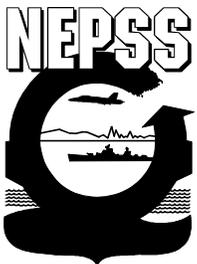




# Marine Environmental Update



## EPA Releases Nutrient Criteria Technical Guidance Manual for Estuarine and Coastal Marine Waters

On October 10, 2001, the Environmental Protection Agency announced the release of its national nutrient guidance manual for estuarine and coastal waters. This document provides State and Tribal water quality managers and others with guidance on how to develop numeric nutrient criteria for estuaries and coastal marine waters. This document does not contain site-specific numeric nutrient criteria for any estuary or coastal marine water. The manual was principally developed to assist States and authorized Tribes in their efforts to establish nutrient criteria. While the document contains the EPA's scientific recommendations regarding defensible approaches for developing regional nutrient criteria, the guidance is not regulation; therefore it does not impose legally binding requirements on the EPA, States, Territories, Tribes, or the public, and might not apply to a particular situation based upon the circumstances. States, Territories, and authorized Tribes retain the discretion to adopt, where appropriate, other scientifically defensible approaches to developing regional or local nutrient criteria that differ from these recommendations.

The key parameters addressed in the guidance are total phosphorus, total nitrogen, algal biomass, and a measure of water clarity, such as Secchi depth. The EPA encourages

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States and authorized Tribes to include additional response variables which they consider necessary to protect water quality. These variables may include, but are not limited to, dissolved oxygen, submerged aquatic vegetation, and macrobenthos. As set forth in the manual, the elements that the EPA expects States and authorized Tribes to consider in developing a nutrient criterion are:

1. Historical data and other information to establish perspective;
2. Current and/or historical reference site information;
3. Models used to simulate or validate the empirical relationships established between causal (nutrients) and response (biological indicators) variables; and
4. Evaluation of downstream consequences before finalizing criteria values.

The EPA expects the criteria development and implementation process (undertaken by the EPA, the Regional Technical Assistance Groups [RTAGs] and others) to proceed as follows:

- Data acquisition and review, as well as additional data gathering and processing methods.
- Classification of the estuarine and coastal waters by physical characteristics.
- Reference site selection and data reduction to identify current or historical reference conditions.
- Development of defensible nutrient criteria, verified by an RTAG and evaluated for potential downstream effects.
- Adoption of nutrient criteria by States and authorized Tribes into their water quality standards, ideally taking into account the reference condition data and designated uses.
- Implementation of EPA-approved nutrient criteria by the EPA, States, and authorized Tribes to identify areas of water quality impairment due to nutrients and to respond appropriately.

The manual concludes with chapters describing data models and management options that actively protect or restore estuarine and coastal marine waters. Case histories illustrating nutrient criteria development experiences are appended with the names of individual specialists to contact for more information.

The technical guidance manual is available at <http://www.epa.gov/ost/standards/nutrients/marine/>. For further information contact Dr. David Flemer, U.S. EPA, Health and Ecological Criteria Division (4304), Office of Science and Technology, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone: (202) 260-0619; facsimile: (202) 260-1036; e-mail: [flemer.david@epa.gov](mailto:flemer.david@epa.gov).

*Federal Register*, Volume 66, Number 196, Wednesday, October 10, 2001, pp. 51665-51667 (11.5 KB [text only](#), or 43.2 KB [Adobe™ Acrobat™ file](#)).

U.S. EPA Office of Water and Office of Science and Technology. *Nutrient Criteria Technical Guidance Manual: Estuarine and Coastal Waters, First Edition. EPA-822-B-01-003, October, 2001.*



## EPA Guidance Memo on Development and Adoption of Nutrient Criteria into Water Quality Standards

On November 14, 2001, the Environmental Protection Agency released a memorandum providing additional guidance to States and authorized Tribes on developing nutrient criteria plans, the role of these plans in the adoption of nutrient criteria, the flexibility available, and the EPA's expectations for the timeframes both to develop a plan and to adopt nutrient criteria into their water quality standards.

### **Nutrient Criteria Plans**

The EPA requests each State and authorized Tribe to develop a nutrient criteria plan to outline the specific strategy, milestones and schedule for developing and adopting nutrient criteria, taking into consideration specific situations, needs and processes. The EPA expects the plans to be refined iteratively as States and authorized Tribes discuss their plans with the EPA. The final plan should reflect a mutually agreed upon approach and schedule. The EPA also expects that the specifics of the plan may change with time as some steps may take longer or shorter than originally anticipated, and as new information is considered. In these plans, the EPA expects States and authorized Tribes to describe a systematic approach, with associated milestones and a preliminary schedule, to assess the sensitivity of State/Tribal waters to over-enrichment and the need for nutrient criteria to protect designated uses.

