

SUPPLEMENTARY INFORMATION:**Background**

The notice of proposed rulemaking that is the subject of this correction is under section 6404 of the Internal Revenue Code.

Need for Correction

As published, REG-209276-87 contains an error which may prove to be misleading and is in need of clarification.

Correction of Publication

Accordingly, the publication of the notice of proposed rulemaking (REG-209276-87), which is the subject of FR Doc. 98-19, is corrected as follows:

On page 1087, column 3, in the preamble under the paragraph reading "Explanation of Provisions", the first full paragraph in the column is corrected to read:

The provisions of the regulations are proposed to apply to interest accruing with respect to deficiencies or payments of any tax described in section 6212(a) for taxable years beginning after July 30, 1996.

Cynthia E. Grigsby,

Chief, Regulations Unit, Assistant Chief Counsel (Corporate).

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ENVIRONMENTAL PROTECTION AGENCY**40 CFR Part 131**

[FRL-OW-5974-3]

RIN 2040-AC65

Water Quality Standards for Alabama

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: EPA is proposing water quality standards that would be applicable to certain waters of the United States in the State of Alabama. If promulgated as final standards, they will supersede use designations for nine stream segments that EPA disapproved in 1986 and 1991 and which have not been revised by the State. EPA is taking this action because it believes these disapproved State water quality standards are inconsistent with the Clean Water Act and EPA's implementing regulations. Specifically, EPA is proposing new use designations for waters of the State whose current use designations under State law do not meet applicable requirements of the Clean Water Act.

DATES: EPA will accept public comments on this rulemaking until May 4, 1998. Comments postmarked after this date may not be considered. A public hearing will be held in Montgomery, Alabama, on April 22, 1998. Both oral and written comments will be accepted at the hearing.

ADDRESSES: An original plus 2 copies, and if possible an electronic version of comments either in WordPerfect or ASCII format, should be addressed to Fritz Wagener, Water Quality Standards Coordinator, U.S. EPA Region 4, Water Management Division, Atlanta Federal Center, 61 Forsyth Street S.W., Atlanta, Georgia, 30303-3104. A public hearing will be held at the Holiday Inn Hotel and Suites, 120 Madison Avenue, Montgomery, Alabama, 36104 (334-264-2231) from 1-5 p.m. and 6-10 p.m. on April 22, 1998. The administrative record for today's proposed rule is available for public inspection at U.S. EPA Region 4, Water Management Division, 15th Floor, Atlanta Federal Center, 61 Forsyth Street S.W., Atlanta, Georgia, 30303-3104, between 8:00 a.m. to 4:30 p.m. Copies of all or portions of the record will be made available for a charge of 20¢ per page.

FOR FURTHER INFORMATION CONTACT: Fritz Wagener, Water Quality Standards Coordinator, U.S. EPA Region 4, Water Management Division, Atlanta Federal Center, 61 Forsyth Street S.W., Atlanta, Georgia, 30303-3104 (telephone: 404-562-9267).

SUPPLEMENTARY INFORMATION: This Supplementary Information Section is organized as follows:

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I. Potentially Affected Entities

Citizens concerned with water quality in Alabama may be interested in this rulemaking. Entities discharging pollutants to certain waters of the United States in Alabama could be indirectly affected by this rulemaking since water quality standards are used in determining National Pollutant Discharge Elimination System (NPDES) permit limits. Potentially affected entities include:

Category	Examples of affected potentially entities
Industry	Industries discharging pollutants to Alabama surface waters listed in section 131.34 of this proposed rule.
Municipalities.	Publicly-owned treatment works discharging pollutants to Alabama surface waters listed in section 131.34 of this proposed rule.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding NPDES regulated entities likely to be affected by this action. This table lists the types of entities that EPA is now aware could potentially be affected by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility, company or business may be affected by this proposed action, you should carefully examine the list of waters identified in § 131.34 of today's proposed rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the proceeding "For Further Information Contact" Section.

II. Background**A. Statutory and Regulatory Background**

Section 303 (33 U.S.C. 1313) of the Clean Water Act (CWA or "the Act") directs States, with oversight by EPA, to adopt water quality standards to protect the public health and welfare, enhance

the quality of water and serve the purposes of the CWA. Under section 303, States are required to develop water quality standards for waters of the United States within the State. Section 303(c) provides that water quality standards shall include the designated use or uses to be made of the water, taking into account the water's use, and criteria necessary to protect those uses. The beneficial uses to be considered by States in establishing water quality standards are specified in the Act: public water supplies, propagation of fish and wildlife, recreation, agricultural uses, industrial uses and navigation. States are required to review their water quality standards at least once every three years and, if appropriate, revise or adopt new standards. The results of this triennial review must be submitted to EPA, and EPA must approve or disapprove any new or revised standards.

