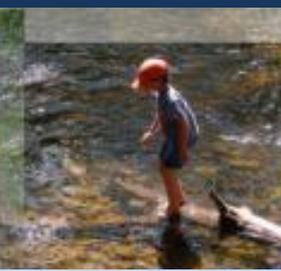




# Connecticut Department of Energy and Environmental Protection



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

# Connecticut Water Quality Standards

March 6, 2014

Presented by Traci Iott

Connecticut Environmental Forum Meeting



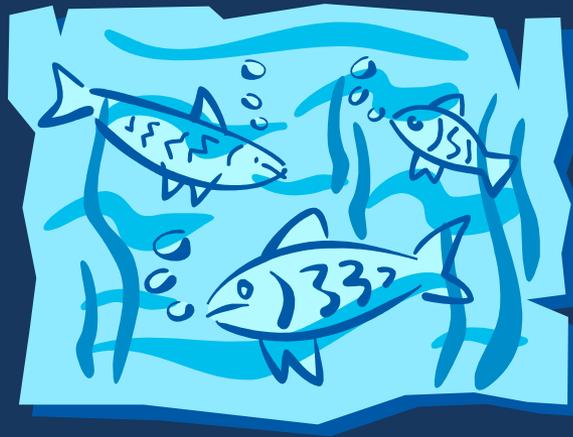
Connecticut Department of Energy and Environmental Protection

# Presentation Overview

- Background on CT Water Quality Standards
- Water Quality Standards as Regulation
- Triennial Review Process
- Water Quality Standards and other Regulatory Programs



# WATER QUALITY STANDARDS: BACKGROUND INFORMATION



# History

- 1967- 1<sup>st</sup> Water Quality Standards document in Connecticut
- 18 revisions since then
- 1980- groundwater standards established
- October 10, 2013: current standards



# What are Water Quality Standards?

- Foundation of the water quality-based control program mandated by the Clean Water Act
- Define the goals for a water body by
  - designating its uses
  - setting criteria to protect those uses
  - establishing provisions to protect water quality from pollutants



# Why are WQS Important?

- Protect and restore the quality of the surface waters
- Identify water quality problems
- Support efforts to achieve and maintain protective water quality conditions within various regulatory programs



# Water Quality Standards- 3 Elements

- **Standards**
  - Overall Goals & Policies
- **Designated Uses & Criteria**
  - Establishes existing and designated uses by class
  - Narrative & numeric criteria to sustain the use
    - chemical, physical, biological
- **Classifications**
  - Assignment of designated uses to specific waters
  - Water Quality Classification Maps



## Policies

Describes desired goals and environmental characteristics for the physical, chemical and biological components of the ecosystem

Policies

# WQ Standards

Implementation

## Implementation

Identifies key components of WQ Management Program integral to implementation of established policies

### Designated Uses

Describes societal and ecological uses of the aquatic environment

### Standards & Criteria

Ascribes environmental characteristics to the physical, chemical and biological components of the ecosystem

Policy



Implementation

### Management

Contains data from programs directly or indirectly involved in supporting and/or implementing a projects that affect water quality

### Assessment

Establishes and executes procedures to evaluate environmental quality

# Designated Uses



## Surface Water

- Healthy aquatic life and wildlife habitat
- Recreation (Fishing & Swimming)
- Fish and Shellfish Consumption
- Drinking Water
- Industrial & Agricultural Supply
- Waste Assimilation
- Navigation

