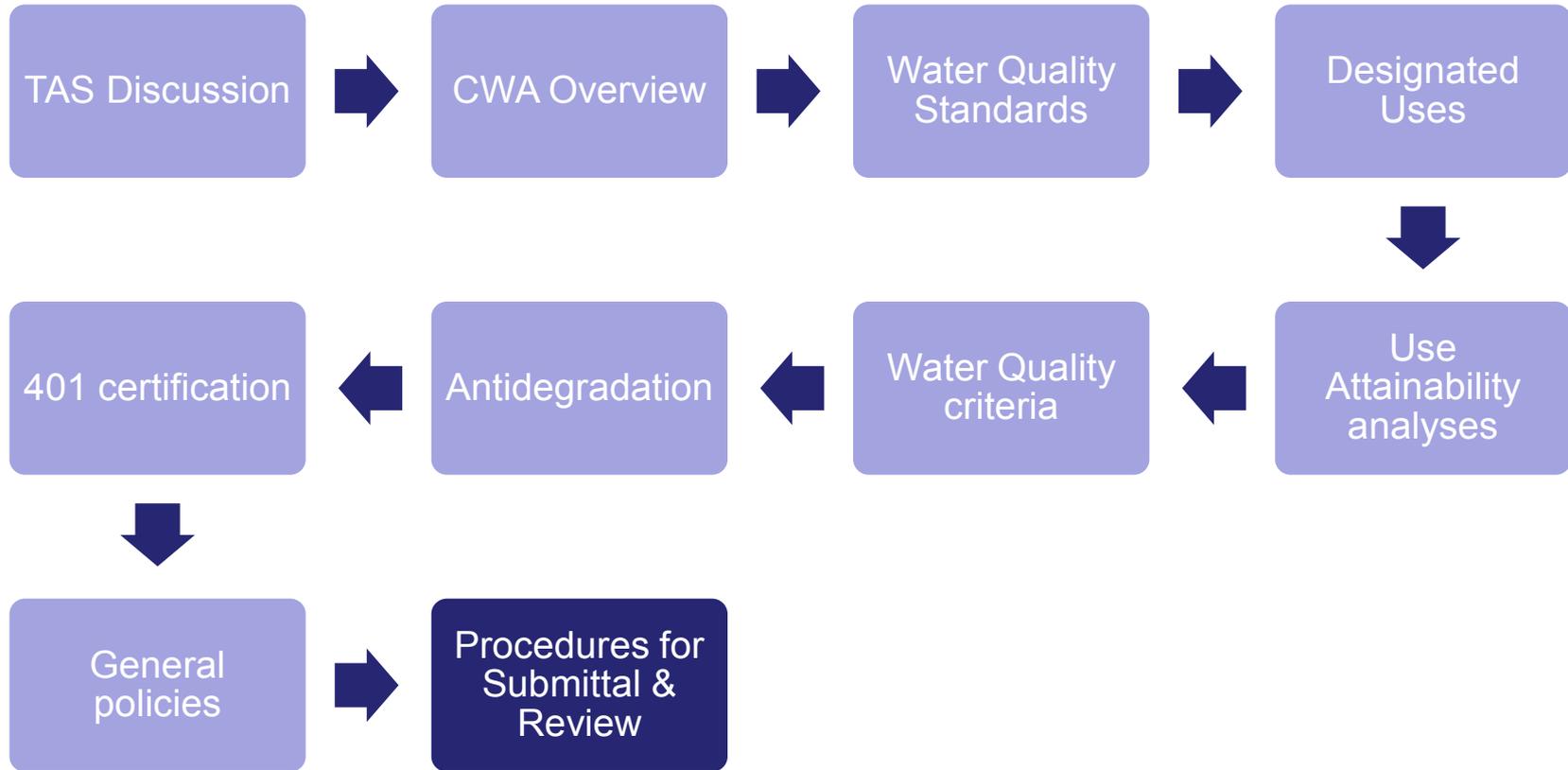
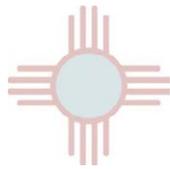
Public Participation

