

cancellation will apply only to the applicable 6(f)(1) request listed in this notice. If the product(s) have been subject to a previous cancellation action, the effective date of cancellation and all other provisions of any earlier cancellation action are controlling. The withdrawal request must also include a commitment to pay any reregistration fees due, and to fulfill any applicable unsatisfied data requirements.

#### VI. Provisions for Disposition of Existing Stocks

The effective date of cancellation will be the date of the cancellation order. The orders effecting these requested cancellations will generally permit a registrant to sell or distribute existing stocks for 1-year after the date the cancellation request was received by the Agency. This policy is in accordance with the Agency's statement of policy as prescribed in the **Federal Register** of June 26, 1991 (56 FR 29362) (FRL 3846-4). Exception to this general rule will be made if a product poses a risk concern, or is in noncompliance with reregistration requirements, or is subject to a data call-in. In all cases, product-specific disposition dates will be given in the cancellation orders.

Existing stocks are those stocks of registered pesticide products which are currently in the United States and which have been packaged, labeled, and released for shipment prior to the effective date of the cancellation action. Unless the provisions of an earlier order apply, existing stocks already in the hands of dealers or users can be distributed, sold or used legally until they are exhausted, provided that such further sale and use comply with the EPA-approved label and labeling of the affected product(s). Exceptions to these general rules will be made in specific cases when more stringent restrictions on sale, distribution, or use of the products or their ingredients have already been imposed, as in Special Review actions, or where the Agency has identified significant potential risk concerns associated with a particular chemical.

#### List of Subjects

Environmental protection,  
Agricultural commodities, Pesticides  
and pests.

Dated: December 21, 2000.

#### Richard D. Schmitt,

Director, Information Resources and Services  
Division, Office of Pesticide Programs.

[FR Doc. 01-575 Filed 1-8-01; 8:45 am]

BILLING CODE 6560-50-S

## ENVIRONMENTAL PROTECTION AGENCY

[OW-FRL-6931-1]

### Nutrient Criteria Development; Notice of Ecoregional Nutrient Criteria

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of Ecoregional Nutrient Criteria for Lakes and Reservoirs, Rivers and Streams, and Wetlands.

**SUMMARY:** The Environmental Protection Agency (EPA) is publishing seventeen Ecoregional Nutrient Criteria Documents for lakes and reservoirs, rivers and streams and wetlands within specific geographic regions (ecoregions) of the United States. These recommended section 304(a) water quality criteria for nutrients were developed with the aim of reducing and preventing eutrophication on a National scale. Each document presents recommended criteria for causal parameters (total phosphorus and total nitrogen) and response variables (chlorophyll a and some form of turbidity). This information is intended to serve as a starting point for States, authorized Tribes and others to develop more refined nutrient criteria, as appropriate, using EPA waterbody-specific technical guidance manuals and other scientifically defensible approaches. EPA will work with States and authorized Tribes as they adopt water quality criteria for nutrients into their water quality standards. EPA expects States and authorized Tribes to adopt or revise EPA ecoregional nutrient criteria published in 2000 into State or Tribal water quality standards by 2004.

Under the Clean Water Act, States, Territories, and authorized Tribes adopt into their water quality standards water quality criteria to protect designated uses. The criteria recommendations presented in these documents are guidance that States, territories, and authorized Tribes may use as a starting point for developing their own criteria as part of their water quality standards. EPA strongly encourages States, Territories and authorized Tribes to refine these recommendations based on the key elements of nutrient criteria development (historical information, reference conditions, models, consideration of downstream effects, and expert judgment) discussed in EPA's published Technical Guidance Manuals (Lakes and Reservoirs: EPA-822-B00-001; Rivers and Streams: EPA-822-B-00-002). While the seventeen documents available today contain EPA's scientific recommendations regarding ecoregional

nutrient criteria, the information and recommendations are not regulations, and do not impose legally binding requirements on EPA, States, Territories, authorized Tribes, or the public. As recommendations, they might not apply to a particular situation based upon the circumstances. States, Territories, and authorized Tribes retain the discretion to adopt water quality criteria based on other scientifically defensible approaches to developing regional or local nutrient criteria that differ from these recommendations. EPA may revise these section 304(a) water quality criteria in the future.

