Promoting Citizen Involvement in the Clean Water Act

WEBCAST

Sponsored by EPA's Watershed Academy

April 19, 2006

Gayle Killam
River Network

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Clean Water Act History

"Can we afford clean water? Can we afford rivers and lakes and streams and oceans which continue to make possible life on this planet? Can we afford life itself? Those questions were never asked as we destroyed the waters of our Nation, and they deserve no answers as we finally move to restore and renew them. These questions answer themselves."

- Senator Edmund Muskie (D), Maine

"I believe that the [act] is far and away the most significant and promising piece of environmental legislation ever enacted by Congress… If we cannot swim in our lakes and rivers, if we cannot breathe the air God has given us, what other comforts can life offer us.?"

- Senator Howard Baker (R), Tennessee

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Clean Water Act Evolution

- 1899 Refuse Act (also known as Rivers and Harbors)
- 1948 Federal Water Pollution Control Act
- 1956 Federal Water Pollution Control Act
- 1965 Water Quality Act
- 1966 Clean Water Restoration Act
- 1972 Federal Water Pollution Control Act Amendments (CLEAN WATER ACT)
  - Protected interstate and intrastate waters, including lakes, rivers, streams, estuaries and wetlands

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Clean Water Act Evolution

- Sweeping 1972 changes
  - Clear national goal
  - "Dilution not solution to pollution"
  - National Pollutant Discharge Elimination System (NPDES): permit required for each point source
  - Minimum end-of-pipe standards
  - Basin planning
  - Stronger framework for state standards for in-stream water quality
  - Public involvement
  - Citizen suits

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Clean Water Act Evolution

- Amendments to the Clean Water Act that added:
  - nonpoint source control provisions
  - improved stormwater management practices
  - tightened controls on point sources
  - prohibited dumping at waterside industrial facilities
  - added Section 518, which authorized EPA to treat federally recognized Indian Tribes as States for certain provisions of the Act
  - phase-out of most direct federal grants
  - beginning of state revolving water pollution control funds

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Clean Water Act

- Objective:
  - To restore and maintain the chemical, physical and biological integrity of the Nation's waters
- National goals:
  - Eliminate discharge of pollutants to surface water
  - All waters will be "fishable and swimmable" wherever attainable

Clean Water Act, Section 101(a)

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Clean Water Act

- Objective:
  - To restore and maintain the chemical, physical and biological integrity of the Nation's waters
- National goals:
  - Eliminate discharge of pollutants to surface water BY 1985
  - All waters will be "fishable and swimmable" wherever attainable BY 1983
    - "water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water"

Clean Water Act, Section 101(a)

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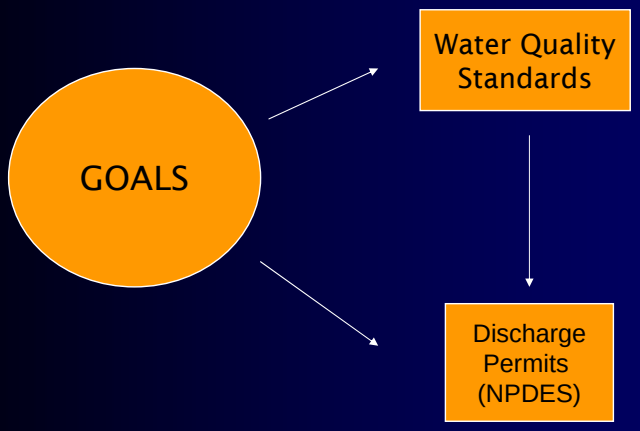
Clean Water Act