Section 303(c) of the CWA authorizes the EPA Administrator to promulgate water quality standards to supersede State standards that have been disapproved, or in any case where the Administrator determines that a new or revised standard is needed to meet the CWA's requirements. Today EPA is proposing federal standards to supersede portions of Alabama's standards that have been disapproved by EPA and have not been revised by the State.

EPA regulations implementing section 303(c) are published at 40 CFR Part 131. Under these rules, the minimum elements that must be included in a State's water quality standards include: use designations for all water bodies in the State, water quality criteria sufficient to protect those use designations, and an antidegradation policy. See 40 CFR 131.6. States may also include in their standards policies generally affecting the standards' application and implementation. See 40 CFR 131.13. These policies are also subject to EPA review and approval.

Water quality standards establish the "goals" for a water body through the designation of beneficial uses. Designated uses in turn determine what water quality criteria apply to specific water bodies. Section 101(a)(2) of the Act establishes as a national goal "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and * * * recreation in and on the water," wherever attainable. These national goals are commonly referred to as the "fishable/swimmable" goals of the Act. Section 303(c)(2)(A) requires water quality standards to "protect the public health and welfare, enhance the quality

of water, and serve the purposes of this Act." EPA's regulations at 40 CFR part 131 interpret and implement these provisions by requiring that water quality standards provide for fishable/swimmable uses unless those uses have been shown to be unattainable, effectively creating a rebuttable presumption of attainability, i.e., a default designation of fishable/swimmable beneficial uses should apply. The mechanism in EPA's regulations used to overcome this presumption is a use attainability analysis. (See discussion below.)

Under 40 CFR 131.10(j), States are required to conduct a use attainability analysis (UAA) whenever the State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the CWA, or when the State wishes to remove a designated use that is specified in section 101(a)(2) of the Act, or adopt subcategories of uses that require less stringent criteria. Uses are considered by EPA to be attainable, at a minimum, if the uses can be achieved (1) when effluent limitations under section 301(b)(1)(A) and (B) and section 306 are imposed on point source dischargers, and (2) when cost effective and reasonable best management practices are imposed on nonpoint source dischargers. 40 CFR 131.10 lists grounds upon which to base a finding that attaining the designated use is not feasible, as long as the designated use is not an existing use.

A UAA is defined in 40 CFR 131.3(g) as a "structured scientific assessment of the factors affecting the attainment of a use which may include physical, chemical, biological, and economic factors" (see §§ 131.3 and 131.10). In a UAA, the physical, chemical and biological factors affecting the attainment of a use are evaluated through a water body survey and assessment.

Guidance on water body survey and assessment techniques is contained in the Technical Support Manual, Volumes I-III: Water Body Surveys and Assessments for Conducting Use Attainability Analyses. Volume I provides information on water bodies in general, Volume II contains information on estuarine systems and Volume III contains information on lake systems; Volumes I-II, November 1983; Volume III, November 1984). Additional guidance is provided in the Water Quality Standards Handbook: Second Edition (EPA-823-B-94-005, August 1994). Guidance on economic factors affecting the attainment of a use is contained in the Interim Economic Guidance for Water Quality Standards:

Workbook (EPA-823-B-95-002, March 1995).

In developing today's proposal, EPA developed water quality standards according to the procedures set out for States in 40 CFR Part 131, and EPA's implementing policies, procedures, and guidance. The basis for the proposed rule is described more fully below.

B. Rebuttable Presumption of Section 101(a) Uses

As discussed in section II.A., above, EPA regulations effectively establish a "rebuttable presumption" that "fishable/swimmable" uses are attainable and therefore should apply to a water body unless it is affirmatively demonstrated that such uses are not attainable. EPA adopted this approach in order to help achieve the national goal articulated by Congress that, "wherever attainable," water quality provide for the "protection and propagation of fish, shellfish and wildlife" and for "recreation in and on the water." CWA 101(a). While facilitating achievement of Congress' goals, the "rebuttable presumption" approach preserves States' paramount role in establishing water quality standards in weighing any available evidence regarding the attainable uses of a particular water body. The rebuttable presumption approach does not restrict the discretion that States have to determine that "fishable/swimmable" uses are not, in fact, attainable in a particular case. Rather, if the water quality goals articulated by Congress are not to be met in a particular water body, the regulations simply require that such a determination be based upon a credible, "structured scientific assessment" of use attainability. See 40 CFR 131.3(g) (defining use attainability analysis).