EPA is making these recommended section 304(a) nutrient water quality criteria available to the public in accordance with the Agency's process for publishing new and revised criteria (see **Federal Register**, December 10, 1998, 63 FR 68354 and in the EPA document titled, National Recommended Water Quality—Correction EPA 822-Z-99-001, April 1999). EPA invites the public to provide scientific views on these criteria. EPA will review and consider information submitted by the public on significant scientific issues and site-specific data that might not have otherwise been identified by the Agency during development of these criteria. After EPA reviews the submitted significant scientific information, the Agency may publish revised nutrient water quality criteria, or publish a notice informing the public that the submitted information does not warrant revision of the criteria.

EPA encourages the public to provide additional data that could help States and or authorized Tribes to refine these recommended nutrient water quality criteria. EPA has identified specific sections within each document where public input would greatly assist States and authorized Tribes in the task of augmenting the database for deriving ecoregional nutrient water quality criteria. For example, the public can provide information concerning the historical conditions and trends of the water resources within an ecoregion related to cultural eutrophication. EPA will forward all comments received on a particular ecoregional criterion or set of criteria to the appropriate State or Tribe to help foster water quality criteria refinement.

EPA's Office of Water, Office of Science and Technology has prepared this document for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

**DATES:** EPA will accept significant scientific information submitted to the Agency within 90 days of publication of this notice in the **Federal Register**. Any scientific information submitted should be adequately documented and contain enough supporting information to indicate that acceptable and scientifically defensible procedures were used and that the results are reliable.

**ADDRESSES:** This notice contains a summary of the Ecoregional Nutrient Criteria Documents. Copies of the all or any document may be obtained from the U.S. National Service Center for Environmental Publications (NSCEP), 11029 Kenwood Road, Cincinnati, OH 45242; (513) 489-8190 or toll free (800) 490-9198. The documents are also available electronically at <http://www.epa.gov/ost/standards/nutrient.html>. The waterbody-specific technical guidance manuals, which present the nutrient criteria derivation methodology used by EPA to develop the nutrient water quality criteria, are also available from EPA's nutrient website. An original and two copies of written significant scientific information should be sent to Robert Cantilli (MC-4304), U.S. EPA, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460. Written significant scientific information may be submitted electronically in ASCII or Word Perfect 5.1, 5.2, 6.1, or 8.0 formats to [OW-General@epa.gov](mailto:OW-General@epa.gov).

**FOR FURTHER INFORMATION CONTACT:** Robert Cantilli, U.S. EPA, Health and Ecological Criteria Division (4304), Office of Science and Technology, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460; or call (202) 260-5546; or e-mail [cantilli.robert@epa.gov](mailto:cantilli.robert@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**What Are Section 304(a) Nutrient Criteria?**

Section 304(a)(2) of the Clean Water Act directs EPA to develop and publish information on the factors necessary "to restore and maintain the chemical, physical and biological integrity of the Nation's waters, including the protection and propagation of shellfish, fish and wildlife, the protection of recreational activities in and on the water, and the measurement and classification of water quality."

Section 304(a)(1) of the Clean Water Act directs EPA to publish, and from time to time revise, recommended criteria for water quality accurately reflecting the latest scientific knowledge, "including information on the factors affecting rates of

eutrophication." The intent of EPA's recommended ecoregional nutrient criteria is to represent water quality conditions of surface water that are minimally affected by human development activities and to provide for the protection and propagation of aquatic life and recreation.

Water quality criteria developed under section 304(a) are based solely on data and scientific judgments and do not reflect consideration of economic impacts or the technological feasibility of meeting any specific level of water quality in ambient water. They provide guidance for States and authorized Tribes in adopting water quality standards that ultimately provide a basis for controlling discharges or releases of pollutants. They also provide guidance to EPA when promulgating water quality standards under section 303(c), when such action is necessary.

EPA published a National Strategy for the Development of Regional Nutrient Criteria in June 1998 that described the approach the Agency would follow in developing nutrient criteria and working with States and authorized Tribes as they adopt nutrient criteria into State and Tribal water quality standards (see **Federal Register**, June 25, 1998, 63 FR 34648; this document is also available from the nutrient website: <http://www.epa.gov/ost/standards/nutrient.html>). The major focus of the strategy is the development of waterbody-type technical guidance manuals and recommended ecoregion-specific nutrient criteria by the end of 2000. In addition, EPA has established a national nutrient database that States and authorized Tribes can use to compile as well as evaluate nutrient data and perform alternative analyses. This database contains the information upon which today's recommendations were calculated.

EPA's Section 304(a) nutrient criteria recommendations are intended to protect against the adverse effects of cultural eutrophication. Cultural eutrophication (*i.e.*, overenrichment of nutrient levels associated with human activities) of United States surface waters is a long-standing problem. States and Tribes consistently identify excessive levels of nutrients as a major reason why as much as half of the surface waters surveyed in this country do not meet water quality objectives, such as full support of aquatic life.