How it all fits together



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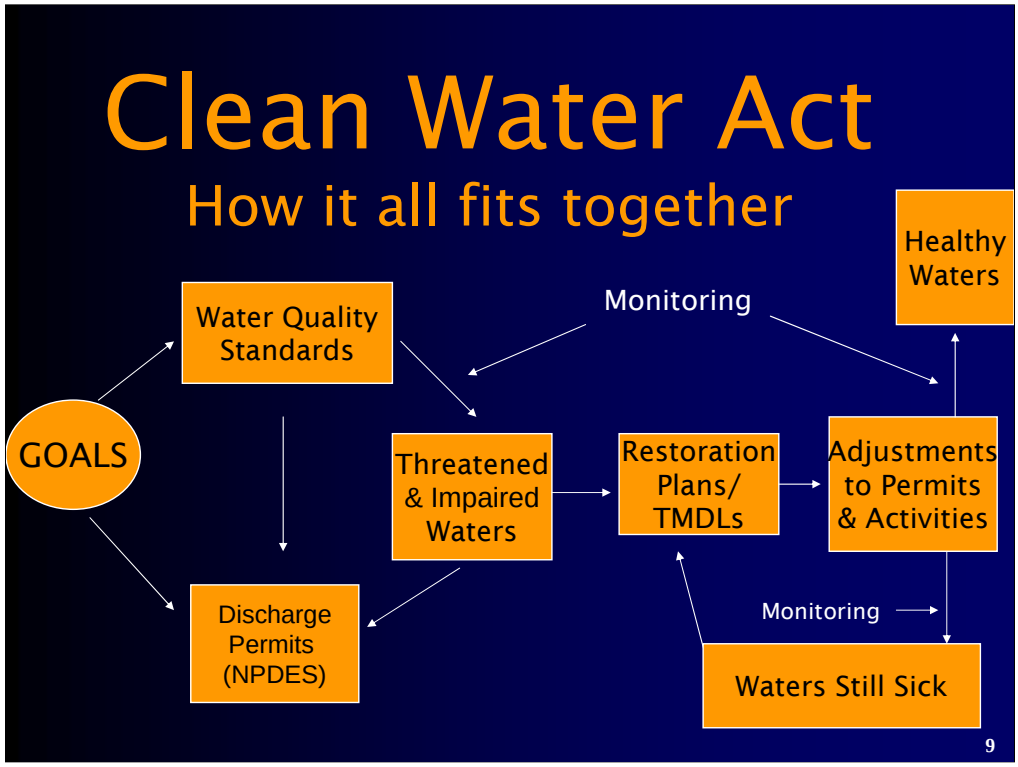
Clean Water Act
How it all fits together
Healthy Waters
Monitoring
Water Quality Standards
GOALS
Threatened & Impaired Waters
Restoration Plans/ TMDLs
Adjustments to Permits & Activities
Discharge Permits (NPDES)
Monitoring
Waters Still Sick
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What brings us to the Clean Water Act?

- "No fishing, No swimming" postings
- drinking water protection
- wild and scenic river designation
- endangered/threatened species
- sportsman's group (fishing, hunting)
- commercial interests
- impact of proposed project
- volunteer monitoring data

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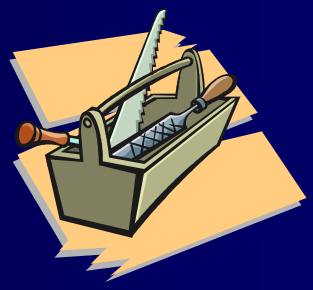
Clean Water Act Tools



- Water quality standards
  - Designated Uses
  - Water Quality Criteria
  - Antidegradation Policy
- How they apply to
  - Discharge (NPDES) permits
  - Threatened and impaired waters list (303d)
  - Watershed Restoration Plans/Total Maximum Daily Loads (TMDLs)
  - State water quality certification (401)
  - Nonpoint source control (319)

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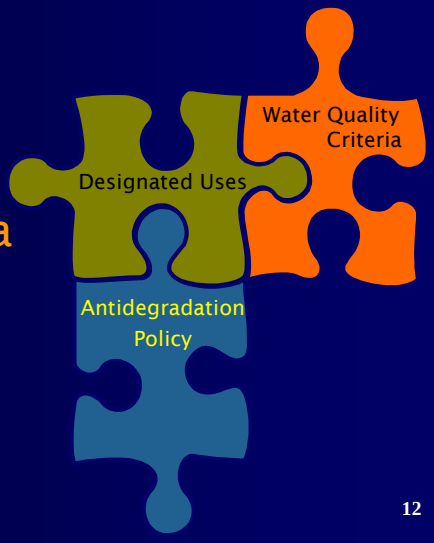
Water Quality Standards

Components:

- designated uses
- water quality criteria
- antidegradation policy



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Water Quality Standards

"A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses.