States and authorized Tribes should further describe their strategy for deriving quantitative endpoints, either as numeric water quality criteria or as detailed mechanisms for translating a narrative criterion into numeric values on a case-by-case basis. States and authorized Tribes should also identify the data required to develop the quantitative endpoints, describe how they will evaluate existing data, identify any data gaps, and specify how the data gaps will be filled. In addition to addressing freshwater lakes, reservoirs, rivers and streams, the EPA encourages States and authorized Tribes to discuss in their nutrient criteria plans, strategies to protect estuaries and/or wetlands from nutrient over-enrichment. The EPA is continuing to work on wetland criteria guidance and expects criteria for wetlands to be included in States' and authorized Tribes' water quality standards once the guidance is developed.

### **Relating Nutrient Criteria to Use Classifications**

There are two general ways of relating nutrient criteria to use classifications. The first is to rely on the selection of appropriate reference conditions that represent a level of water quality at which there are no known impairments of a use due to nutrient over-enrichment. The EPA's Section 304(a) criteria recommendations attempt to characterize reference conditions on a broad ecoregion or sub-ecoregion scale irrespective of designated uses (*i.e.*, drinking water, aquatic life) or levels of refinement within the same type of designated use (*i.e.*, warmwater fishery, coldwater fishery). The EPA considers these Section 304(a) criteria recommendations to be protective against the adverse effects of excessive nutrient enrichment in these ecoregions for all assigned designated uses, in the absence of information to the contrary. However, the EPA encourages States and authorized Tribes to consider the designated use of waters when grouping and prioritizing waters for criteria development and characterization of reference conditions.





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The second way to relate nutrient criteria to use classifications is to construct quantitative relationships among nutrient criteria parameters, such as total nitrogen and total phosphorus, and parameters that are more directly related to or descriptive of the particular designated use. The EPA's technical guidance manuals for nutrient criteria development for specific waterbody types contain much information of this sort from specific studies and other data analyses (see *Marine Environmental Update*, [Vol. FY01, No. 2](#), [Vol. FY98, No. 4](#)).

### **Flexibility**

The criteria setting process and water quality standards regulations allow states to:

1. Develop their own criteria which reflect more locally representative conditions;
2. Use different techniques to develop criteria as long as they are protective of designated uses and scientifically defensible; and
3. Conduct use attainability studies and refine their use designations.

The EPA recognizes that States and authorized Tribes may have their own specific priorities for nutrient criteria development. Therefore, States/authorized Tribes have the flexibility to prioritize their waters in a way other than strictly by the ecoregions for which EPA has provided criteria recommendations. If a State/Tribe focuses first on threatened or impaired waters, they should also address how they will ensure continued protection of waters that are not currently impaired or threatened by nutrient over-enrichment, but may be subject to increased nutrient loading or have not had time to show the effects of current nutrient loading.

States and authorized Tribes should also consider the development of antidegradation review procedures to address new/expanded discharges of nutrients to high quality waters where numeric criteria have not yet been established. If a State/Tribe determines that there is a subset of waters for which they believe nutrient criteria are not needed (*e.g.*, water quality and designated uses are not affected by nutrients now and unlikely to be affected by nutrients in the future), they should provide a rationale for excluding these waters.

The EPA's recommended parameters for nutrient assessment are total phosphorus, total nitrogen, chlorophyll-a, and some measure of water clarity (*e.g.*, Secchi depth or photometer for lakes and reservoirs, and turbidity for rivers and streams). Nitrogen and phosphorus are the main causal agents of enrichment, while the two response variables, chlorophyll-a and water clarity, are early indicators of system over-enrichment for most waters. If a State or authorized Tribe shows that one causal variable (nitrogen or phosphorus) is the limiting nutrient, the State/Tribe should develop criteria for at least the limiting nutrient. If the non-limiting nutrient is likely contributing to a downstream impairment, source reduction strategies should be implemented in advance of developing quantified limits where specific downstream criteria are not yet adopted.

If a State or authorized Tribe wishes to develop nutrient criteria at a large ecoregion level, then the EPA recommends a comprehensive approach where total nitrogen, total phosphorus, chlorophyll-a and a measure of water clarity are appropriate variables. At a sub-ecoregion or site-specific level of





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classification, the EPA recognizes that more flexibility is appropriate. States and authorized Tribes may also elect to combine causal and response variable information into a single index value of nutrient over-enrichment.