Nitrogen and phosphorus are the primary causes of eutrophication; algal blooms are often a response to enrichment. Within various waterbody types (e.g., lakes, rivers, estuaries), chronic symptoms of overenrichment include low dissolved oxygen, fish kills,

reduced water clarity, and changes from the natural types and diversity of species of flora and fauna. The problem is national in scope, but specific levels of overenrichment leading to these problems vary from one region of the country to another because of factors such as geographical variations in geology and soil types. For these reasons, EPA is developing its recommended nutrient water quality criteria on an ecoregional basis for use by States and authorized Tribes.

Because EPA's nutrient water quality criteria are intended to represent water quality conditions that are reflective of those minimally impacted by human activities, they are presumed to protect any threatened or endangered species that reside in or make use of those waters. However, there remains a small possibility that the nutrient criteria will not protect all listed endangered or threatened species. Consequently, EPA recommends that States and authorized Tribes develop more protective, site-specific modifications of the criteria as necessary to protect threatened and endangered species, where sufficient data exist indicating that endangered or threatened species are more sensitive to a particular level of a nutrient parameter or overenrichment condition than that reflected by EPA's nutrient water quality criteria.

**What Guidance Will EPA Develop and Publish for Nutrients Under Section 304(a)?**

To assist EPA Regions, States, and authorized Tribes to establish protective and scientifically defensible nutrient criteria, EPA will publish specific technical guidance manuals for various waterbody types. In 2000, EPA published guidance manuals for lakes and reservoirs and for rivers and streams. These documents are available from EPA's nutrient website: <http://www.epa.gov/ost/standards/nutrient.html>. EPA is currently developing guidance manuals for estuarine and coastal waters and for wetlands.

In addition to developing this waterbody-type specific guidance, EPA is working to publish specific nutrient water quality criteria recommendations under section 304(a) for every type of waterbody, *i.e.*, lakes and reservoirs, rivers and streams, wetlands and estuaries and coastal waters (where applicable) for all of the 14 nutrient ecoregions that EPA has identified in the continental United States. Today's notice announces the availability of Ecoregional Nutrient Criteria Documents for lakes and reservoirs in a set of eight ecoregions, for rivers and

streams in a set of eight ecoregions (several of which overlap with the set of eight ecoregions for lakes and reservoirs), and for wetlands in one ecoregion. These ecoregions were chosen based on the availability of nutrient data within each ecoregion. Following development of technical guidance manuals for estuarine and coastal waters and wetlands (in general), EPA intends to publish water quality criteria for these waters on an appropriate regional basis.

EPA expects States and authorized Tribes to use the technical guidance manuals, together with today's recommended water quality criteria and the national nutrient database, to develop State and Tribal quantified water quality criteria for nutrients, to help identify water quality impairments, and to evaluate success in increasing the number of waterbodies across the U.S. which meet State and Tribal water quality standards.

#### **How Should States and Authorized Tribes Establish Nutrient Criteria in Their Water Quality Standards?**

EPA will work with States and authorized Tribes as they adopt water quality criteria for nutrients into their water quality standards. EPA recognizes that States and authorized Tribes have several options available to them. EPA recommends the following approaches, in order of preference:

(1) Wherever possible, develop nutrient criteria that fully reflect localized conditions and protect specific designated uses using the process described in EPA's Technical Guidance Manuals for nutrient criteria development. Such criteria may be expressed either as numeric criteria or as procedures to translate a State or Tribal narrative criterion into a quantified endpoint in State or Tribal water quality standards.

(2) Adopt EPA's section 304(a) water quality criteria for nutrients, either as numeric criteria or as procedures to translate a State or Tribal narrative nutrient criterion into a quantified endpoint.

(3) Develop nutrient criteria protective of designated uses using other scientifically defensible methods and appropriate water quality data.

The key parameters addressed in the Ecoregional Nutrient Criteria Documents are total phosphorus, total nitrogen, chlorophyll a, and turbidity (e.g., Secchi depth for lakes; turbidity for rivers and streams). These are the parameters which EPA considers important in nutrient assessment because the first two (nitrogen and phosphorus) are the main causal agents of enrichment, while the two response variables (chlorophyll a and turbidity) are early indicators of system overenrichment for most surface waters.

States and authorized Tribes are encouraged to develop additional criteria for additional parameters such as dissolved oxygen, algal biomass, and biological integrity indices. EPA believes that quantitative endpoints are needed for both causal and biological and physical response variables.