40 CFR 131.2

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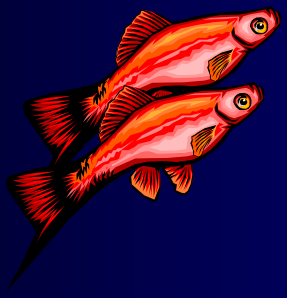
Water Quality Standards:
Designated Uses



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Identifying Uses

What are typical uses of the waters in your area?

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Statewide designated uses Pennsylvania

§ 93.4. Statewide water uses.

(a) *Statewide water uses.* Except when otherwise specified in law or regulation, the uses set forth in Table 2 apply to all surface waters. These uses shall be protected in accordance with this chapter, Chapter 96 (relating to water quality standards implementation) and other applicable State and Federal laws and regulations.

TABLE 2

Symbol	*Use*
	Aquatic Life
WWF	Warm Water Fishes
	Water Supply
PWS	Potable Water Supply
IWS	Industrial Water Supply
LWS	Livestock Water Supply
AWS	Wildlife Water Supply
IRS	Irrigation
	Recreation
B	Boating
F	Fishing
WC	Water Contact Sports
E	Esthetics

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Statewide designated uses Alabama

335-6-10-.03	**Water Use Classifications.**
(1)	Outstanding Alabama Water
(2)	Public Water Supply
(3)	Swimming and Other Whole Body Water-Contact Sports
(4)	Shellfish Harvesting
(5)	Fish and Wildlife
(6)	Limited Warmwater Fishery
(7)	Agricultural and Industrial Water Supply

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Statewide designated uses Tennessee

CHAPTER 1200-4-4
USE CLASSIFICATIONS FOR SURFACE WATERS

Abbreviations for Designated Uses:	
Domestic Water Supply	DWS
Industrial Water Supply	IWS
Fish and Aquatic Life	FAL
Trout Stream	TS
Naturally Reproducing Trout Stream	NRTS
Recreation	REC
Livestock Watering and Wildlife	LWW
Irrigation	IRR
Navigation	NAV

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Basin-specific uses Tennessee

1200-4-4-.02 HATCHIE RIVER BASIN.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Mississippi River	Mile 741.0 to 820.0	X	X	X	X	X	X	X		
Hatchie River	Mile 0.0 to Mile 129.0	X	X	X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Alston Creek	Mile 0.0 to Origin			X	X	X	X			
Big Muddy Canal	Mile 0.0 to Origin			X	X	X	X			

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"All other surface waters" language - TN

1200-4-4-.02 HATCHIE RIVER BASIN.

STREAM	DESCRIPTION	DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS
Mississippi River	Mile 741.0 to 820.0	X	X	X	X	X	X	X		
Hatchie River	Mile 0.0 to Mile 129.0	X	X	X	X	X	X			
Town Creek	Mile 0.0 to Origin			X	X	X	X			
Cane Creek	Mile 0.0 to Origin			X	X	X	X			
Alston Creek	Mile 0.0 to Origin			X	X	X	X			
Big Muddy Canal	Mile 0.0 to Origin			X	X	X	X			
All other surface waters named and unnamed in the Hatchie Basin, with the exception of wet weather conveyances, which have not been specifically noted shall be classified				X	X	X	X			

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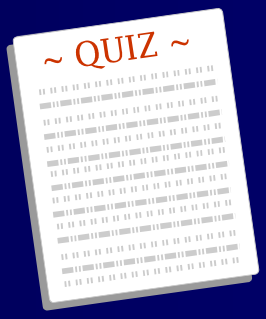
QUIZ
Designated Uses

- Existing uses are those uses attained on or after what date?
- Is “Navigation” an acceptable designated use?
- Is “Aquatic Life” a more sensitive use than “Recreation”?



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Water Quality Standards:
Designated Uses

- Must be assigned to every water body; generally assigned to segments
- Must include aquatic life, wildlife and recreation (basic CWA goals)
- Must protect downstream waters
- Must protect all existing uses
  - Uses actually attained on or after 11/28/75
  - Uses that water quality supports but are not occurring

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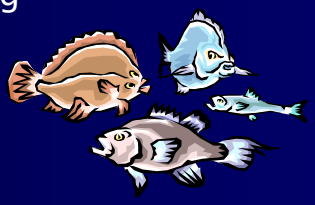
Typical Designated Uses

- Aquatic Life
  - Cold water, warm water, spawning, rearing, migration
- Recreation
  - Swimming, boating, sport fishing
- Public Water Supply
- Agriculture
- Industry
- Navigation
- Less typical: aesthetic, cultural, ceremonial, aquaculture



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Water Quality Standards:
Designated Uses

"Designated uses are those uses specified in water quality standards for each water body or segment whether or not they are being attained."