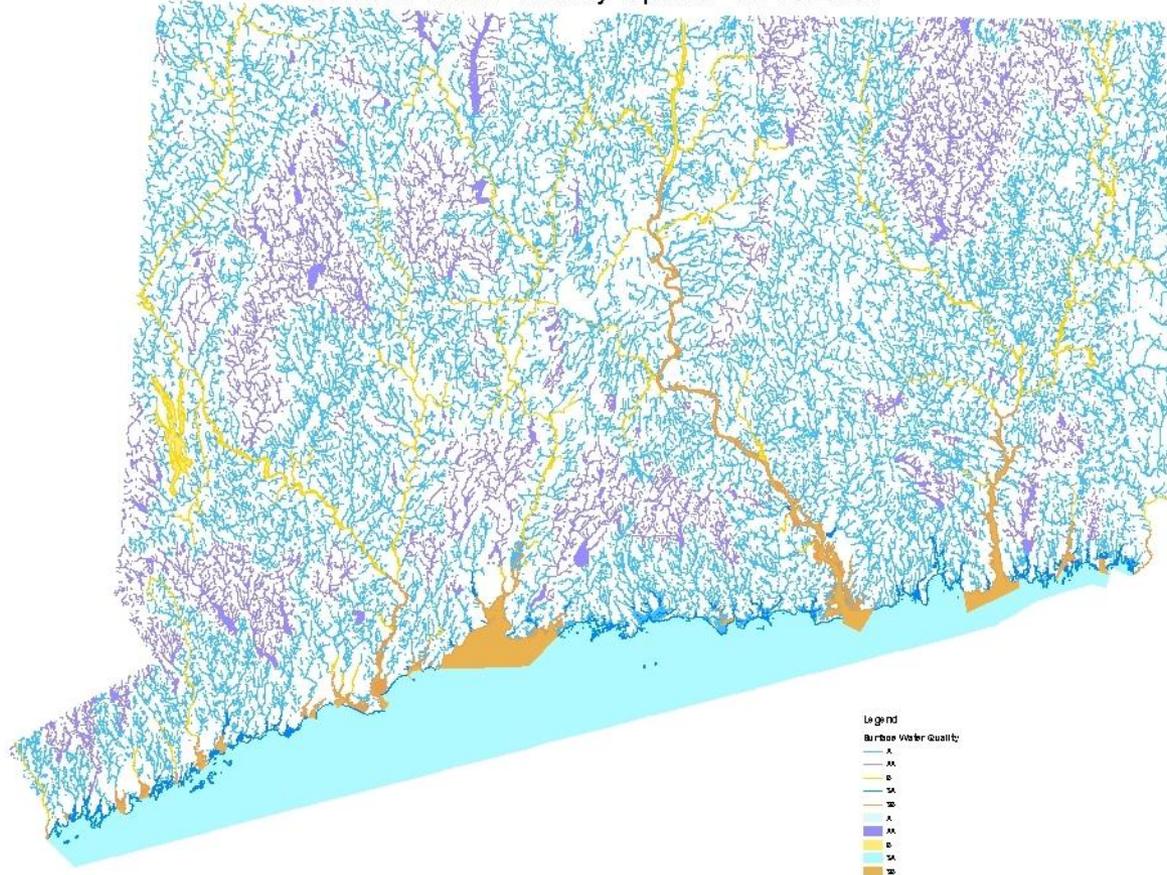
## Ground Water

- Drinking Water Supply
- Baseflow for Surface Water Bodies
- Industrial & Agricultural Supply
- Waste Assimilation



# WQ Classification Maps

Surface Water Quality Update 10/30/2009



Legend  
Surface Water Quality

- A
- AA
- B
- SA
- SB

## Legend

### Surface Water Quality

- A
- AA
- B
- SA
- SB
- A
- AA
- B
- SA
- SB



# Water Quality Standards & the Law

- Adoption and periodic revision of Water Quality Standards is required by both federal and state law
  - Section 303 of the Federal Clean Water Act
  - Section 22a-426 of the Connecticut General Statutes



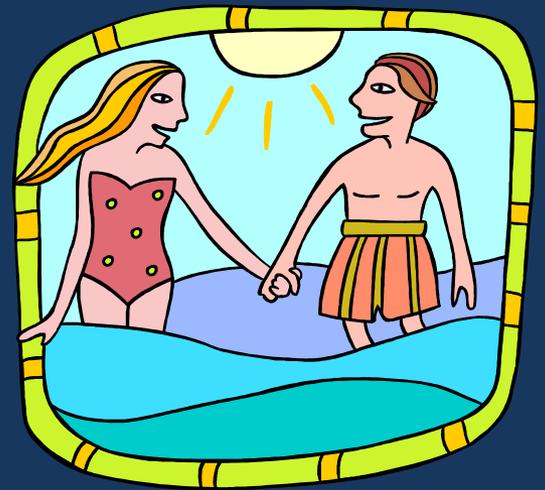
# WQS Review and Revision

- The Clean Water Act requires States to review their standards and revise them if appropriate.
- Updates may be needed to address:
  - due to changing water quality conditions or water body uses
  - new scientific information
  - programmatic requirements or guidance established by EPA
- Must include consideration of comments from the public
- New or revised Water Quality Standards become effective for purposes of the Clean Water Act upon EPA approval.