EPA believes that the rebuttable presumption policy reflected in these regulations is an essential foundation for effective implementation of the Clean Water Act as a whole. The "use" of a water body is the most fundamental articulation of its role in the aquatic and human environments, and all of the water quality protections established by the CWA follow from the water's designated use. If a use lower than "fishable/swimmable" is designated based on inadequate information or superficial analysis, water quality-based protections that might have enabled the water to achieve the goals articulated by Congress in section 101(a) may not be put in place. As a result, the true potential of the water body may never be realized, and a resource highly valued by Congress may be forever lost.

EPA seeks, through its oversight under section 303(c) of the Act, to ensure that any State's decision to forego protection of a water body's potential to support "fishable/swimmable" uses results from an appropriately "structured" analysis of use attainment. Where, as in the case of these waters in Alabama, EPA concludes that the State failed to adequately justify a lower than "fishable/swimmable" use designation, EPA disapproves the use designation. In some cases, as Alabama has done with regard to most of the use classifications originally disapproved by EPA (see section II.C., below), the State will revise its use classifications to protect fishable/swimmable uses. In other cases, the State will conduct a more thorough analysis of use attainability sufficient to rebut the rebuttable presumption reflected in the regulations. Indeed, Alabama has done so for several of the streams originally disapproved by EPA in 1986. Where, however, a State does neither, EPA will undertake federal rulemaking to ensure the water quality goals of the Act are effectively implemented.

In undertaking such federal rulemakings, EPA believes that it is appropriate to follow the same rebuttable presumption approach that applies under the regulation to State decision-making. EPA believes this is appropriate for several reasons. First, the Agency does not believe that it would be appropriate to alter the Part 131 approach to making use designations merely because the forum for decision-making has changed from the State to the federal level. Attaining the goals articulated by Congress is no less important when EPA, as opposed to a State, is making use designation determinations. Moreover, EPA believes that failure to apply the rebuttable presumption in the federal context could undermine how that presumption currently applies to State decision-making under the Part 131 regulations. If the presumption did not apply equally in the State and federal decision-making process, a State could effectively shift the burden of demonstrating attainability simply by failing to adequately justify its use designation and thereby triggering a federal rulemaking proceeding.

Therefore, in reaching the decisions reflected in this proposed rule, EPA applied a rebuttable presumption that fishable/swimmable uses are attainable for these nine waters. EPA acknowledges that the information related to actual and potential uses of these waters is, in some cases, not extensive, and that deciding upon the

appropriate use designations is an inexact practice. At this time, and as explained in detail below, EPA believes the available information regarding these nine water body segments does not rebut the presumption that "fishable/swimmable" uses are attainable.

EPA's approach in this rulemaking does not undermine the State's primary role in designating uses for waters in Alabama. As before, if, prior to EPA's finalizing this rule, the State undertakes a sound analysis of use attainability, taking into account appropriate biological, chemical and physical factors, and concludes that the "fishable/swimmable" use is not attainable for these waters, EPA would approve the State's action and not finalize this rule (or initiate withdrawal if the State submits a sound analysis after EPA takes final action). EPA encourages the State and any other party that is aware of relevant information bearing upon the decisions in this rule to provide such information in this rulemaking. EPA also encourages the State to continue evaluating the appropriate use designations for these waters.

C. Factual Background

In a letter dated October 14, 1986, the EPA Regional Administrator for Region 4 disapproved use designations adopted by the Alabama Department of Environmental Management (ADEM) for 49 stream segments because the State failed to justify use classifications lower than "fishable/swimmable" uses in accordance with 40 CFR 131.10(j). Although the State had previously submitted use attainability analyses for these stream segments, the analyses did not adequately describe the basis for the lower use classifications, nor did they provide adequate information to determine if such classifications were appropriate. From 1986 to 1991, 20 of the use designations were either upgraded to the Fish and Wildlife use classification (F&W use) by ADEM or approved as the Agricultural and Industrial Water Supply use classification (A&I use) by EPA. On July 18, 1991, the EPA Regional Administrator for Region 4 disapproved 30 beneficial use designations adopted by ADEM, 29 of which were previously disapproved in 1986, plus the beneficial use designation for one additional stream segment which lacked a use attainability analysis.