40 CFR 131.3(f)

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Can a designated use be weakened or removed?

NOT IF:

- It is an existing use OR
- It is "attainable"

  …at a minimum can be attained by implementing *(technology-based)* permits or "cost-effective and reasonable" practices for nonpoint source control

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Use Attainability Analysis (UAA) is required

- What is it?
  - "scientific assessment of the factors affecting the attainment of the use" 40CFR131.3(g)
- When is it required?
  - if designated uses are proposed for weakening or removal
  - OR
  - if basic CWA uses (aquatic life, wildlife, recreation) are not designated for a water body

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Proposed Downgrading of Designated Uses
from the field

- Kentucky
- Wisconsin
- Louisiana
- Oregon

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What Can You Do?

- Document uses in your water body
  - share with water quality agency
- Review designated uses
  for your water body and in state water quality standards - advocate for protection of all the uses
- Examine the segments
  - do they allow for greatest protection of different parts of the water body?
- **Request changes**
  Participate in the Triennial Review or petition for changes where they are needed

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Triennial Review

- The Clean Water Act requires each state to hold regular public hearings on its Water Quality Standards
- These hearings are to be held at least once every three years – "Triennial Review"
- This can be the public's best chance to comment on the adequacy of each part of the standards

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Triennial Review

"The state shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards."

40 CFR 131.20

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Triennial Review

Everything in the water quality standards!

- The state's designated uses and criteria
- Classification of a particular water body
- Antidegradation policy and implementation plan
- Public involvement procedures
- Format - are the standards easy to understand?

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Triennial Review
from the field

- New Mexico

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Questions?

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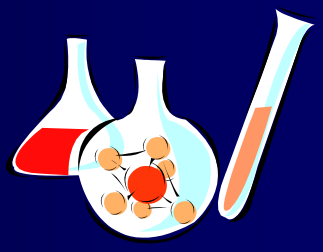
Water Quality Standards:
Water Quality Criteria



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Water Quality Standards:
Water Quality Criteria

What chemical, physical and biological characteristics should be monitored to ensure each designated use is protected?

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Regional criteria

California (LA Basin)

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Regional Criteria

California (LA Basin)

Regional Objectives for Inland Surface Waters

Narrative or numerical water quality objectives have been developed for the following parameters (listed alphabetically) and apply to all inland surface waters and enclosed bays and estuaries (including wetlands) in the Region. *Water quality objectives are in italics.*

Bacteria, Coliform

Total and fecal coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Water quality objectives for total and fecal coliform vary with the beneficial uses of the waterbody and are described below:

In waters designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of total samples during any 30-day period exceed 400/100 ml.

In waters designated for non-water contact recreation (REC-2) and not designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 2000/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of samples collected during any 30-day period exceed 4000/100 ml.

In all waters where shellfish can be harvested for human consumption (SHELL), the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 ml, nor shall more than ten percent of the samples collected during any 30-day period exceed 230/100 ml for a five-tube decimal dilution test or 330/100 ml when a three-tube decimal dilution test is used.

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(3) SWIMMING AND OTHER WHOLE BODY WATER-CONTACT SPORTS

(a) Best usage of waters: swimming and other whole body water-contact sports.*

(b) Conditions related to best usage: the waters, u sanitary supervision by the controlling health authorities, will me standards of water quality for outdoor swimming places and will be satisfactory for swimming and other whole body water-contact s quality of waters will also be suitable for the propagation of fish, aquatic life. The quality of salt waters and estuarine waters to classification is assigned will be suitable for the propagation and h shrimp and crabs.

(c) Specific criteria:

1. Sewage, industrial wastes, or other wastes: none which are not effectively treated or controlled in accordance with Rule 335-6-10-.08.

2. pH: sewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5. For estuarine waters and salt waters to which this classification is assigned, wastes as described herein shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.5, nor greater than 8.5.