# Role of the Public

- The Public has a clear interest in the quality of Connecticut's waters
- State and Federal law require public input into the revision process for the WQS
- A public hearing is mandatory



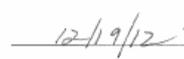
# Existing WQ Conditions vs. the WQS

## 2012 STATE OF CONNECTICUT INTEGRATED WATER QUALITY REPORT

Final – December 17, 2012

This document has been established pursuant  
to the requirements of Sections 305(b) and 303(d)  
of the Federal Clean Water Act

  
Betsey Wingfield, Chief  
Bureau of Water Protection and Land Reuse

  
Date



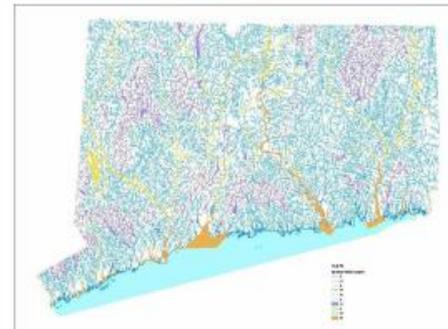
Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, CT 06106-5127  
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Daniel C. Esty, Commissioner

STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



## WATER QUALITY STANDARDS



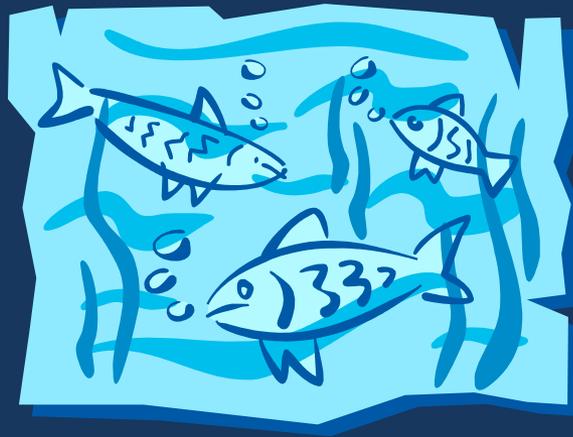
Bureau of Water Protection and Land Reuse  
Planning and Standards Division

Surface Water Quality Standards	Effective	February 25, 2011
Groundwater Quality Standards	Effective	April 12, 1996



Connecticut Department of Energy and Environmental Protection

# WATER QUALITY STANDARDS: CONVERSION TO REGULATIONS AS REQUIRED BY 22A-426 C.G.S. AMENDMENTS



# Conversion Purpose

- Required in 2010 by Public Act 10-158
- Amended CGS 22a-426 (WQS Statutes)
  - From statutory controlled adoption process
  - To regulatory controlled process (after March 2011)
- However
  - Left the “Classification procedure” in the statutory process
  - Existing WQS stayed in place until new regulations were finalized



# 2013 Regulatory Conversion Process

- Basic Translation of Feb 2011 Version of Water Quality Standards to Regulatory Format
  - No Changes to Substance or Meaning were made
  - Some changes to organization and language were necessary to conform to regulation-formatting and to improve readability

Connecticut Water Quality Standards:  
Sections 22a-426-1 through 22a-426-9 of the  
Regulations of Connecticut State Agencies



# Water Quality Standards: Format

## 2011 Water Quality Standards

Preface
Introduction
Surface Water Quality Standards
Lake Trophic Categories
Ground Water Quality Standards
Appendix A: Definitions
Appendix B: Criteria for Sanitary Indicators
Appendix C: Dissolved Oxygen Criteria for Marine Waters
Appendix D: Numerical Water Quality Criteria
Appendix E: Antidegradation Implementation Procedures
Appendix F: Biological Condition Gradient

## 2013 Water Quality Standards

426 Section	Regulation Title
1	Short Title
2	Purpose Goals & Applicability
3	Definitions
4	Surface Waters
5	Biological Gradient Model
6	Lake Trophic Category
7	Ground Waters
8	Antidegradation Standards and Antidegradation Implementation Procedures
9	Environmental Criteria