States and authorized Tribes also have the flexibility to adopt numeric criteria to protect designated uses or to adopt methods and procedures that translate narrative criteria to protect designated uses. This procedure could be a mathematical loading/response model that is referenced in the state or tribal water quality standards as a “translator” of narrative criteria for water quality parameters that are not otherwise easily related to a pollutant source.

### ***Expected Time Frames***

By the end of 2004, the EPA will evaluate the progress of the State or authorized Tribe and determine how it compares to the agreed upon schedule in the nutrient criteria plan:

- If the State/authorized Tribe has developed a plan and met the mutually agreed upon milestones by the end of 2004, the EPA would likely conclude that the State/Tribe is making substantial progress, according to their plan, towards adopting nutrient criteria and that a promulgation would not be necessary, at that time, to meet the requirements of the Clean Water Act.
- If the State/authorized Tribe has not met the milestone/schedule laid out in the plan by the end of 2004, the EPA would evaluate whether a federal promulgation would be appropriate.
- If the State/Tribe has not developed a plan, the EPA expects the State/Tribe to have begun the administrative process to adopt nutrient criteria into its water quality standards by the end of 2004. If not, the EPA would evaluate whether a federal promulgation would be appropriate.

The complete text of the memorandum is [available from MESO](#) (976 KB Adobe™ Acrobat™ file), or at <http://www.epa.gov/waterscience/criteria/nutrientSWGsmemo.pdf>.



## **EPA Revises Effective Date of TMDL and NPDES Regulations**

On October 18, 2001 the Environmental Protection Agency established April 30, 2003, as the effective date of the revisions to the EPA’s Total Maximum Daily Load (TMDL) and National Pollutant Discharge Elimination System Program (NPDES) regulations (see *Marine Environmental Update*, [Vol. FY00, No. 4](#); [Vol. FY00, No. 3](#)). The EPA also amended 40 CFR 130.7(d)(1) to revise the date on which States are required to submit the next list of impaired waters from April 1, 2002 to October 1, 2002. This new date will provide States who wish to do so the time to incorporate some or all of the recommendations suggested by the EPA in a guidance entitled *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* (see next article).

The EPA stated that the delay of the effective date is the minimum necessary for the EPA to be able to conduct a meaningful consultation with the public, analyze recommendations of various stakeholders, reconcile concerns about the scope, complexity, and cost of the TMDL program, and structure a flexible





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yet effective solution to meet Clean Water Act goals of restoring the nation's impaired waters. During this delay, the program will continue to operate under the 1985 TMDL regulations, as amended in 1992 at 40 CFR Part 130; and the EPA and the States and Territories will continue to develop TMDLs to work towards cleaning up the nation's waters and meeting water quality standards. The EPA is aware that some States are well underway in their development of a 2002 Section 303(d) list which they intended to submit on April 1, 2002. The EPA will review and approve or disapprove a State list within 30 days as required by the CWA regardless of when it is submitted.

Further information may be found at <http://www.epa.gov/owow/tmdl/defer/isigned.html>.

*Federal Register, Volume 66, Number 202, Thursday, October 18, 2001, pp. 53044-53048 (36.0 KB [text only](#), or 105 KB [Adobe™ Acrobat™ file](#)).*



## Integrated Water Quality Monitoring and Assessment Report Guidance Released by EPA

On November 19, 2001, the Environmental Protection Agency released a guidance for States, Territories, and authorized Tribes on integrating the development and submission of 2002 Section 305(b) water quality reports and Section 303(d) lists of impaired waters. This guidance recommends that States, Territories, and authorized Tribes submit a 2002 Integrated Water Quality Monitoring and Assessment Report (hereinafter referred to as the Integrated Report) that will satisfy CWA requirements for both Section 305(b) water quality reports and Section 303(d) lists. This Integrated Report will show the following information:

- Delineation of water quality assessment units (AUs) based on the National Hydrography Dataset (NHD);
- Status of and progress toward achieving comprehensive assessments of all waters;
- Water quality standard attainment status for every AU;
- Basis for the water quality standard attainment determinations for every AU;
- Additional monitoring that may be needed to determine water quality standard attainment status and, if necessary, to support development of TMDLs for each pollutant/AU combination;
- Schedules for additional monitoring planned for AUs;
- Pollutant/AU combinations still requiring TMDLs; and
- TMDL development schedules reflecting the priority ranking of each pollutant/AU combination.