Between July 18, 1991 and today's proposal, ADEM has upgraded to the F&W use 13 of the stream segments disapproved by EPA. Most recently, on May 30, 1997, ADEM adopted F&W use

classifications for Hog Bayou, Pigeon Creek, Unnamed Tributary of Pigeon Creek, Rocky Creek, Hollinger Creek, Soughatchee Creek, Sugar Creek and Little Bear Creek. EPA approved these changes to the Alabama water quality standards on December 9, 1997. Thus, as of today's proposal, there are 17 stream segments for which EPA has disapproved the State use designation classifications. In a separate State action on April 22, 1997, the length of seven of these 17 remaining segments classified for less than "fishable/swimmable" uses was reduced, reflecting upgrades of a portion of each of these segments to the F&W use classifications by the State. However, the remaining portions of these seven streams remains subject to EPA's disapproval.

On September 18, 1996 the Legal Environmental Assistance Foundation, Inc. (LEAF) filed suit in District Court in Alabama against EPA for failing to propose replacement Water Quality Standards for 12 stream segments in Alabama designated as "Agricultural and Industrial Water Supply" or "Industrial Operations" which EPA had previously disapproved. *LEAF v. Browner* No. CV-96-ETC-2454-S. On September 11, 1997 EPA and the plaintiffs entered into a consent decree covering 9 of these stream segments. (EPA agreed outside the context of the consent decree to continue evaluation of the other three segments identified in the lawsuit). Under the terms and conditions of the consent decree, EPA was required to sign a **Federal Register** notice proposing federal use designations, or withdraw the EPA disapproval of the existing Alabama standards for these waters, by February 28, 1998. Since the signing of the consent decree, 2 of these 9 streams have been upgraded to the F&W use classification by ADEM and approved by EPA, and therefore are not covered by today's proposed federal water quality standards. Today's proposal covers the remaining 7 streams subject to the consent decree, as well as an additional 2 other streams still subject to EPA's outstanding disapproval. EPA is continuing to evaluate available information regarding the remaining 8 segments subject to EPA's outstanding disapproval for the purposes of determining whether federal use designations should be proposed for those waters.

On January 29, 1997, EPA published in the **Federal Register** (62 FR 4115) a notice of request for information and announced a public hearing to solicit any information from interested parties which would assist the Agency in

evaluating existing and potential beneficial uses of waters of the State of Alabama. A public hearing was held on February 26, 1997 in Montgomery, Alabama. EPA received 91 oral and written comments from interested parties, and has considered that information in the development of today's proposal.

As discussed above, the federal water quality standards regulations require that water quality standards provide for fishable/swimmable uses unless it has been demonstrated that attaining the designated beneficial uses is not feasible for any of the reasons described in 40 CFR 131.10(g). Whenever the State designates or has designated uses that do not include these fishable/swimmable uses or when the State wishes to remove a designated use that is not an existing use, a use attainability analysis must be completed and submitted to EPA for review.

D. Current Alabama Water Quality Standards

Alabama's water quality regulations at 335-6-10 and 335-6-11, revised most recently on May 30, 1997, contain the following use classification categories: surface waters for public water supply, swimming and other whole body water contact sports, shellfish harvesting, fish and wildlife, agricultural and industrial water supply, industrial operations, and navigation. Alabama has not adopted a default use classification for unsurveyed waters into the state water quality standards. The seven use designations contained in 335-6-10 have been applied, singly or in some combination, to all surface waters of Alabama. As discussed above, in section II.C., EPA disapproved A&I use classifications for the 9 streams segments in today's proposal. Based upon written correspondence and conversations with Alabama's Department of Environmental Management, it is EPA's understanding that current State practice relies on a demonstration that "fishable/swimmable" uses have actually been attained before the State takes action to adopt the higher use into water quality standards. In EPA's view, Alabama's approach assumes the unattainability of "fishable/swimmable" uses, in impaired waters, by requiring a demonstration that fishable/swimmable uses are actually attained before they will be protected. This is inconsistent with the requirements of 40 CFR Part 140 131.10. (See discussion above.)