# Updated WQS Web Pages

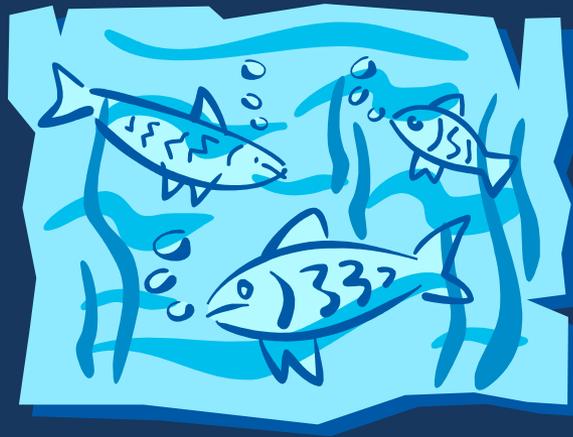
- Gateway for all information on CT Water Quality Standards
- Background on Water Quality Standards
- Links to current and past revisions



[www.ct.gov/deep/wqsc](http://www.ct.gov/deep/wqsc)



# WATER QUALITY STANDARDS: TRIENNIAL REVIEW



# Triennial Review Process

- Separate Process from Current Proposal
- Consists of review of WQS every three years
  - Required under the CWA
  - Evaluate existing WQS
  - Solicit public input on potential changes to WQS



# 2013 Triennial Review

- Conducted Oct 24- Dec 16, 2013
- Identified topics being evaluated by DEEP
- Solicited public comments
- No formal proposal to make changes at this time
- Triennial Review informs potential future changes



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## PUBLIC NOTICE OF INTENT TO INITIATE TRIENNIAL REVIEW OF CONNECTICUT WATER QUALITY STANDARDS

In accordance with Section 303(c)(1) of the federal Clean Water Act, the Connecticut Department of Energy and Environmental Protection hereby gives notice of its intent to