The Integrated Report will enhance the ability of water quality managers to display, access, and integrate environmental data and information from all components of the water quality program (e.g., water quality standards, National Pollutant Discharge Elimination System (NPDES) permits, TMDLs, nonpoint source controls, and monitoring), as well as other media programs such as Superfund, Resource Conservation and Recovery Act (RCRA), and the Clean Air Act programs. This approach will help managers justify,





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on a watershed basis, resource allocations and future resource requirements. This approach will also allow water quality managers to focus TMDL resources on those waters that are actually impaired by pollutants. The EPA also anticipates that the development of an Integrated Report will benefit the public by providing a much clearer summary of the water quality status of the nation's waters and the management actions necessary to protect and restore them.

A State or Territory should provide the public an opportunity to review and comment on an integrated assessment of the status of all waters within its jurisdiction. This integrated assessment will include monitoring schedules, the assessment and listing methodology, and supporting data and information used to develop the Integrated Report.

This guidance updates previous guidance and, to the extent it is different, supercedes previous guidance. The statutory provisions in Sections 303(d) and 305(b) and EPA regulations described in this document contain legally binding requirements. This document does not substitute for those statutory provisions or regulations, nor is it a regulation itself. Thus, it does not impose legally binding requirements on the EPA, States, or Territories and may not apply to a particular situation based upon the circumstances. The EPA, State, and Territorial decision makers have the discretion to adopt approaches on a case-by-case basis that differ from this guidance where appropriate. The EPA may revise this guidance in the future, as appropriate.

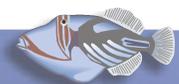
On October 18, 2001, the EPA extended the date for submission of 2002 lists of impaired waters by six (6) months (see previous article) to allow States, Territories and authorized Tribes time to incorporate some or all of the recommendations suggested.

The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* is [available from MESO](#) (140 KB Adobe™ Acrobat™ file) or at <http://www.epa.gov/owow/tmdl/2002wqma.pdf>.



## EPA Revises List of Impaired Waters in Hawaii

On November 19, 2001, Environmental Protection Agency Region IX announced results of a review of Hawaii's 1998 list of polluted waters, which concluded that 30 coastal waters and 81 streams show evidence of impairment by pollutants including sediments, nutrients, bacteria and trash. A court order issued by U.S. District Court Judge David Ezra on September 5, 2001, mandated the EPA's review of Hawaii's 1998 list of polluted waters. The EPA based the revised list on water quality data collected from 1993 to 1998 and on-site visits to nearly 100 water bodies in 1996-97. Most of the apparently polluted waters are streams in urban and agricultural areas, coastal bays and estuaries, and harbors. The list includes 58 Oahu waters, 15 on Maui, 20 on Hawaii, 2 on Molokai, and 16 on Kauai. In addition to previously recognized pollution problems in water bodies such as the Ala Wai Canal, Honolulu Harbor, and Pearl Harbor, the list includes Hanauma Bay, Kuhio Beach, and other swimming beaches.





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The EPA is seeking public comment on this revised list of polluted water bodies. Comments on the list of impaired waters should be directed to David Smith, TMDL Team Leader, EPA Region IX, WTR-2, 75 Hawthorne St., San Francisco, CA 94105.

The revised list of polluted water bodies is [available from MESO](#) (536 KB Adobe™ Acrobat™ file) or may be found on the EPA's website at: <http://www.epa.gov/region09/water/tmdl/303d.html>.

*EPA Press Release, Monday, November 19, 2001, EPA ISSUES REVISED LIST OF POLLUTED WATERS IN HAWAII (3.73 KB [text file](#)).*

*EPA Region IX letter to Hawaii Department of Health, dated November 15, 2001.*



## CA RWQCB Drafts Recommended Update to 303(d) List for San Diego Region

On October 23, 2001, the California Regional Water Quality Control Board, San Diego Region (SDRWQCB), announced the posting of draft recommendations of changes and updates to the Clean Water Act Section 303(d) list of impaired waters. The Section 303(d) list of impaired waters is to be updated every two years and submitted to the Environmental Protection Agency for approval. This report contains the draft 2002 update to the list of impaired waters and the listing methodologies for the SDRWQCB. The current Section 303(d) list of impaired waterbodies was developed in 1998. The San Diego Region is listed for 36 waterbodies and 19 different types of pollutants. In total, there are 69 distinct combinations of waterbodies/pollutants in the San Diego Region.