EPA is proposing that nine stream segments be classified as subject to the Fish and Wildlife use set out at 335-6-10-.03 of the State's regulations. In developing today's proposal, EPA

evaluated Alabama's existing water quality standards to determine which State use designations correspond to "fishable/swimmable" uses, and would therefore ensure protection of the CWA section 101(a) goals. Rather than establish new federal use designations for these Alabama waters, EPA believes it is preferable to apply use designations that both meet the goals of the CWA and would be consistent with longstanding State standards regulations. Because water quality standards for these segments, if ultimately promulgated, will be the basis for establishing NPDES permit limits by the State, the Agency believes that utilizing an existing State use designation will facilitate implementation of the standards. This also facilitates withdrawal of federal standards in the future, if Alabama takes appropriate action justifying such withdrawal.

Subsection 335-6-10-.09(4) includes the descriptions of the Fish and Wildlife uses and conditions and specific criteria necessary to support the Fish and Wildlife use. Subsection 335-6-10-.09(4) (a), (b), (c) and (d) specify the usage of waters classified for Fish and Wildlife uses, as follows:

(4)(a) Best usage of waters: Fishing, propagation of fish, aquatic life, and wildlife, and any other usage except for swimming and water-contact sports or as a source of water supply for drinking or food processing purposes.

(4)(b) Conditions related to best usage: the waters will be suitable for fish, aquatic life and wildlife propagation. The quality of salt and estuarine waters to which this classification is assigned will also be suitable for the propagation of shrimp and crabs.

(4)(c) Other usage of waters: It is recognized that the waters may be used for incidental water contact and recreation during June through September, except that water contact is strongly discouraged in the vicinity of discharges or other conditions beyond the control of the Department or the Alabama Department of Public Health.

(4)(d) Conditions related to other usage: The waters, under proper sanitary supervision by the controlling health authorities, will meet accepted standards of water quality for outdoor swimming places and will be considered satisfactory for swimming and other whole body water-contact sports.

If EPA promulgates final water quality standards as proposed, Alabama's existing water quality criteria adopted to protect the F&W use would apply to these waters. These criteria are set out at 335-6-10-.05 (General Conditions Applicable to All Water Criteria), 335-6-10-.06 (Minimum Conditions Applicable to All State Waters), 335-6-10-.07 (Toxic Pollutant Criteria Applicable to State Waters), and 335-6-

10-.09(4) (Specific Water Quality Criteria—Fish and Wildlife use).

Subsection 335-6-10-.05 establishes State policies applicable to all State waters regarding analytical procedures, collection of samples used to determine compliance with water quality criteria, mixing zones, criteria exceedances due to natural conditions, recreational use of State waters, and schedules of compliance with new water quality standards. Compliance with a modified effluent limit based on a new standard is required as soon as possible, "but in all cases within three years of the adoption of the new standard."

Subsection 335-10-.06 contains the "free from" toxicity provisions of Alabama's water quality standards applicable to all State waters. These provisions relate to general protection of State waters from adverse effects due to substances attributable to sewage, industrial wastes or other wastes from settling, floating, and toxicity.

Section 335-6-10.07 includes a tabular listing of water quality criteria applicable to State waters pursuant to applicable designated uses. Included are numeric criteria or criteria equations for protection of aquatic life from acute toxic effects for 24 parameters (which apply to all State waters except those waters classified for Navigation or Industrial Operations uses), numeric criteria or criteria equations for protection of aquatic life from chronic toxic effects for 29 parameters (which apply to all State waters except those waters classified for Navigation, Industrial Operations, or Agricultural and Industrial Water Supply uses), human health-based criteria equations and Maximum Contaminant Levels for 100 parameters (applicable to waters classified for drinking water purposes), and the minimum instream design flows to be used in application of water quality criteria.

This section also includes the criteria equations for 98 parameters for protection of human health from the consumption of fish and shellfish applicable to all State waters. Since the State's human health-based water quality criteria apply to all State waters, regardless of classification, human health criteria were not considered to have a direct effect in the analysis of proposed revised classifications of Fish and Wildlife uses for waters considered in this rulemaking.

Subsection 335-6-10.09(4)(e) (Specific criteria) contains the water quality criteria related to the protection of the above uses, including numeric and/or narrative criteria for pH, temperature, dissolved oxygen, whole

effluent toxicity, bacteria, radioactivity and turbidity.

Criteria for protection of aquatic life for dissolved oxygen (DO) are contained in the Alabama water quality standards at Subsection (4)(e)(4), which includes, in pertinent part:

(i) For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times; except under extreme conditions due to natural causes, it may range between 5 mg/l and 4 mg/l, provided that the water quality is favorable in all other parameters. The normal seasonal and daily fluctuations shall be maintained above these levels.