initiate a review of [Connecticut's Water Quality Standards](#) ("WQS"). This review is being conducted to evaluate the need to update or revise the WQS in order to remain consistent with state and federal law. The review will also ensure that Connecticut's WQS continue to reflect the best available science and support sound water quality management policies to improve and protect the water resources of the state.

With this notice the Department is soliciting comments from interested parties on any aspect of the WQS that a person believes the Department should consider for potential revision. Comments should include the matter at issue, whether it is currently covered by the WQS, and if so where, any suggested revision and the basis for the suggested revision. Any technical information or reports supporting the comment should be included.

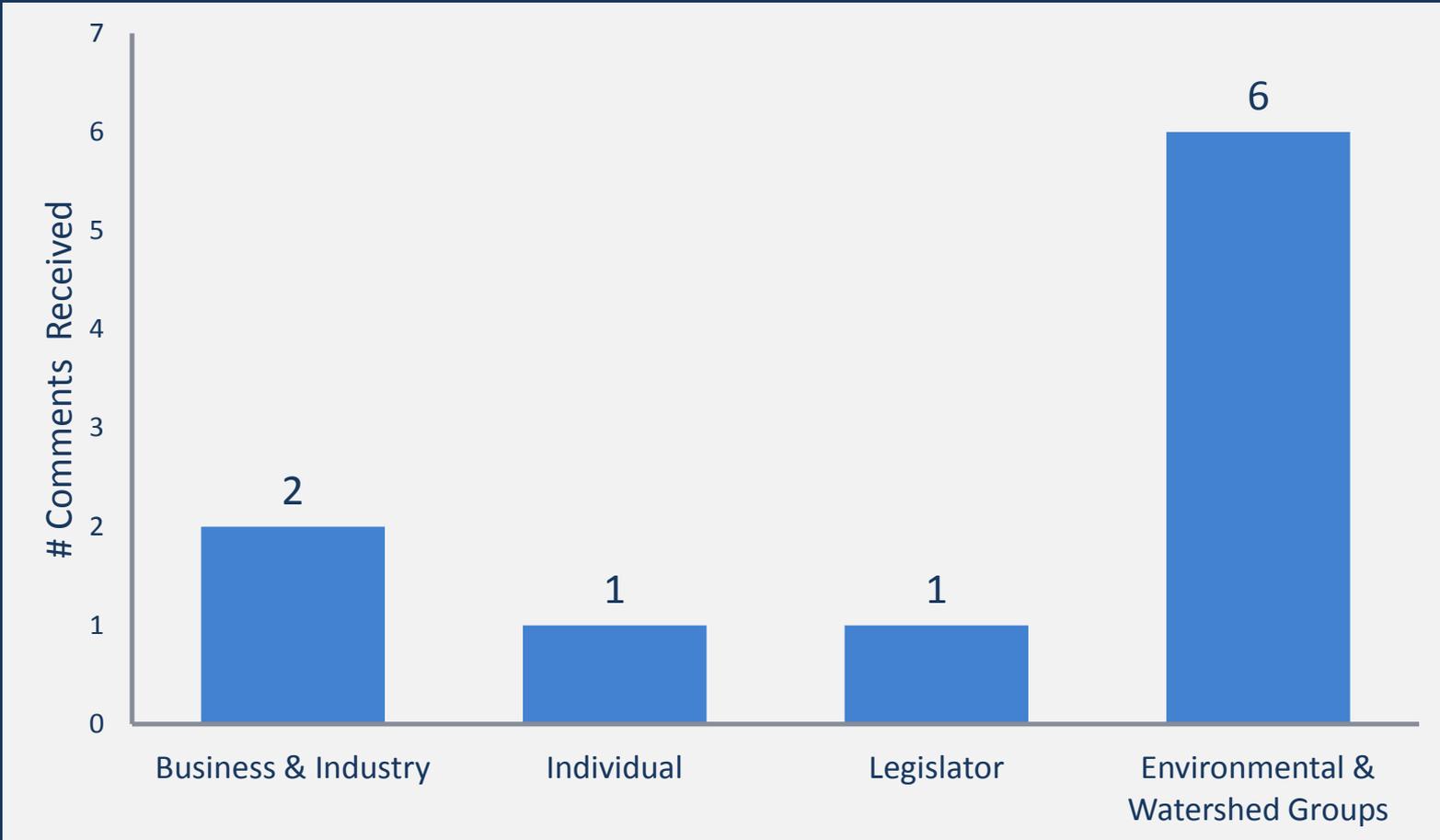
While the Department will accept comments on any provision of the WQS, the Department is particularly interested in comments on the following areas, which are currently being evaluated for revision:

- Reclassification of certain shellfishing areas as needed to insure consistency with allowable shellfishing activities;
- Evaluate consistency of WQS with federal water quality criteria established in accordance with section 304(a) of the federal Clean Water Act;
- Potentially change the low flow statistic currently used in the WQS from the 7Q10 flow to the Q99 flow for consistency between regulations;
- Potential extension of the wastewater disinfection period;
- Allowance for extended timeframes in permits for compliance with certain water quality based effluent limitations and requirements;
- Potentially consolidate the ground water and surface water antidegradation sections into one section;
- Clarify statutory references to endangered species;

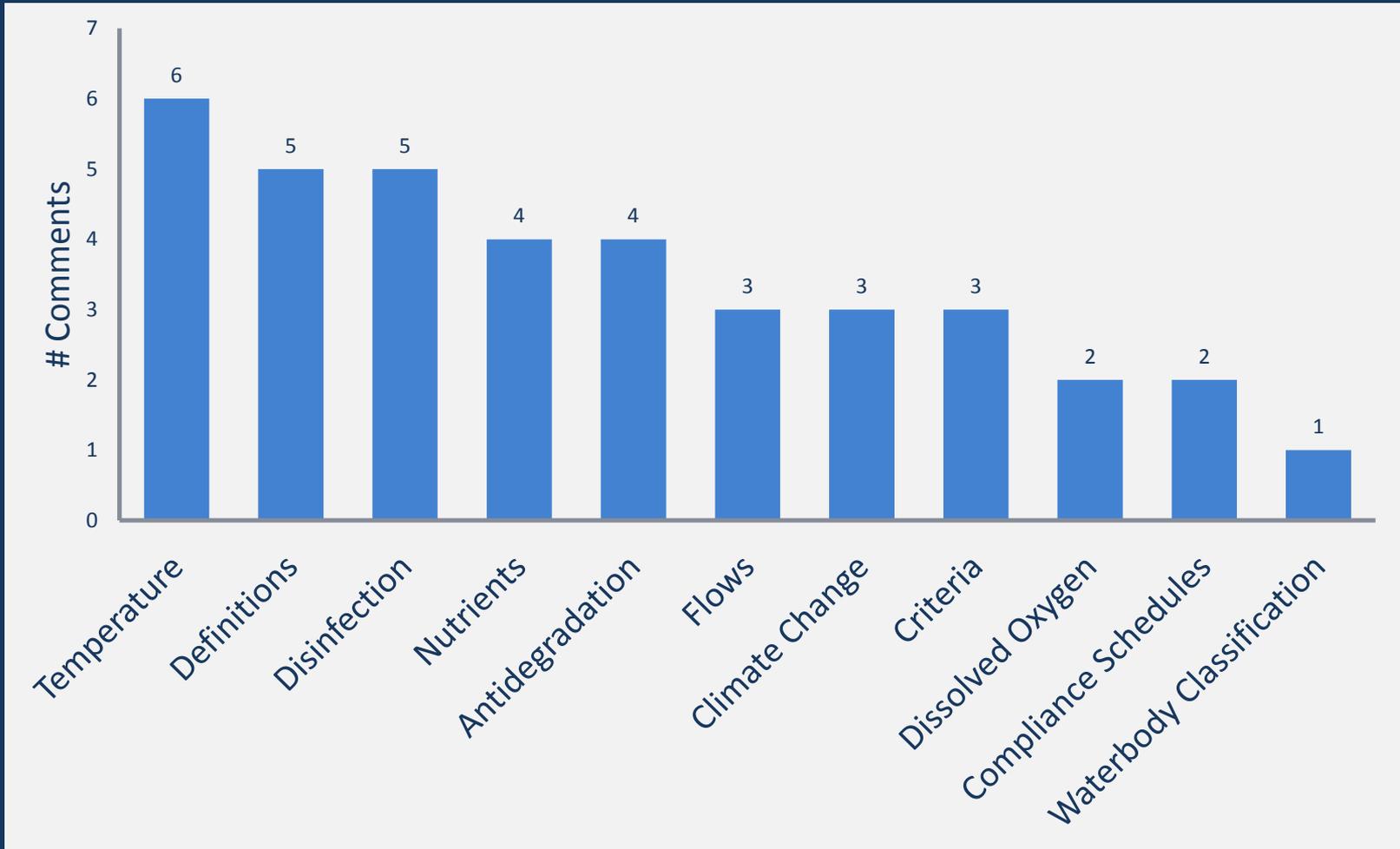


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# Comments Received During Triennial Review



# Comments Received During Triennial Review

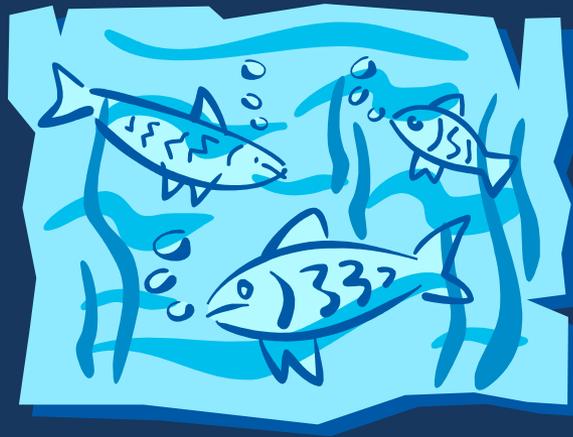


# Triennial Review Next Steps

- Department is completing review of public comments and internal agency review
- Triennial Review Report to be published on DEEP website
- Report will identify future actions as necessary



# WATER QUALITY STANDARDS: RELATIONSHIP TO REGULATORY PROGRAMS



# WQS Changes & Existing Regulations

- Changes in the WQS do not change currently adopted state regulations
  - WQS provide support to regulatory programs
  - Existing regulations do not change “automatically” by revision of the WQS
  - Changes to existing regulatory programs would need to follow procedures for revising and adopting regulations.



# Federal and State Requirements

State & Federal Requirements

Incorporates Risk-based decision making

Federal  
CWA,  
CERCLA &  
RCRA

State  
Statutes

- Environmental Goals
  - WQ Standards
- Implementation Regulations
  - Remediation Standard Regulations
  - Coastal Permitting Program
  - NPDES Permitting Program