The SDRWQCB staff evaluated 56 unique sets of data and information received from public solicitation, other governmental agencies and from sources within the SDRWQCB. Analysis was limited to data for the period of July 1997 to May 15, 2001. In making listing decisions, the staff utilized general guidelines developed in 1998 for the Section 303(d) listing in California. In general, a weight of evidence approach was utilized to support each listing. Waterbodies and pollutants were only listed if conclusive evidence existed to show violation of the applicable water quality objectives. The current draft list update recommends the addition of 19 new waterbodies and 13 new pollutants. The addition of 4 new pollutants to previously listed waterbodies and the change in the extent of impairment for 19 previously listed waterbodies is also recommended. Combining the 1998 and draft 2002 list produces 53 listed waterbodies with 32 unique pollutants for a total of 115 combinations of waterbody/pollutant. No de-listings are recommended.

The California State Water Resources Control Board (SWRCB) is planning to address public comments and conduct a public workshop(s) shortly. The SWRCB is planning to conduct a formal hearing(s) in early 2002 to consider adopting the single statewide Clean Water Act Section 303(d) list of impaired waters. The adopted list will be submitted to EPA in the form of the State's biennial report on water





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quality. Questions or concerns can be directed to Mr. Jimmy Smith of the SDRWQCB; telephone (858) 467-2732; e-mail: [303dlist@rb9.swrcb.ca.gov](mailto:303dlist@rb9.swrcb.ca.gov).

The draft report is available at: <http://www.swrcb.ca.gov/rwqcb9/Programs/TMDL/303d/303d.html>.

*Smith, J.G. and C.M. Arias. Draft Clean Water Act Section 303(d) List of Impaired Waters 2002 Update-Staff Report. California Regional Water Quality Control Board San Diego Region, October, 2001.*



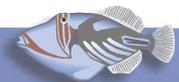
## EPA Issues Proposed WET Test Procedures Rule

On September 28, 2001, the Environmental Protection Agency proposed to ratify its approval of several analytic test procedures measuring “whole effluent toxicity” (WET), which the Agency standardized in an earlier rulemaking. The proposal also would modify some of those test procedures. Proposal of the revisions partially fulfills the requirements of two settlement agreements between stakeholders and EPA (*Edison Electric Institute, et al. v. EPA, No. 96-1062 & consolidated case (D.C. Cir.), Settlement Agreement, July 24, 1998*; and *Lone Star Steel v. EPA, No. 96-1157 (D.C. Cir.), Settlement Agreement, March 4, 1998*). The proposed changes are intended to improve the performance of whole effluent toxicity tests, and increase confidence in the reliability of the results obtained using the test procedures.

The proposed revisions include changes to the three method manuals incorporated by reference in the WET rule (60 FR 53529, October 16, 1995) and amend the “Guidelines Establishing Test Procedures for the Analysis of Pollutants” (40 CFR part 136) to reference the updated editions of the method manuals. Modifications to the method manuals are intended to update the methods, provide additional minor corrections and clarifications, and address specific stakeholder concerns. The EPA proposes to update the methods (1) by incorporating previous method addenda and errata and (2) by revising method precision statements to reflect results from recent EPA studies. In addition to corrections identified in previous method addenda and errata, the EPA proposes to correct other minor technical errors and omissions. The EPA is also seeks comment on an additional modification to WET test methods that would require the application of upper and lower bounds on the percent minimum significant difference (PMSD) calculated in WET tests.

The EPA also proposed method revisions in response to specific stakeholder concerns. Specifically, these revisions include: requiring “blocking” by known parentage in the *Ceriodaphnia dubia* Survival and Reproduction Test; adding procedures to control pH drift that may occur during testing; incorporating review procedures for the evaluation of concentration-response relationships; clarifying allowable nominal error rate adjustments; clarifying limitations in the generation of confidence intervals; adding guidance on dilution series selection; clarifying dilution water acceptability; and adding procedures for determining and minimizing the impact of pathogens in the Fathead Minnow Survival and Growth Test.

Comments on this proposal must be postmarked, delivered by hand, or electronically mailed on or before January 11, 2002. For regulatory information regarding this proposal, contact Marion Kelly, Engineering





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and Analysis Division (4303), Office of Science and Technology, Office of Water, U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; telephone: (202) 260-7117; e-mail: [kelly.marion@epa.gov](mailto:kelly.marion@epa.gov). For technical information regarding method changes proposed, contact Teresa J. Norberg-King, National Health and Environmental Effects Research Laboratory, Mid-Continent Ecology Division, Office of Research and Development, U.S. EPA, 6201 Congdon Boulevard, Duluth, MN 55804; telephone: (218) 529-5163; e-mail: [norberg-king.teresa@epa.gov](mailto:norberg-king.teresa@epa.gov).

