# U.S. ENVIRONMENTAL PROTECTION AGENCY WATER QUALITY STANDARDS ACADEMY

# DESCRIPTION OF MODULES TYPICALLY PRESENTED

# (subject to change)

## Introductions and Participant Expectations

Introduces the course, instructors, and participants. Addresses participant expectations.

# Overview of EPA, the Clean Water Act, and the Water Quality Standards Program

Presents an overview of the course, the roles of EPA, States and Tribes in the development of Water Quality Standards, a discussion of the Clean Water Act (CWA), and an overview of Water Quality Standards and their implementation.

#### Waters of the U.S.

Provides an overview of what is a "water of the U.S." and what waters may not be covered under the Clean Water Act.

#### Water Quality Standards on Tribal Lands

Provides information on the requirements for Tribes to administer the Water Quality Standards program.

#### **Designated Uses**

Covers State and Tribal designated use classifications, what designated uses are required, when and how designated uses can be revised, and the distinction between designated and existing uses.

#### Use Attainability Analyses

Provides a basic understanding of the role of Use Attainability Analyses in revising designated uses, explains when a Use Attainability Analysis is required, and discusses some examples.

## Human Health Criteria

Discusses the components of and calculation of EPA's criteria recommendations to protect human health for both carcinogens and non-carcinogens. Introduces fish tissue criteria and fish consumption advisories.

#### Aquatic Life Criteria

Discusses how EPA develops criteria recommendations for the protection of aquatic life, and summarizes site-specific modification procedures.

#### **Biological Criteria**

Provides an overview of the biocriteria program, including the development of biocriteria and the use of biological information in water quality programs.

#### **Nutrient Criteria**

Provides an overview of the development of EPA's numeric nutrient criteria, other defensible ways of developing criteria, and the application of State/Tribal nutrient criteria in Water Quality Standards.

#### **Recreational Water Quality Criteria**

Provides an understanding of EPA's current water quality criteria for bacteria and information on the relationship between the water quality criteria and the Beaches Environmental Assessment and Coastal Health Act of 2000.

#### **Antidegradation Requirements**

Provides an understanding of how State/Tribal antidegradation programs help protect and maintain water quality.

#### Site-specific and Site-dependent Criteria

Describes different methods of developing aquatic life criteria tailored to site conditions (site-specific criteria) and equation-based and model-based criteria (site-dependent criteria).

#### **Tools for Achieving Standards**

Provides a summary of the various Water Quality Standards (and other) tools that States and Tribes can use when standards cannot be attained immediately.

#### **Economic Considerations**

Provides a basic understanding of when and how it is appropriate to consider economic factors within the Water Quality Standards process and how to evaluate decisions based on a finding of substantial and widespread economic and social impacts.

#### Water Quality Standard Variances

Defines and outlines the requirements for Water Quality Standard Variances. Describes the purpose of a variance, how to adopt and submit a variance to EPA and how variances relate to other Clean Water Act programs.

#### Water Quality Standards Submittal and Review Process

Describes the administrative process by which EPA reviews State and Tribal adopted and submitted Water Quality Standards. Discusses EPA's potential actions on submitted standards, as well as Federal Water Quality Standards promulgation procedures.

#### NPDES Permits (Clean Water Act Section 402)

Overview of the National Pollutant Discharge Elimination System (NPDES) permit program.

#### Permit Tools with Roots in WQS

Provides an overview of two tools for permit writers (NPDES permit compliance schedules and NPDES permit mixing zones) with roots in Water Quality Standards.

#### **401** Certification

Provides an overview of Section 401 of the Clean Water Act, and how States and Tribes can use it in reviewing federal permits/licenses that authorize a discharge to waters of the U.S.

#### **Building Resilient Water Quality Standards**

Provides an overview of how to consider building water quality resilience through water quality standards implementation and water monitoring strategies.

Wetland Water Quality Standards and Dredge and Fill Permits Provides an overview of Section 404 of the Clean Water Act, as well as an overview of wetland water quality standards.

## Planning and Implementation of Water Quality Standards

Presents the processes by which adopted Water Quality Standards are implemented in two modules: monitoring and assessment, and Total Maximum Daily Loads and Impaired Waters Listing.