- **CWA 303(c)(1) and 40 CFR 131.20, 131.22 are specific to public involvement in the WQS program**
- **Assure the public has the opportunity to understand and participate in any proposed environmental action**
- **WQS: at least once every 3 years, hold public hearing for reviewing applicable standards (Triennial Review)**
- **A public hearing must be held when a Tribe changes any element of a standard**
- **Formal public hearing requires a notice 45 days prior to the hearing**



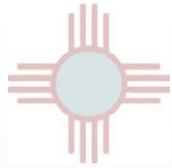


Roadmap



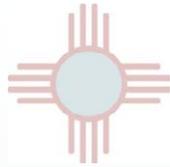
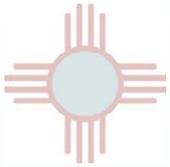


Submittal and Review



- Tribal submittal must include (40 CFR 131.20(c))**
- **Use(s) for each waterbody**
 - **Criteria sufficient to protect those uses**
 - **An antidegradation policy and identification of implementation methods consistent with 40 CFR 131.12**
 - **Certification that the standards were duly adopted according to Tribal law**
 - **Other general supporting information**





Submittal and Review

How does EPA review adopted new/revised WQS?

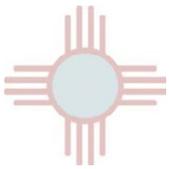
- **Authority Delegated to Regional Administrator**
 - Informal participation by EPA Headquarters
- **Approval of WQS requires “consultation” under the Endangered Species Act**
- **Approval/disapproval records of decision based solely on CWA and WQS Regulations**
- **EPA has 60 days to approve and 90 days to disapprove**
- **New/revised WQS are not effective until approved by EPA (as of May 30, 2000)**



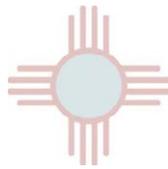
Federal Promulgations

- **40 CFR 131.22**
- **If EPA disapproves AND**
- **If authorized Tribe does not adopt specified changes within 90 days...**
- **THEN the EPA Administrator must promptly propose and promulgate a replacement standard**
- **OR in any case where the Administrator determines new or revised standards are necessary to meet the requirements of the CWA**



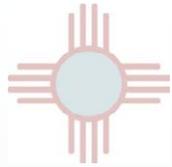
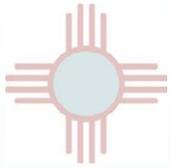


Helpful Tips to Develop a TAS Application



- **Use CWA 106 funding to develop WQS**
 - Where such activity is part of an approved CWA section 106 work plan
- **Draft WQS need to be available for a public comment period prior to EPA approval**
- **Check EPA's Clean Water Act training Web site for updates on training events**
<http://water.epa.gov/learn/training/Tribaltraining/>
 - **Water Quality Standards Academy**
 - Special face-to-face sessions for Tribes
 - **Webcasts on Specialized Topics**

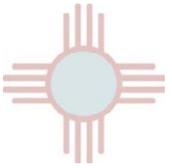
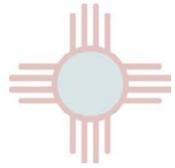




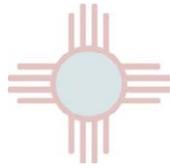
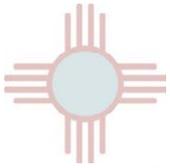
Where to go for more information

- EPA WQS Homepage
 - <http://water.epa.gov/scitech/swguidance/waterquality/standards/>
- EPA Tribal WQS Homepage
 - <http://water.epa.gov/scitech/swguidance/waterquality/standards/wqslibrary/Tribes.cfm>
- EPA Tribal Training Website
 - <http://water.epa.gov/learn/training/Tribaltraining/index.cfm>
- EPA WQS Handbook
 - <http://water.epa.gov/scitech/swguidance/waterquality/standards/handbook/index.cfm>
- EPA WQS Academy
 - <http://water.epa.gov/learn/training/standardsacademy/index.cfm>





Questions?



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