Further information may be found at: <http://www.epa.gov/waterscience/WET/>.

*Federal Register, Volume 66, Number 189, Friday, September 28, 2001, pp. 49793-49816* (158 KB [text only](#), or 187 KB [Adobe™ Acrobat™ file](#)).

*Federal Register, Volume 66, Number 226, Friday, November 23, 2001, pp. 58693-58695.*



## Comment Period on Draft Aquatic Life Criteria for Atrazine Extended

On September 26, 2001, the EPA published a notice of availability for a draft aquatic life criteria document for atrazine (see *Marine Environmental Update Bulletin*, [September 27, 2001](#)). In response to an official request, the EPA is extending the comment period on the draft aquatic life criteria document until January 25, 2002. All significant scientific information submissions are requested to be submitted by January 25, 2002. For further information see <http://www.epa.gov/ost/criteria/atrazine/atrazref.html>, or contact: Frank Gostomski, Health and Ecological Criteria Division (4304), U.S. EPA, 1200 Pennsylvania Avenue NW., Washington, DC 20460; (202) 260-1321; e-mail: [gostomski.frank@epa.gov](mailto:gostomski.frank@epa.gov).

*Federal Register, Volume 66, Number 232, Monday, December 3, 2001, pp. 60211-60212* (9.93 KB [text only](#) or 37.3 KB [Adobe™ Acrobat™ file](#)).



## EPA Issues Cooling Water Intake Structure Regulations for New Facilities

On December 18, 2001, the Environmental Protection Agency issued a final rule implementing Section 316(b) of the Clean Water Act for new facilities that use water withdrawn from rivers, streams, lakes, reservoirs, estuaries, oceans or other waters of the United States for cooling purposes. The final rule establishes national technology-based performance requirements applicable to the location, design, construction, and capacity of cooling water intake structures at new facilities. New facilities subject to this regulation include those that have a design intake flow of greater than two (2) million gallons per day (MGD) and that use at least twenty-five (25) percent of water withdrawn for cooling purposes.





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The national requirements establish the best technology available based on a two-track approach. Based on size, Track I establishes national intake capacity and velocity requirements as well as location- and capacity-based requirements to reduce intake flow below certain proportions of certain waterbodies (referred to as “proportional-flow requirements”). It also requires the permit applicant to select and implement design and construction technologies under certain conditions to minimize impingement mortality and entrainment. Track II allows permit applicants to conduct site-specific studies to demonstrate to the Director that alternatives to the Track I requirements will reduce impingement mortality and entrainment for all life stages of fish and shellfish to a level of reduction comparable to the level the facility would achieve at the cooling water intake structure if it met the Track I requirements.

This regulation becomes effective on January 17, 2002. For additional technical information contact Deborah G. Nagle at (202) 260-2656. For additional biological information contact Debbi Hart at (202) 260-0905. For additional economic information contact Ghulam Ali at (202) 260-9886. The e-mail address for the above contacts is [rule.316b@epa.gov](mailto:rule.316b@epa.gov). The complete text of this final rule is available from MESO (173 KB [text only](#), or 775 KB [Adobe™ Acrobat™ file](#)).

*Federal Register, Volume 66, Number 243, Tuesday, December 18, 2001, pp. 65255-65345.*



## USCG Issues Final National Invasive Species Act Implementation Rule

On November 21, 2001, the U.S. Coast Guard issued a final rule on the implementation of the National Invasive Species Act of 1996. This rule finalizes regulations for the Great Lakes ecosystem and voluntary ballast water management guidelines for all other waters of the United States, including mandatory reporting for nearly all vessels entering waters of the United States, originally published on May 17, 1999 (64 FR 26672).

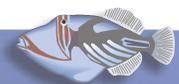
Comments and material received from the public, as well as all documents mentioned in the rule announcement are available as part of docket USCG-1998-3423; which can be found on the internet at <http://dms.dot.gov/>. This final rule is effective December 21, 2001.

*Federal Register, Volume 66, Number 225, Wednesday, November 21, 2001, pp. 58381-58393 (74.3 KB [text only](#), or 219 KB [Adobe™ Acrobat™ file](#)).*



## FWS Designates Critical Habitat for Oahu `Elepaio

On December 10, 2001 the U.S. Fish & Wildlife Service designated critical habitat for the Oahu `Elepaio (*Chasiempis sandwichensis ibids*). The Oahu `elepaio is a forest bird found only on the island of Oahu and is listed as endangered under the ESA. The critical habitat consists of five units whose boundaries





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encompass a total area of approximately 26,661 hectares (ha) (65,879 acres (ac)) in the Koolau and Waianae mountains on the island of Oahu, Hawaii. Critical habitat identifies specific areas that are essential to the conservation of a listed species and that may require special management considerations or protection.