(ii) In coastal waters, surface dissolved oxygen concentrations shall not be less than 5 mg/l, except where natural phenomena cause the value to be depressed.

(iii) In estuaries and tidal tributaries, dissolved oxygen concentrations shall not be less than 5 mg/l, except in dystrophic waters or where natural conditions cause the value to be depressed. (iv) In the application of dissolved oxygen criteria referred to above, dissolved oxygen shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, dissolved oxygen criteria will be applied at mid-depth.

Subsection 335-6-10-.09(4)(e) also includes a reference to toxicity-based criteria applicable to the Fish and Wildlife use in section 335-6-10-.07. This Subsection includes narrative criteria for the protection from adverse effects of taste, odor, and color effects, including aesthetic qualities, as well as narrative criteria for the protection of palatability and marketability of fish, wildlife, shrimp and crabs taken from State waters.

III. Use Designations for Alabama Streams

A. Overview

As discussed above, the Agency believes that it is appropriate to apply a rebuttable presumption that "fishable/swimmable" uses are attainable in these waters. In terms of Alabama's water quality standards, the Agency believes that the F&W use designation appropriately reflects "fishable/swimmable" uses. EPA has evaluated the information available to the Agency to determine whether that information demonstrates the F&W use is not attainable for any of these waters (i.e., to rebut the rebuttable presumption). EPA's analysis has been informed by regulatory provisions and technical guidance that EPA has provided to

States for the development of UAs. As noted above, EPA regulations define a use attainability analysis as an assessment of the factors affecting attainment of a use, which may include "physical, chemical, biological and economic factors * * *." 40 CFR 131.3(g). Consistent with this provision, but within the limitations of the data and information available, EPA evaluated several categories of information in today's analysis of use attainability.

First, the Agency evaluated available information regarding the existing characteristics of the waters in terms of the biological communities that are present. If, in fact, the waters currently support biological communities commensurate with the F&W use designation, EPA considered this to be very strong evidence in favor of the conclusion that such a use is, in fact, attainable. To facilitate evaluation, EPA reviewed the technical literature and examined studies performed by federal, State, or local agencies. EPA considered all the information that it could obtain prior to today's proposal regarding these streams' biology. However, in certain cases, this information was quite limited. As discussed below, EPA is interested in obtaining from the public any additional information regarding the biological state of these waters.

EPA recognizes the presence of aquatic life in a water is not the only information which should be reviewed when evaluating designated uses. Significant exceedances of criteria established to protect "fishable/swimmable" uses may indicate that, notwithstanding the existing aquatic community, the use is impaired to some extent. In such cases, full attainment of the use might lead to development of a more robust and diverse aquatic community than is currently present. Therefore, in addition to evaluating available biological information, the Agency also reviewed available information regarding ambient stream chemical characteristics. EPA extracted chemical-specific data from the EPA Storage and Retrieval (STORET) data base, which houses ambient water quality data for water bodies throughout the United States, including Alabama. EPA's evaluation focused on those pollutant parameters for which new or more stringent criteria would apply to the affected stream segment under the proposed rule. According to the procedures contained in Chapter 335 of the Alabama Department of Environmental Management Regulations, chronic aquatic life protection criteria are applied to stream segments classified as F&W use,

whereas only acute aquatic life criteria are applied for A&I use protection. For all pollutants except dissolved oxygen (DO), EPA generated summary statistics (minimum, average, and maximum values on record) for the ambient water quality within each affected stream segment and compared them to the State water quality criteria applicable to the F&W use designation. EPA then evaluated the extent to which current ambient stream chemical concentrations met the applicable criteria.

Alabama's criterion for DO adopted to protect and maintain the F&W use is a minimum of 5 mg/L unless natural factors preclude the attainment of a 5 mg/L standard, in which case the criterion is 4 mg/L. In determining whether stream segments currently meet this criterion, data were obtained from STORET and analyzed by year and month. September generally had the lowest DO concentrations and the lowest stream flow and was considered to represent the worst situation that would be found on average. For purposes of EPA's analysis, if the mean of September DO values was above 4 mg/L, then the criterion was deemed to be met. If the mean of September DO values was below 4 mg/L, then EPA performed an analysis using a mathematical model to project the increase in DO that would result from removing the biological oxygen demand (BOD) from point source discharges to each segment. If the resulting DO concentration was above 4 mg/L, then EPA concluded that the criterion could be met if appropriate controls were established for point and nonpoint source discharges.