3. Temperature:

(i) The maximum temperature in streams, lakes, and reservoirs, other than those in river basins listed in subparagraph (ii) hereof, shall not exceed 90° F.

(ii) The maximum temperature in streams, lakes, and reservoirs in the Tennessee and Cahaba River Basins, and for that portion of the Tallapoosa River Basin from the tailrace of Thurlow Dam at Tallassee downstream to the junction of the Coosa and Tallapoosa Rivers which has been

* **NOTE**: In assigning this classification to waters intended for swimming and water-contact sports, the Commission will take into consideration the relative proximity of discharges of wastes and will recognize the potential hazards involved in locating swimming areas close to waste discharges. The Commission will not assign this classification to waters, the bacterial quality of which is dependent upon adequate disinfection of waste and where the interruption of such treatment would render the water unsafe for bathing.

Statewide criteria

Alabama

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Statewide criteria

Alabama
(continued)

6. Bacteria:

(i) Waters in the immediate vicinity of discharges of sewage or other wastes likely to contain bacteria harmful to humans, regardless of the degree of treatment afforded these wastes* , are not acceptable for swimming or other whole body water-contact sports.

(ii) In all other areas, the bacterial quality of water is acceptable when a sanitary survey by the controlling health authorities reveals no source of dangerous pollution and when the geometric mean fecal coliform organism density does not exceed 200 colonies/100 ml in non-coastal waters. In coastal waters, bacteria of the enterococci group shall not exceed a geometric mean of 35 colonies/100 ml nor exceed a maximum of 104 colonies/100 ml in any sample. The geometric mean shall be calculated from no less than five samples collected at a given station over a 30-day period at intervals not less than 24 hours. When the geometric mean bacterial organism density exceeds these levels, the bacterial water quality shall be considered acceptable only if a second detailed sanitary survey and evaluation discloses no significant public health risk in the use of the waters.

(iii) The policy of nondegradation of high quality waters shall be stringently applied to bacterial quality of recreational waters.

7. Radioactivity: the concentrations of radioactive materials present shall not exceed the requirement of the State Department of Public Health.

8. Turbidity: there shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters, without the influence of man-made or man-induced causes. Turbidity levels caused by natural runoff will be included in establishing background levels.

Statewide criteria
Alabama

335-6-10-.06 **Minimum Conditions Applicable to All State Waters.**
The following minimum conditions are applicable to all State waters, at all places and at all times, regardless of their uses:

(a) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes that will settle to form bottom deposits which are unsightly, putrescent or interfere directly or indirectly with any classified water use.

(b) State waters shall be free from floating debris, oil, scum, and other floating materials attributable to sewage, industrial wastes or other wastes in amounts sufficient to be unsightly or interfere directly or indirectly with any classified water use.

(c) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes in concentrations or combinations which are toxic or harmful to human, animal or aquatic life to the extent commensurate with the designated usage of such waters.

Statewide criteria
New Mexico

20.6.4.12 GENERAL STANDARDS: General standards are established to sustain and protect existing or attainable uses of surface waters of the state. These general standards apply to all surface waters of the state at all times, unless a specified standard is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property. When changes in dissolved oxygen, temperature, dissolved solids, sediment or turbidity in a water of the state is attributable to natural causes or the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting, numerical standards for temperature, dissolved solids content, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply. The foregoing provision does not include major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public, or discharges from municipal separate storm sewers.

A. Bottom Deposits: Surface waters of the state shall be free of water contaminants from other than natural causes that will settle and damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

B. Floating Solids, Oil and Grease: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. Color: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. Odor and Taste of Fish: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, or result in offensive odor arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

E. Plant Nutrients: Plant nutrients from other than natural causes shall not be present in concentrations which will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

Basin-specific criteria
New Mexico

20.6.4.108 RIO GRANDE BASIN - The Jemez river and all its tributaries above state highway 4 near the town of Jemez Springs, and the Guadalupe river and all its tributaries.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater fishery, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. Standards:

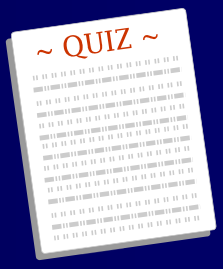
(1) In any single sample: conductivity shall not exceed 400 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and turbidity shall not exceed 25 NTU. The use-specific numeric standards set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL (see Subsection B of 20.6.4.13 NMAC).