Based on the information available to the Agency at the time of publication, the values presented in these documents generally represent nutrient levels that protect against the adverse effects of nutrient overenrichment in aquatic environments. However, these recommended water quality criteria should be viewed as starting points that should be further refined. As set forth in each document, the elements that EPA expects States and authorized Tribes to consider in developing a nutrient criterion are:

- (1) Historical data and other information (published literature);
- (2) Current reference conditions;
- (3) Models to simulate physical and ecological processes or determine empirical relationships among causal (nutrients) and response (biological or physical conditions) variables; and
- (4) Evaluation of downstream effects.

EPA also expects States and authorized Tribes to make use of expert judgment when examining the information and establishing criteria.

#### **What Are Regional Technical Assistance Groups?**

To assist States and authorized Tribes in developing and refining their own nutrient criteria, and to provide multi-jurisdictional coordination and consistency in the criteria development process, EPA established Regional Technical Assistance Groups (RTAGs). RTAGs are a collection of EPA, State, Tribal representatives who are working together to employ the processes and approaches recommended in EPA's waterbody-specific technical guidance manuals (e.g., those EPA has already published for lakes and reservoirs, and rivers and streams) for the purpose of developing more refined nutrient criteria than those made available today. Criteria refinement can occur by grouping data or performing data analyses at smaller geographic scales than an ecoregion, such as a subecoregion, the State or Tribe level, or specific class of lakes or streams. Refinement can also occur through further consideration of other elements of criteria development, such as published literature or models.

EPA has used data and expertise provided by the RTAGs to date in the development of today's Ecoregional Nutrient Criteria Documents. EPA

strongly encourages States and authorized Tribes to fully participate in their respective RTAG, and use this opportunity to pool expertise and resources at the State, Tribal, and federal level. In addition to the criteria development role, the RTAGs also function to facilitate dialogue among stakeholders through public meetings and technical meetings.

#### **How and When Does EPA Expect States and Authorized Tribes to Adopt Nutrient Criteria Into Their Water Quality Standards?**

EPA emphasizes that, in the course of carrying out its responsibilities under section 303(c) of the Clean Water Act, it reviews State and authorized Tribal water quality standards to assess the need for new or revised water quality criteria. The Agency views the criteria adoption process as a two phased approach. The first phase includes the development of a plan which outlines the process for adopting criteria. This plan should address items such as the criteria development process, staffing of personnel who will undertake specific tasks, and setting the internal schedule to complete the adoption process within the State and Tribal triennial review or another process. The second phase of the adoption process is implementing the criteria adoption plan. This may involve collecting existing data, sampling to obtain new data, developing a supporting data base, analyzing data to determine reference conditions and predictive relationships among variables, establishing nutrient water quality criteria, and facilitating appropriate public participation in the process.

The Agency presents the following schedule for the adoption of nutrient criteria into water quality standards, which includes a recommended period of time for the formation of a plan for developing and adopting nutrient criteria, as well as a specific period of time during which we expect States and Tribes to adopt the nutrient criteria into their water quality standards:

(1) By the end of 2001, each State and authorized Tribe should complete a plan for developing and adopting nutrient criteria into State or Tribal water quality standards. The plan should describe how and when nutrient criteria will be adopted, either as part of a triennial review, or another process.

(2) By the end of 2004, States and authorized Tribes should adopt nutrient criteria (either numeric criteria or as procedures to translate a narrative nutrient criteria into a quantified endpoint) for the waterbody type and ecoregions associated with the section

304(a) water quality criteria that EPA publishes by the end of 2001. EPA intends to notify States and authorized Tribes by March 2001 which waterbody type and ecoregions EPA expects to address in section 304(a) criteria published by the end of 2001.

EPA recognizes that the ecoregions addressed in the section 304(a) water quality criteria for nutrients published by the end of 2001 may not represent complete coverage across all State and Tribal waters, may not overlap with important watershed boundaries, and may not reflect high priority waters. In developing their own criteria for specific waters, States and authorized Tribes have the flexibility to first address geographic areas and waterbody types other than those specified in the section 304(a) criteria published by the end of 2001, particularly if a State or authorized Tribe has efforts underway to develop criteria for those areas. However, EPA would continue to expect States and authorized Tribes to adopt nutrient criteria by 2004 for all waterbody types and ecoregions addressed in the section 304(a) criteria published by the end of 2001. The plan for developing and adopting nutrient criteria, completed by the end of 2001, should address these considerations.