Activities that may affect the species include but are not limited to:

- Regulation of activities affecting waters of the United States by the Army Corps of Engineers under Section 404 of the Clean Water Act;
- Regulation of water flows, damming, diversion, and channelization by Federal agencies;
- Development on private or State lands requiring permits from other Federal agencies, such as the Department of Housing and Urban Development;
- Military training or similar activities of the U.S. Department of Defense (Army and Navy) on their lands or lands under their jurisdiction at Schofield Barracks, Makua Military Reservation, Fort Shafter, Kawaihoa Training Area, and Pearl Harbor Naval Magazine Lualualei Branch;
- Construction of communication sites licensed by the Federal Communications Commission;
- Road construction and maintenance, right-of-way designation, and regulation of agricultural activities by Federal agencies;
- Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency; and
- Activities not previously mentioned that are funded or authorized by the U.S. Department of Agriculture (Forest Service, Natural Resources Conservation Service), Department of Defense, Department of Transportation, Department of Energy, Department of the Interior (U.S. Fish and Wildlife Service, U.S. Geological Survey, National Park Service), Department of Commerce (National Oceanic and Atmospheric Administration), Environmental Protection Agency, or any other Federal agency.

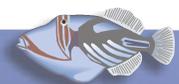
This rule is effective January 9, 2002. For further information, contact Marilet A. Zablan, Vertebrate Conservation Coordinator, or Eric VanderWerf, Biologist, Pacific Islands Fish and Wildlife Office, U.S. FWS, 300 Ala Moana Boulevard, Room 3-122, Box 50088, Honolulu, Hawaii 96850; telephone: (808) 541-3441; facsimile: (808) 541-3470.

*Federal Register, Volume 66, Number 237, Monday, December 10, 2001, pp. 63751-63776 (166 KB [text only](#), or 1.75 MB [Adobe™ Acrobat™ file](#)).*



## FWS Updates List of Candidates for Endangered Species Act Listing

On October 30, 2001, the U.S. Fish and Wildlife Service published a revised Candidate Notice of Review naming 252 species of plants and animals that may warrant protection under the Endangered Species Act,





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including 26 new candidate species. In addition, the Notice includes the 35 domestic animal and plant species that are currently proposed for addition to the list of endangered and threatened wildlife and plants. Additions to the List of Candidate Species Under the Endangered Species Act include:

### **Mammals**

- Island fox (*Urocyon littoralis*) – San Miguel, Santa Rosa, Santa Cruz, and Santa Catalina Islands of California.
- Mazama pocket gopher (*Thomomys mazama*) – Western Washington.
- Southern Idaho ground squirrel (*Spermophilus brunneus endemicus*) – Southern Idaho.

### **Birds**

- Yellow-billed cuckoo, western continental United States distinct population segment (*Coccyzus americanus*) – Arizona, California, Colorado, North Dakota, Montana, New Mexico, Nevada, Oregon, Texas, Utah, Washington, Wyoming.
- Streaked horned lark (*Eremophila alpestris strigata*) – Oregon and Washington.
- Western sage grouse, Washington distinct population segment (*Centrocercus urophasianus phaios*) – Central Washington.

### **Reptiles**

- Sand dune lizard (*Sceloporus arenicolus*) – New Mexico and Texas.

### **Amphibians**

- Georgetown salamander (*Eurycea naufragia*) – Texas.
- Ozark hellbender (*Cryptobranchus alleganiensis bishopi*) – Arkansas and Missouri.

### **Fish**

- Yellowcheek darter (*Etheostoma moorei*) – Arkansas.
- Zuni bluehead sucker (*Catostomus discobolus yarrowi*) – Arizona and New Mexico.

### **Clams**

- Neosho mucket (*Lampsilis rafinesqueana*) – Arkansas, Kansas, Missouri, and Oklahoma.
- Texas hornshell (*Popenaias popei*) – New Mexico, Texas, and Mexico.