QUIZ
Water Quality Criteria

True or False

- All states have biological criteria
- Different states develop different criteria to protect the same designated uses
- The same water body may have different criteria in different states
- All states have a “catch-all” category of minimum uses and criteria protections



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Water Quality Standards:
Water Quality Criteria

"States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use."

40 CFR 131.11(a)(1)

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Water Quality Standards:
Water Quality Criteria

- Numbers and/or words that describe conditions protective of a designated use
- Protection of different characteristics
  - Chemical
  - Physical
  - Biological

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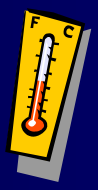
Water Quality Standards:
Water Quality Criteria

- Numbers and/or words that describe conditions protective of a designated use
- Protection of different characteristics
  - Chemical – metals, pesticides
  - Physical – temperature, sediment
  - Biological - "biocriteria," biological conditions of a waterbody, compared to reference site



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Typical Criteria

Numeric: *measurable benchmarks*

Narrative: *desirable conditions*

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Typical Criteria

Numeric: *measurable benchmarks*

- Dissolved oxygen >= 5 mg/L, 1-hour average, not to be exceeded more than once per month
- Temperature <= 68 degrees F, daily average, never to be exceeded
- IBI > X, monthly average, not to be violated more than once a year

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Typical Criteria

Narrative: *desirable conditions*

- Temperature will not exceed "natural levels"
- Waters will be free from floating debris, scum and oil
- No toxic contaminants in toxic amounts
- Wastewater discharges will not be allowed that produce objectionable color, odor, taste or turbidity

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Criteria should address:

- How much?
  Concentration of exposure or *magnitude*
- How long?
  Time period of exposure or *duration*
- How often?
  Frequency of exposure or *frequency*

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Where you might see those elements New Mexico

20.6.4.11 COMPLIANCE WITH WATER QUALITY STANDARDS:

A. Compliance with acute water quality standards shall be determined from the analytical results of a single grab sample. Acute standards shall not be exceeded.

B. Compliance with chronic water quality standards shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic standards shall not be exceeded more than once every three years.

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Connect uses and criteria

Swimming/Primary Contact Recreation

- E. coli <= 240 colonies/100 ml, instantaneous, never to be exceeded

Cold Water Aquatic Life

- Dissolved Oxygen >= 6 mg/L, hourly average, never to be exceeded
- Temperature <= 68 degreesF, 6-hour average, not to be exceeded more than once per month

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What Can You Do?

- **Examine criteria**
  in state water quality standards – are uses protected by appropriate criteria? Are criteria as stringent as EPA's national recommendations? If not, why not?
- **Review monitoring data**
  or collect your own to document whether criteria are protective of uses
- **Research concerns**
  about criteria that may not be protective enough
- **Request changes**
  participate in the Triennial Review or petition for changes where they are needed

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Water Quality Standards:
Water Quality Criteria
from the field

- Tennessee

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How to participate in the Triennial Review process

- Contact agency
- Get on mailing list
- Obtain relevant documents
- Talk with your members, other organizations, and the public about concerns in their watersheds
- Meet with agency folks
- Prepare your comments and/or testimony

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If your state/tribe has not had a Triennial Review in more than 3 years:

- Contact your water quality agency to find out if there is one scheduled
- Write a letter to your water quality agency requesting one be scheduled
- Copy your letter to your regional EPA office
- If there is no response - contact newspapers, other watershed organizations, elected officials and EPA

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Questions?

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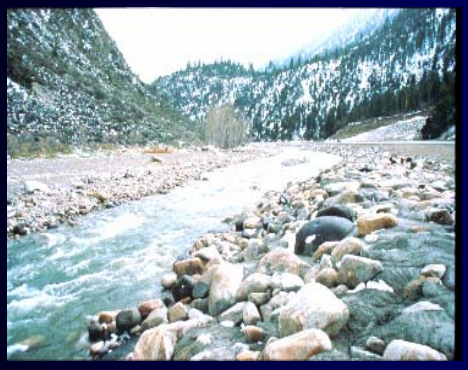
Water Quality Standards:
Antidegradation



