

OVERVIEW OF WATER QUALITY STANDARDS

SOUTHWEST TRIBAL CWA TRAINING

MARCH 4, 2024

OVERVIEW

- Water Quality Standards (WQS)
 - WQS Templates and Tools for Tribes
 - WQS Roles for Tribes and EPA
 - CWA Implementation
 - Take Home Messages



WATER QUALITY STANDARDS (WQS)

DISCLAIMERS

- This presentation does not:
 - Impose any binding requirements
 - Determine the obligations of the regulated community
 - Change or substitute for any statutory provision or regulation requirement
 - Represent, change, or substitute for any Agency policy or guidance
 - Control in any case of conflict between this discussion and statute, regulation, policy, or guidance

The views expressed in presentation are those of the author(s) and do not necessarily represent the views or policies of the U.S. Environmental protection Agency.

CWA: OBJECTIVE AND GOALS



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

CWA 303(C): WATER QUALITY STANDARDS



State and tribal WQS must:

- Protect public health or welfare, enhance water quality, and serve the purposes of the Act.
- Be established considering use and value for public water supplies, fish and wildlife propagation, and recreational, agricultural, industrial, and navigation purposes.
- Must include **designated uses, water quality criteria, antidegradation policy.**

DESIGNATED USES



- Designated uses are those uses specified in WQS for each water body or segment, whether or not they are being attained.
- They describe the water quality goals or desired condition for a specific water body, and the functions and/or activities that are supported by a level of water quality.
- They also help communicate water quality goals to the public.

WATER QUALITY CRITERIA

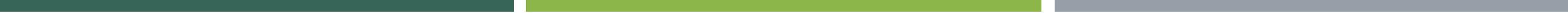


- The water quality levels that will protect the designated use.
Elements of water quality standards, expressed as constituent concentrations, levels or narrative statements, representing water quality that supports a particular designated use. When criteria are met, water quality will generally protect the designated use.

ANTIDEGRADATION



- States and authorized tribes must have antidegradation policies and implementation methods to provide a framework for maintaining and protecting water quality that has already been achieved, independent of whether designated uses and criteria are achieved.
- Three tiers of protection:
 - Tier 1: Existing in-stream uses.
 - Tier 2: High quality waters (where water quality is better than necessary to support propagation of fish, shellfish and wildlife and recreation in and on the waters)
 - Tier 3: Outstanding National Resource Waters (ONRWs) designated by the state or tribe.
- Implementation methods – for example, how permits will be adjusted to reflect the antidegradation policy



WQS TEMPLATES AND TOOLS FOR TRIBES

EPA'S NUMERIC CRITERIA RECOMMENDATIONS

<https://epa.gov/wqc>

Current Water Quality Criteria Tables



- [Aquatic Life Criteria Table](#)
- [Human Health Criteria Table](#)
- [Organoleptic Effects Criteria Table](#)

Water Quality Criteria

The Clean Water Act requires EPA to develop criteria for surface water quality that accurately reflect the latest scientific knowledge on the impacts of pollutants on human health and the environment. [Basic Information on Water Quality Criteria](#).

Aquatic Life



- [Toxics Criteria and Methods](#)
- [Nutrient Water Quality Criteria](#)
- [Biological Water Quality Criteria](#)
- [Other Aquatic Life Water Quality Resources](#)