The above analysis was carried out solely to provide an estimate of the extent to which DO conditions appear to be commensurate with the F&W use. It should be recognized that the completion of more definitive wasteload allocations could be needed for the purposes implementing water quality control programs to ensure attainment of the F&W use designation ultimately promulgated by EPA.

If significant exceedances of F&W water quality criteria (in terms of relative magnitude above the applicable criteria, duration and frequency of exceedance above the criteria, and the number and types of pollutants) had occurred on a consistent basis, such information could suggest that a F&W use is not being fully attained currently. Considerable judgment, however, must be exercised when evaluating the extent to which current exceedances of water quality criteria in the stream indicate that the F&W use is not, in fact, attainable within the meaning of the

water quality standards regulations. Findings regarding attainability must take into account not only present circumstances, but also the pollutant reductions that would be achieved, at a minimum, through imposition of technology-based controls for point sources as well as implementation of best management practices for nonpoint sources.

Moreover, where the biological and other information indicates that a water body is or could be generally supportive of the F&W use, exceedances of criteria for particular pollutant parameters might not, in fact, support a conclusion that such a use is not currently being attained or is otherwise unattainable. Rather, in some cases an aquatic community could have acclimated to ambient conditions which are less than ideal and the best approach may be to adopt site-specific criteria protective of that F&W use for the particular water body (see discussion of alternative regulatory approaches in section IV.B., below). Thus, in evaluating the significance of a water body's exceedance of F&W criteria, EPA weighed that information along with consideration of other related factors (e.g., biological and physical characteristics, habitat, flow regime, tidal influences, etc.), as well as the types of pollutants at issue and the significance of any impairment, as well as discharger-specific information described below.

The last broad category of information considered by EPA in its decision-making process was monitoring information for each of the dischargers on the nine stream segments (as reflected in Discharge Monitoring Reports or DMRs). As discussed in detail in section V.C., below, EPA analyzed the extent to which the proposed federal use designations would require any facility to meet more stringent NPDES permit limits and, if so, what types of controls would be needed by these facilities to meet such limits. Discharger information was used in one of two ways by the Agency. First, monitoring data was used to assess the contribution of the point source dischargers to the affected stream segment in order to assist in the determination of whether F&W uses could be achieved. Second, the Agency used the monitoring data to determine whether dischargers would need to significantly alter their operations (or could, in fact, meet permit limits that would be associated with the F&W use). Information indicating that dischargers could generally meet such revised limits would support the presumption that the F&W use is attainable.

An additional factor considered carefully by EPA in its analysis has been the State of Alabama's analysis of use attainability. As discussed above, the State has previously determined that the A&I use was appropriate for these waters and, in some cases, submitted some analyses in support of those designations. While EPA disapproved the use designations on the grounds that the State had not provided use attainability analyses that would meet applicable EPA requirements (i.e., the analyses provided by the State focused on a facility's inability to meet revised F&W permit limits instead of a broader evaluation of the factors which might preclude a stream segment from attaining the F&W use), the Agency nonetheless carefully evaluated the State's conclusions and any supporting information. EPA also considered initiatives that may be underway to address point and nonpoint sources of pollution.

Finally, one important factor considered by EPA was the use designations adopted by the State for similar or proximate areas. Where a segment designated as A&I was similar in character to segments designated as F&W by the State, in particular if the F&W stream segment was located close to the A&I stream segment, the Agency considered such information to strongly favor the presumption of attainability of the F&W use.

B. Proposed Use Designations for Specific Waters of Alabama

Based upon the approach described above, EPA has evaluated any available information to determine whether it is sufficient to rebut the presumption the Fish and Wildlife use designation is attainable for the nine stream segments in today's proposal. Each segment is addressed below.

If, prior to any final rulemaking by EPA, Alabama classifies any of the nine stream segments with use designations consistent with the CWA and 40 CFR Part 131, EPA will approve those use designations and not include such stream segments in any final rule promulgated by EPA.

1. Buck Creek

Ambient monitoring for several pollutants (including in part, nutrients, DO, and BOD), was performed by EPA in Buck Creek for 4 days in 1995. According to these monitoring data, the DO (reported as an average of two samples on each occasion) upstream from the Alabaster Waste Water Treatment Plant (WWTP), which is the only permitted point source on Buck Creek, was below the 5 mg/L criterion

on 3 of 4 occasions; DO directly downstream from the Alabaster WWTP was above the DO criterion on all four occasions; DO about 1 mile downstream from the Alabaster WWTP, was above 5 mg/L on 3 of 4 occasions. However, the stream DO levels never fell significantly below the DO criterion and were typically above 3.8 mg/L.

