

WATER QUALITY STANDARDS: *Protecting Human Health and Aquatic Life*

We use water in a variety of ways. Humans drink it, swim in it, wash with it and travel across it. We use water to cool our machines and provide power to our cities. Aquatic organisms, such as fish, snails, frogs and insects, live in water for part or all of their lives. To protect human health and aquatic life, states, territories and authorized tribes establish water quality standards regulating how clean their water bodies should be. The Environmental Protection Agency (EPA) reviews these water quality standards and approves them if they meet the requirements of the Clean Water Act and EPA's water quality standards regulations.

States, territories and authorized tribes are required to hold public hearings to review water quality standards every three years to ensure that the standards in their regulations align with current science and uses of specific water bodies by people and aquatic life. This review is an opportunity for you to help protect the water bodies in your area. State, territorial and tribal environmental departments need your help to learn how water bodies in your area are used or could be used.

WHAT ARE WATER QUALITY STANDARDS?

Set by each state, water quality standards regulate how clean a water body should be. The standards consist of the water body's designated uses, water quality criteria to protect those uses and determine if they are being attained, and antidegradation policies to help protect high quality water bodies.

- **DESIGNATED USES.** States designate water bodies for specific uses based on their goals and expectations for their waters. Typical designated uses include:
 - Protection and propagation of fish, shellfish and wildlife.
 - Recreation.
 - Public water supply.
 - Agricultural, industrial, navigational and other purposes.

A water body's designated use can be changed if the state, territory or authorized tribe can demonstrate that the water body's current use is not attainable and if EPA approves of the change.



- **WATER QUALITY CRITERIA.** Water quality criteria are set to protect each designated use and are based only on data and scientific judgments about pollutant concentrations and their effects. Whether numeric or narrative in form, water quality criteria protect designated uses by describing the chemical, physical and biological conditions necessary for safe use of waters by humans and aquatic life. Definitions and examples of some criteria appear in the table below.



TYPE	DEFINITION	EXAMPLE
Numeric Criteria	Lists the maximum pollutant concentration levels allowed in a water body.	The maximum concentration of lead that aquatic life can tolerate in a water body on a short-term (acute) basis is 65 micrograms of lead per liter of freshwater.
Narrative "Free From" Criteria	Describes the desired conditions for a water body as being "free from" certain negative conditions.	Free from excessive algae blooms.
Narrative Biological Criteria	Describes the kinds of organisms expected in a healthy water body.	Capable of supporting and maintaining a balanced, integrated, adaptive community of diverse warm water aquatic organisms.

- **ANTIDegradation POLICIES.** States, territories and authorized tribes are required to complete the following:

- Protect existing uses and the water quality necessary to support such uses for all of their water bodies.
- Establish a public decision-making process for water bodies with water quality that is better than necessary to support the designated uses and for which an activity is proposed that would lower water quality.
- Maintain and protect water quality of Outstanding National Resource Waters from degradation. Outstanding National Resource Waters are water bodies that a state chooses to protect most strictly.
- Identify methods for implementing their antidegradation policies.



HELP PROTECT YOUR WATER BODIES

- Check out your state's water quality standards regulations at <http://water.epa.gov/scitech/swguidance/waterquality/standards/wqslibrary/index.cfm> and contact your state's environmental department to voice your ideas or concerns about current or proposed standards.
- Contact your state's EPA regional water quality standards coordinator at <http://water.epa.gov/scitech/swguidance/waterquality/standards/regions.cfm> if you have questions or concerns.
- Attend public hearings or information sessions to learn about water-related issues in your state.
- Check the designated uses for the water bodies near you. Are you or people you know using water bodies in other ways? If so, tell your state's environmental department.
- Visit <http://water.epa.gov/action> for more ways you can help protect and clean up your state's waters.