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Clean Water Act goal

"To restore and maintain the chemical, physical and biological integrity of the Nation's waters"

Water Quality Standards: Antidegradation

- Policy since 1968 – pre-dating Clean Water Act
- Federal policy regulation: 40 CFR 131.12; added to CWA (Section 303(d)(4)(B))
- Component of every state's water quality standards
  - designated uses
  - water quality criteria
  - antidegradation policy
- State policy must be consistent with Federal regulations

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Water Quality Standards:
Antidegradation

SICK HEALTHY

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Water Quality Standards:
Antidegradation

SICK HEALTHY

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Water Quality Standards:
Antidegradation

SICK HEALTHY

63

Water Quality Standards:
Antidegradation

SICK HEALTHY

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Water Quality Standards:
Antidegradation

SICK HEALTHY

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Antidegradation Policy

- Keep healthy waters healthy
- Three levels of protection
  - existing uses
  - "high quality waters"
  - "outstanding waters"
- Antidegradation review to occur to prevent harm to any of the above

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What can trigger antidegradation?

An antidegradation review should be triggered by any action with the potential to degrade water quality

For example:

- NPDES permit issuance
- State water quality certification
- TMDL development or changes
- Changes to water quality standards

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What Can You Do?

- **Review antidegradation policy and implementation procedures**
  and state/tribe track record on NPDES permits; make sure state/tribe follows policy and implementation procedures
- **Examine activities**
  that are likely to harm existing uses, degrade high water quality, impact outstanding waters
- **Insist on antidegradation review**
  that is documented with a public process
- **Challenge permits**
  that have not had adequate antidegradation review
- **Request changes**
  participate in the Triennial Review or petition for changes where they are needed

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Water Quality Standards: Antidegradation from the field

- Illinois
- Tennessee
- Georgia
- New Mexico

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Questions?

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How does all this apply in my waters?

- Threatened and impaired waters list (303d)
- Total Maximum Daily Loads (TMDLs)
- Discharge (NPDES) permits
- State water quality certification (401)
- Nonpoint source control (319)

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Threatened and Impaired Waters List

"To restore and maintain the chemical, physical and biological integrity of the Nation's waters"

- Determine whether waters are meeting criteria and supporting uses ("303d list")
  - All waters not meeting, or expected not to meet, state water quality standards
  - April 1, even years
  - Review all "existing and readily-available water quality-related data and information"
  - EPA must approve or develop another list
- Considered when issuing NPDES and 401

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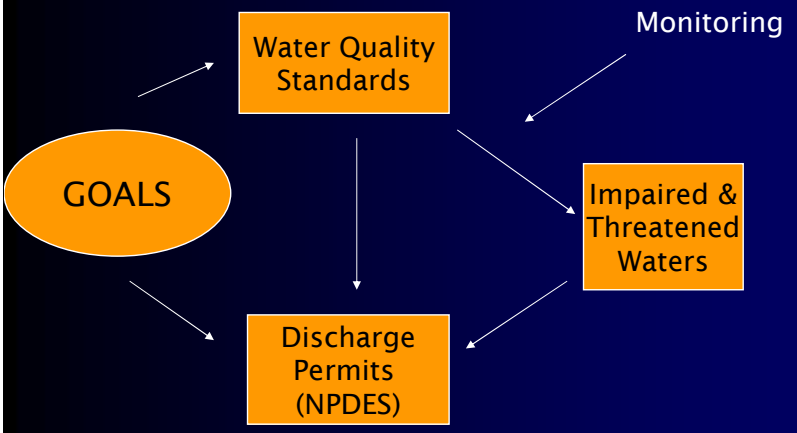
Clean Water Act

How it all fits together



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Total Maximum Daily Loads (TMDLs)

- *A calculation of the maximum safe amount of a pollutant for a waterbody; and*
- *A plan for cleanup of a polluted river, lake, or coastal water.*

Steps required:

- Prioritize waters needing attention
- Determine how much pollution water body can handle
- Identify sources of pollution
- Allocate allowable pollution from each source
- Include "margin of safety" to account for uncertainty

Steps recommended:

- Develop implementation plan
- Monitor and revise

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Discharge Permits (NPDES)