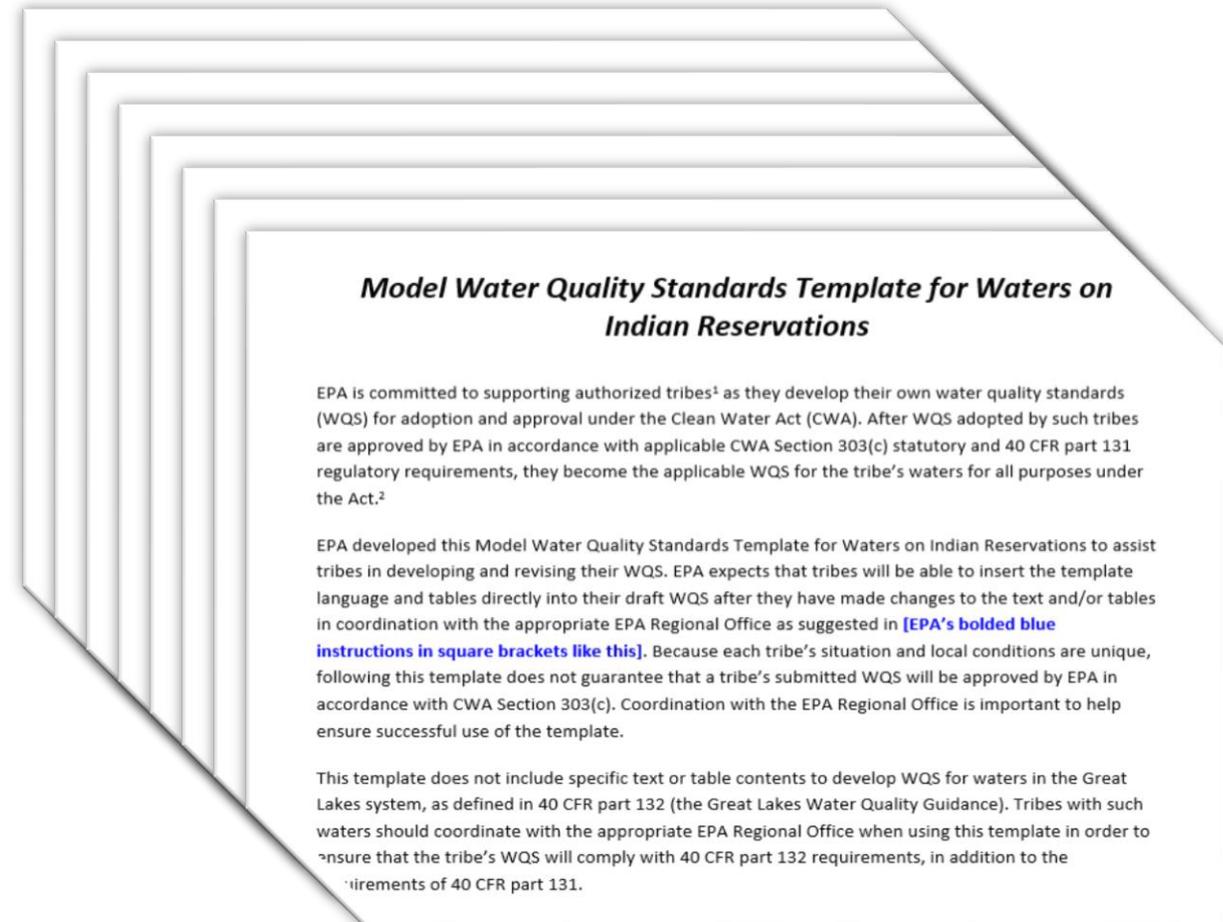
Human Health



- [Toxics Criteria and Methods](#)
- [Recreational Criteria and Methods](#)

MODEL WQS: TEMPLATE FOR TRIBES

- 24 pages of editable text with instructions
- 10 pages of numeric criteria tables
- Download from <https://www.epa.gov/wqs-tech/water-quality-standards-tools-tribes#tab3>



TRIBAL/STATE HUMAN HEALTH CRITERIA CALCULATOR

- Produces printable table reflecting tribe's choices of FCR and CRL
- Run online at <https://www.epa.gov/wqs-tech/water-quality-standards-tools-tribes#tab4>

Fish Consumption Rate (FCR)

- 22 grams per day - EPA's default "general" rate (updated in 2015)
- 142.4 grams per day - EPA's default "subsistence" rate
- 160 grams per day - half of the USDA recommended daily protein intake
- 175 grams per day - from the Columbia River Inter-Tribal Fish Commission Survey (1994)
- Use Custom Rate Enter grams per day

Important: Please work with your EPA Regional Office to determine the appropriate FCR.

Cancer Risk Level (CRL)

- 1 in 100,000 people (10^{-5})
- 1 in 1,000,000 people (10^{-6})
- 1 in 10,000,000 people (10^{-7})

WETLAND WATER QUALITY STANDARDS

- EPA website dedicated to information on wetland water quality standards:
- <https://www.epa.gov/wetlands/wetland-water-quality-standards>
- Includes narrative templates for developing and tailoring wetland water quality criteria



WQS ROLES FOR TRIBES AND EPA

ROLE: AUTHORIZED TRIBES AND STATES

- Primary authorities to adopt, review and revise WQS
 - They may adopt WQS more stringent than required by EPA **CWA 510**
- They must:
 - Conduct a public hearing and involve the public
 - Adopt WQS in accordance with state or tribal law
 - Submit adopted WQS to EPA for review and approval
 - Review WQS every three years and revise as necessary

ROLE: EPA REGIONAL OFFICE

- Coordinate with tribe and provide technical assistance.
- Approve/disapprove WQS submitted by states and authorized tribes. CWA requires EPA to approve within 60 days or disapprove within 90 days.
- Contact the Tribal WQS Coordinator in the EPA Regional Office:
<https://www.epa.gov/wqs-tech/epa-actions-tribal-water-quality-standards-and-contacts>



IMPLEMENTATION OF WQS

WQS IMPLEMENTATION: WHAT THE CWA SAYS

- CWA 303(d): WQS are the water quality targets when assessing impaired waters and calculating Total Maximum Daily Loads (TMDLs)
- CWA 401: Federal licenses and permits must be certified as complying with WQS
- CWA 402: NPDES permit limits must derive from and comply with WQS
- CWA 404: Dredge or fill permits must consider WQS

EPA-approved WQS are part of federal law, must be considered by upstream states and tribes



TAKE HOME MESSAGES

OVERVIEW: TAKE HOME MESSAGES (I)

- The CWA establishes a national goal of “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.”
- The CWA and the WQS regulation are the basis for EPA’s review and approval of adopted state and tribal water quality standards.

OVERVIEW: TAKE HOME MESSAGES (2)

Tribal Water Quality Standards under the CWA:

- Establish water quality goals for a water body
- Core components:

Designated Uses

Criteria

Antidegradation

- Provide the regulatory basis for controls beyond technology-based limits in permits
- Are used to determine attainment and non-attainment, for future TMDL development

OVERVIEW: TAKE HOME MESSAGES (3)

- Use EPA's templates and tools!
- Coordinate with your EPA regional contact

OVERVIEW: TAKE HOME MESSAGES (4)

Take advantage of additional training from EPA available at www.epa.gov/wqs-tech/water-quality-standards-academy

- Classroom WQS Academy (*virtual and in-person one-week offerings*)
FLASH: next Virtual Academy – Spring 2024
- Key Concepts Modules (*online story pages*)
- Introduction to Water Quality Standards (*66-slide pdf*)
- Online Courses (*recorded from Academy – coming soon*)

Sign up for WQS news and announcements at www.epa.gov/wqs-tech/wqsnews-listserv-receive-alerts-about-water-quality-standards-news-and-events

QUESTIONS?

