



United States  
Environmental Protection  
Agency

Office of Water  
Mail Code 4303

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## **Interim Economic Guidance for Water Quality Standards: Workbook**

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### **Fact Sheet** **Interim Economic Guidance for Water Quality Standards: Workbook**

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### **FACT SHEET**

( February 1997; EPA-823-F-97-002 )

#### **SUMMARY**

This workbook will help State and Indian tribes' environmental protection agencies understand economic factors and the types of tests that can be used to determine: 1) if the designated use of a water body cannot be attained, 2) if a variance to an individual discharger can be granted, or 3) if degradation of high quality water is warranted. The measures and tests contained in this guidance are standard economic analytical tools.

This guidance, including the various screening levels and measures presented, is designed to be implemented as reference points and used as guides by the States and Regions. The measures outlined in the guidance are not intended to be applied as absolute decision points. States may use other economically defensible approaches in lieu of those suggested in this interim guidance. This guidance is designed for use in the water quality standards program and does not represent Agency guidance outside of that program.

#### **BACKGROUND:**

Economic factors may be considered at several different points in the water quality standards program. The water quality standards regulation provides for such consideration in the following areas:

- Section 131.10--Designation of Uses (also applies to variances)
  - (g)(6) Controls more stringent than those required by Sections 301(b) and 306 of this Act would result in substantial and widespread economic and social impact.
- Section 131.12--Antidegradation
  - (a)(2)...allowing lower water quality is necessary to accommodate important economic or



social development in the areas in which the waters are located.

Since publication of the water quality standards regulation in 1983 we have produced extensive guidance on the interpretation and application of the various regulatory requirements. None of this guidance, however, dealt extensively with the economic considerations.

This guidance workbook is intended to fill that gap. It is anticipated that the guidance will be revised from time to time to reflect State and Regional experience in its application. For example we intend to add case studies as appendices to the guidance to reflect real-world experiences in its application. In addition, the Agency is considering revising the water quality regulation. If revisions to the regulation are made with respect to economic considerations, the applicable guidance will be revised accordingly. However, it is likely to be at least 3 years before any revisions to the regulation are finally promulgated and no way of anticipating whether any changes will be made in the economic provisions.

This guidance is presented to assist States and EPA Regional Offices, along with other interested parties, in understanding the economic factors that may be considered, and the types of tests that can be used to determine: (1) if a designated use cannot be attained, (2) if a variance to an individual discharger can be granted, or (3) if degradation of high-quality water is warranted.

The regulatory requirement that must be met is that attaining a designated use or obtaining a variance would result in substantial and widespread economic and social impacts. The regulatory requirement for antidegradation is that it must be shown that lower water quality is necessary to accommodate important social and economic development. This guidance provides a framework for making these determinations.

The measures and tests suggested in this guidance are standard economic analytical tools, but the States are free to provide other kinds of analysis to support their position. The guidance does provide information on the kinds and types of analysis that are appropriate and how the information can be assembled in order to make a decision. It is not an exhaustive description of all appropriate economic analysis. Additional information and tests may be necessary and/or desirable in certain circumstances.

The economic impacts to be considered are those that result from treatment beyond that required by technology-based regulations. All economic analyses of water quality standards should address only the cost of improving the water to meet water quality standards or the cost of maintaining water quality in high-quality waters.

Although EPA is responsible for approving a State's water quality standards, the State is responsible for interpreting the circumstances of each case and determining where there are substantial and widespread economic and social impacts, or where important economic and social development would be inappropriately precluded.

Various drafts of this guidance were reviewed by EPA headquarters and regional offices, States, and other organizations. State and Regional staff should feel free to contact the Economic and Statistical Analysis Branch in the Office of Science and Technology for advice and assistance regarding this guidance or related concerns. We would appreciate receiving feedback from the users of this guidance so that it can be improved as necessary. As with all guidance related to the water quality standards program, this document is considered to be part of the Water Quality Standards Handbook--Second Edition.

# Interim Economic Guidance for Water Quality Standards: Workbook

(March 1995; EPA-823-B-95-002)

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### **Additional Information**

If you have any questions or if you would like additional information, you may contact George Denning (202-260-7374) or via e-mail: [denning.george@epamail.epa.gov](mailto:denning.george@epamail.epa.gov)

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Last Updated January 28, 1997  
*OW-GENERAL@epamail.epa.gov*  
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