- National Pollutant Discharge Elimination System (NPDES)
  - Technology-based effluent limits
  - Water quality-based effluent limits
- Reasonable potential analysis - any potential excursion
- Impaired waters – "can't cause or contribute"
- TMDL goals – NPDES permits must be adjusted to meet wasteload allocations

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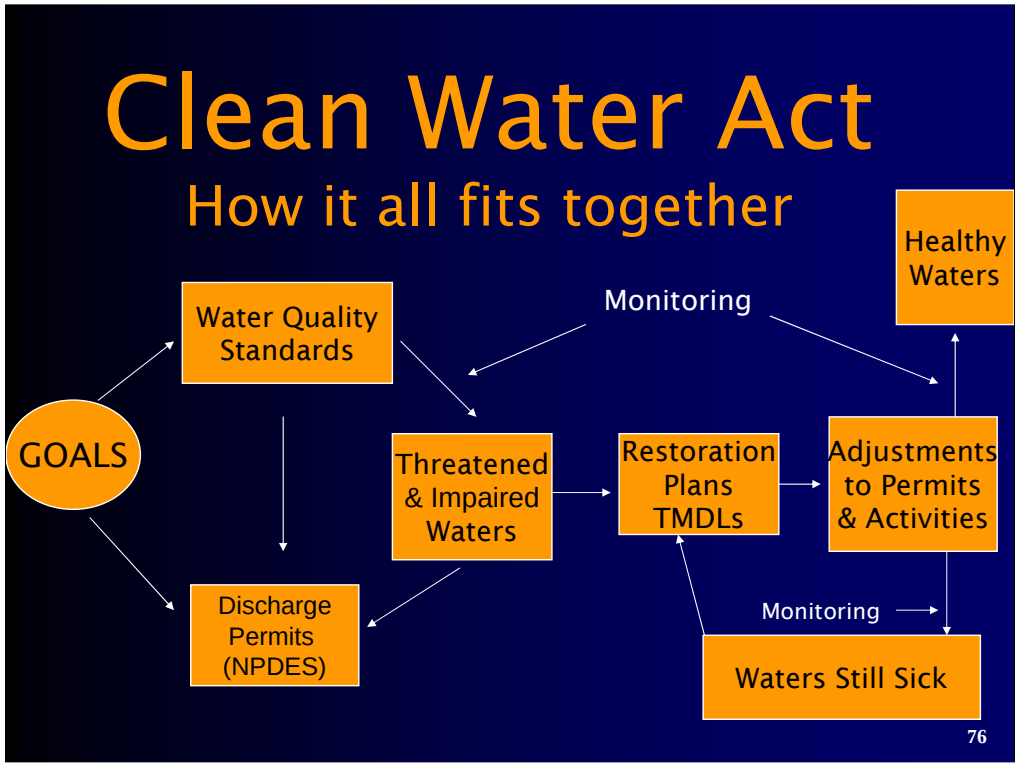
Clean Water Act
How it all fits together
Healthy Waters
Monitoring
Water Quality Standards
GOALS
Threatened & Impaired Waters
Restoration Plans TMDLs
Adjustments to Permits & Activities
Discharge Permits (NPDES)
Monitoring
Waters Still Sick
76

State Water Quality Certification (401)

- State/tribal review of federal activities – ensure water quality standards are not violated
- When?
  - Dredge and fill permits (404)
  - NPDES issued by EPA
  - FERC relicensing
- What?
  - certify
  - certify with conditions
  - deny
  - waive

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Nonpoint source control (319)

States must

- Prepare assessments of nonpoint source pollution problems
- Develop management programs to address problems
- Implement grant program to reduce nonpoint source pollution
  - Recent emphasis on development of watershed plans to meet water quality standards

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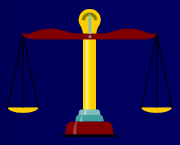
How can the Clean Water Act help me solve problems?

- Public pressure
- Ask questions

- Research
- Monitor
- Testify
- Legal strategies



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Questions?

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River Network

- Gayle Killam
  (503) 542-8387
  gkillam@rivernetwork.org
- The Clean Water Act Owner's Manual
  www.rivernetwork.org/marketplace/cwa.cfm
- Clean Water Act course online
  www.cleanwateract.org
- Online searchable state CWA database
  www.rivernetwork.org/cleanwater/cwa_search.asp

Additional Resources