### **Snails**

- Phantom Cave snail (*Cochliopa texana*) and Phantom springsnail (*Tryonia cheatumi*) – Texas

### **Insects**

- Nine cave beetles (*Pseudanophthalmus caecus*, *P. cataryctos*, *P. frigidus*, *P. inexpectatus*, *P. inquistor*, *P. major*, *P. pholeter*, *P. parvus*, and *P. troglodytes*) – Kentucky and Tennessee.
- Whulge checkerspot butterfly (*Euphydryas editha taylori*) – British Columbia, Washington, and Oregon.





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### **Ferns and Allies**

- Slender moonwort (*Botrychium lineare*) – Colorado, Oregon, Montana, and Washington.

Further information can be found at: <http://endangered.fws.gov/candidates/index.html>.

*Federal Register*, Volume 66, Number 210, Tuesday, October 30, 2001, pp. 54808-54832 (192 KB [text only](#) or 204 KB [Adobe™ Acrobat™ file](#)).



## **National Management Measures to Protect and Restore Wetlands and Riparian Areas for NPS Pollution Abatement**

On November 6, 2001, the Environmental Protection Agency released the *National Management Measures to Protect and Restore Wetlands and Riparian Areas for the Abatement of Nonpoint Source Pollution* for comments. This guidance is intended to provide technical assistance to state program managers and others on the best available, economically achievable means of protecting and restoring wetlands and riparian areas from nonpoint source pollution. Additionally, this guidance is intended to provide technical assistance for state program managers on the use of vegetated treatment systems to control nonpoint source pollution. The guidance provides background information about nonpoint source pollution, including where it comes from and how it enters the Nation's waters. It also presents many examples of how to protect and restore the many functions of wetlands and riparian areas from the impacts of nonpoint source pollution.

In addition to soliciting comments on the draft guidance, the EPA is also requesting additional information and supporting data on the measures specified in the guidance and on additional measures that may be as effective or more effective to protect and restore wetlands and riparian areas for the abatement of nonpoint source pollution and the use of vegetated treatment systems. Written comments should be sent by close of business day on February 4, 2002. For further information contact Chris Solloway, Assessment and Watershed Protection Division (4503-F), U.S. EPA, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; telephone (202) 260-3008.

Further information may be found at: <http://www.epa.gov/owow/nps/wetmeasures/>.

*Federal Register*, Volume 66, Number 215, Tuesday, November 6, 2001, pp. 56106-56107 (9.05 KB [text only](#) or 37.7 KB [Adobe™ Acrobat™ file](#)).



## Proposed Revisions to EPA Method 1631 – Measurement of Mercury in Water

On October 9, 2001, the Environmental Protection Agency issued proposed modifications to EPA Method 1631, Revision C: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry (Method 1631C), which measures mercury in aqueous samples. The proposed modifications would require use of certain “clean techniques” and quality control requirements when using this test method. The proposed modifications are intended to improve performance of EPA Method 1631C by reducing opportunities for contamination during sample collection and analysis. In addition, the EPA is proposing revisions to this test method based on comments received from method users following method approval.

For further information, see <http://www.epa.gov/ost/methods/1631.html>, or contact Maria Gomez-Taylor, Ph.D.; Engineering and Analysis Division (4303); Office of Science and Technology; Office of Water; U.S. EPA; Ariel Rios Building; 1200 Pennsylvania Avenue, NW; Washington, DC 20460; telephone (202) 260-1639; e-mail: [gomez-taylor.maria@epa.gov](mailto:gomez-taylor.maria@epa.gov).

*Federal Register, Volume 66, Number 195, Tuesday, October 9, 2001, pp. 51518-51528 (79.8 KB [text only](#) or 136 KB [Adobe™ Acrobat™ file](#)).*



## EPA Sector Facility Indexing Project Database Access Available

The Environmental Protection Agency announced the Internet release of data on a subset of federal facilities in the Sector Facility Indexing Project (SFIP). The SFIP has compiled compliance and enforcement summaries, Toxic Release Inventory (TRI) pollutant release information, and other data elements for five industrial sectors, and a subset of major federal facilities. Facilities from these sectors are included if they operated at any time during the calendar year covered by the latest TRI Public Release data available in SFIP, currently 1998.

All data are accessible from this website to query on-line or download for analysis. The new federal facility subset includes all federal facilities which are considered to be major facilities under at least two of the three following statutes: the Clean Air Act, the Clean Water Act, and the Resource Conservation and Recovery Act. This new subset joins the approximately 625 facilities already profiled in SFIP. The database can be found at: <http://es.epa.gov/oeca/sfi>.

*Federal Register, Volume 66, Number 132, July 10, 2001, p. 35976 (4.62 KB [text only](#) or 32.7 KB [Adobe™ Acrobat™ file](#)).*





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