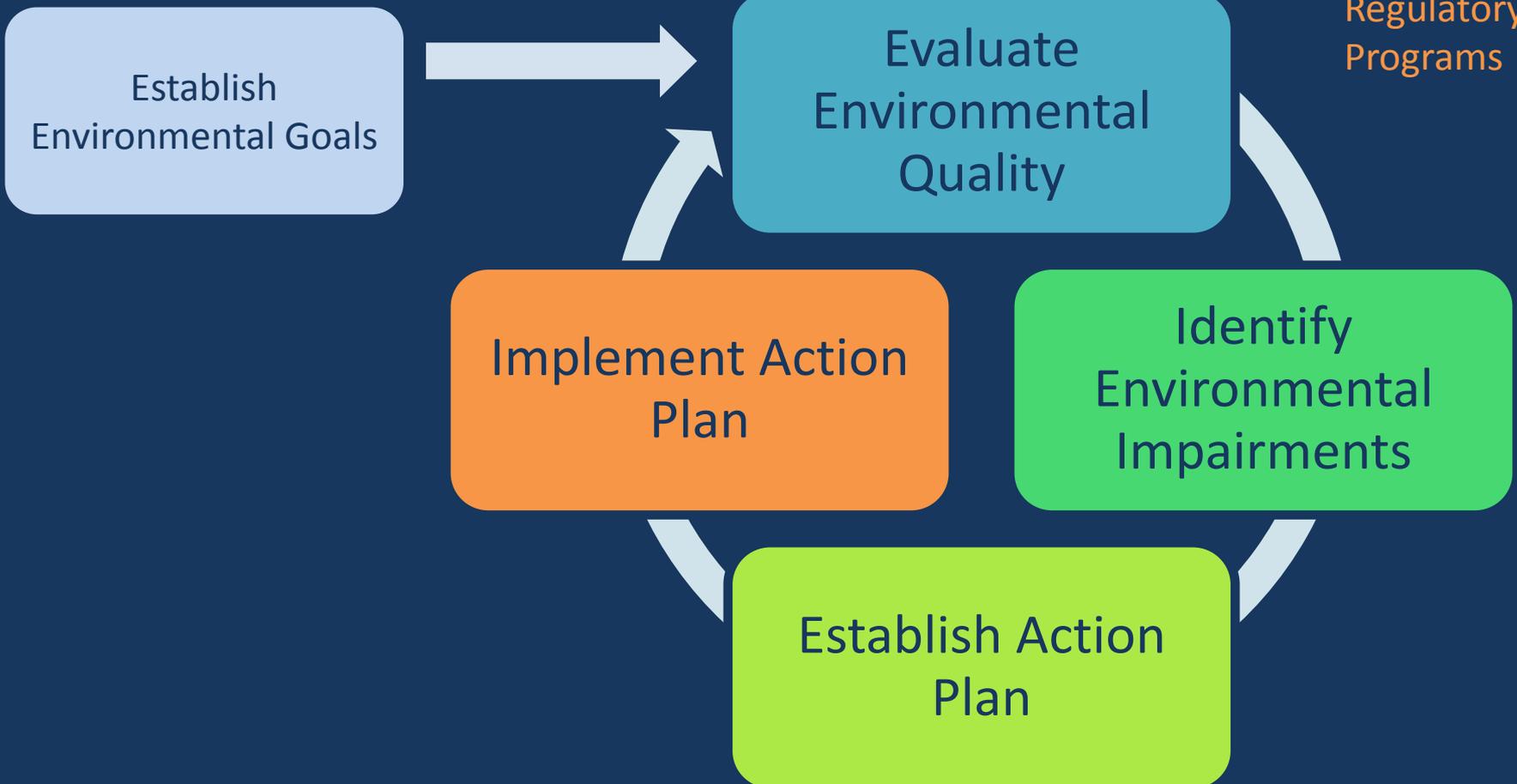
Meet  
Environmental  
Goals



# Environmental Protection Process

WQS

Regulatory Programs



# Public Participation Opportunity

- Evaluation of Risk-based Decision Making per Public Act 13-308
  - Assess existing risk-based decision making in CT
  - Address Human and Ecological Health
  - Include Risk Assessment and Risk Management
  - Compare to other agencies, guidance and practices
- CDM Smith Hired Under an RFP Process
- Additional Info on DEEP RSR Wave 2 Web Page

Written Comments: Due March 11, 2014

Public Meeting: March 12, 2014

9am-12pm @ DEEP Offices

Phoenix Auditorium



# Stay Current on WQ Issues

- Sign Up for [Water Quality Planning ListServ](#)
- Information on WQ based programs at CT DEEP, such as
  - WQS
  - TMDLs
  - Monitoring & Assessment
  - Watershed Management
  - 319
  - Aquifer Protection



# Questions?

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