(3) EPA intends to propose to promulgate nutrient water quality criteria, relying substantially on EPA's section 304(a) water quality criteria, by the end of 2004, where States and authorized Tribes have not substantially completed their adoption of such criteria according to the plan completed by the end of 2001, if the Administrator determines that such new or revised standards are necessary to meet the requirements of the Clean Water Act.

(4) As EPA issues additional section 304(a) nutrient criteria recommendations in 2002 and beyond, States and authorized Tribes should continue to adopt nutrient criteria for the remaining waterbody types and ecoregions. Such efforts should generally follow a schedule similar to the sequence in (1) through (3) above, with the years adjusted to reflect the date EPA issues each set of criteria.

Dated: December 29, 2000.

**J. Charles Fox,**

Assistant Administrator, Office of Water.  
[FR Doc. 01-569 Filed 1-8-01; 8:45 am]

**BILLING CODE 6560-50-U**

## ENVIRONMENTAL PROTECTION AGENCY

[FRL-6930-7]

### Estuarine and Coastal Marine Waters: Bioassessment and Biocriteria Technical Guidance Document; Notice of Availability

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of availability.

**SUMMARY:** EPA is announcing the availability of the *Estuarine and Coastal Marine Waters: Bioassessment and Biocriteria Technical Guidance* document developed and published pursuant to section 304(a)(8) of the Clean Water Act (CWA). This technical guidance document helps fulfill CWA section 101(a) which states, in summary, "The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

To help protect the biological integrity of the Nation's waters, this technical guidance provides an extensive collection of methods and protocols for conducting bioassessments in estuarine and coastal marine waters and the procedures for deriving biocriteria from the results. Case studies illustrate the bioassessment process and biocriteria derivation procedures. The document outlines physical classification of estuaries and coastal marine waters, and discusses sampling methods and candidate metrics for four core groups of biological indicator assemblages: benthic macroinvertebrates, fish, aquatic macrophytes, and phytoplankton. Three sampling tiers are developed, increasing in sampling effort, precision, and diagnostic ability. Alternative data analysis methods are introduced for biological index development, and the document ends with eight case studies illustrating the implementation of the methods.

Many natural resource agencies throughout the United States are using bioassessments and biocriteria for small rivers and streams and some States are beginning work in lakes and reservoirs. EPA issued guidance documents for these water bodies in 1996 and 1998, respectively (*Biological Criteria: Technical Guidance for Streams and Small Rivers* (EPA-822-B-96-001) and *Lake and Reservoir Bioassessment and Biocriteria Technical Guidance Document* (EPA 841-B-98-007)).

With the use of this guidance State/Tribal and Federal water resource managers will be able to better protect and restore the biological integrity of

coastal and estuarine resources. This guidance is not a regulation and does not impose legally-binding requirements on EPA, States, Territories, Tribes, or the public.

**Availability of Documents:** The guidance is published with the following title and EPA document number; *Estuarine and Coastal Marine Waters: Bioassessment and Biocriteria Technical Guidance*, (EPA 822-B-00-024), dated December 2000. The document and a summary Fact Sheet are available on the EPA website at [www.epa.gov/ost/biocriteria/](http://www.epa.gov/ost/biocriteria/). Paper copies can be obtained from the U.S. EPA, Water Resource Center by phone at: (202) 260-7786, or by sending an e-mail to the Center at [center.water-resource@epa.gov](mailto:center.water-resource@epa.gov), or through conventional mail by sending a letter of request to U.S. EPA Water Resource Center, Ariel Rios Building, 1200 Pennsylvania Ave., Washington, DC 20460.

**FOR FURTHER INFORMATION CONTACT:** William Swietlik at (202) 260-9569 or by e-mail at [swietlik.william@epa.gov](mailto:swietlik.william@epa.gov) or Laura Gabanski at (202) 260-5868 or by e-mail at [gabanski.laura@epa.gov](mailto:gabanski.laura@epa.gov).

Dated: December 22, 2000.

**Geoffrey H. Grubbs,**

Director, Office of Science and Technology.  
[FR Doc. 01-573 Filed 1-8-01; 8:45 am]

**BILLING CODE 6560-50-P**

## ENVIRONMENTAL PROTECTION AGENCY

[FRL-6931-6]

### Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-1999

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of document availability and request for comments.

**SUMMARY:** The Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-1999 is available for public review and comment. Annual U.S. emissions for the period of time from 1990-1999 are summarized and presented by source category and sector. The inventory contains estimates of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>) emissions. The inventory also includes updated estimates of carbon sequestration in U.S. forests and soils. The technical approach used in this report to estimate greenhouse gas emissions from sources and removals by sinks is consistent with the methodologies recommended by the