Alabama recently upgraded the lower portion of Buck Creek to the F&W use. EPA is unaware of information indicating that water quality conditions on the portion of Buck Creek that is subject to this proposal is significantly different from the portion that Alabama has upgraded to the F&W use. The alleged inability of the Alabaster WWTP to meet permit limits based on the F&W criteria for DO is the rationale ADEM is using to maintain the A&I use for this portion of Buck Creek. However, as discussed further below, EPA does not believe that designated uses should be determined solely based upon the ability of a particular discharger to meet permit limits for a particular pollutant. In the case of this discharger, moreover, EPA believes that the existing effluent quality is very close to the permit limit that would likely be imposed to assure compliance with the DO criterion for the F&W use, based on the natural, low-flow conditions of this water body.

Taking into account the proximity of the segment to waters designated as F&W, the available (although limited) DO data, as well as the likely negligible impact of an upgrade on the only discharger on this segment, EPA believes that proposing the F&W use designation for this stream is appropriate.

2. Lost Creek

In 1993, two field studies were performed by ADEM on Lost Creek. During the June 1993 study of Lost Creek, DO values at all stations, including stations downstream from the Carbon Hill WWTP discharge, were reported above the 5.0 mg/L F&W criterion. The results from the second study performed in September 1993 were similar to the first in that DO values at most stations were reported above the 5.0 mg/L criterion. However, the DO occasionally dropped to just below the F&W criterion at two stations located 6 to 7 miles downstream from the discharge from the Carbon Hill WWTP. These two stations are also located just downstream from Mill Creek and Cheatham Creek, two tributaries to Lost Creek.

Based on available information, EPA proposes to upgrade this stream segment to the F&W use designation. This segment of Lost Creek is 8.2 miles long,

and is located between upstream and downstream segments each classified as F&W. The geographic relationship between this segment and other segments classified as F&W by the State supports a conclusion that the appropriate use designation for this segment should also be the F&W use. EPA is aware of no information indicating that the biological, physical or chemical characteristics of this segment are so substantially different from the surrounding segments that its use designation should be lower than those segments. Moreover, given the length of this segment, EPA believes it is reasonable to infer fish migration from the stream segments classified as F&W into the segment currently classified as A&I.

The primary characteristic distinguishing this stream segment and the surrounding segments classified as F&W by the State is that it is influenced by the discharge from the Carbon Hill Wastewater Treatment Plant. In a draft UAA provided to EPA, ADEM sought to justify the A&I use designation for this segment on the presumed inability of that plant to meet NPDES permit limits that would need to be imposed on that plant to meet the F&W criterion for DO. As stated above, however, EPA believes that determining the appropriate use designation for a water requires consideration of both the actual and potential circumstances in the water body, and should not be determined solely based upon the ability of a particular discharger to meet permit limits for a particular pollutant. As discussed further below, if attainment of a particular permit limit is not feasible for a particular discharger, the appropriate mechanism for dealing with that circumstance may be a variance, rather than failing to protect the attainable uses of the water body as a whole. While Alabama has chosen not to include variance procedures in its standards, EPA does not believe that the use designation for an entire water body should necessarily turn on the feasibility of a particular discharger's meeting certain permit limits. For the purposes of this rule, moreover, the Agency is proposing a federal variance procedure (see discussion in section IV.).

In any case, based on an evaluation conducted by EPA, the Agency believes that the existing effluent discharged by the Carbon Hill plant is currently of sufficient quality to meet permit limits consistent with F&W uses, and that the plant would similarly be able to meet such limits operating at its design capacity. The Agency bases this conclusion on a review of the existing

treatment capabilities and operations, and discussions with the plant operator and State officials.

3. Cane Creek—Oakman Segment

In September 1997, EPA conducted a biological survey of Cane Creek (from Alabama Highway 69 to its source). The survey compared a site in the stream segment classified as F&W upstream from the Oakman WWTP and a site in the A&I segment 2.5 miles downstream from the facility. The results of this survey indicate that both sites were very similar. This biological assessment in late summer indicates that the stream has a substantial aquatic community. Chemical-specific water quality data also collected during this survey, indicate no exceedances of applicable F&W criteria, but did show potential water quality impacts from discharges from mining areas within the watershed (as indicated by elevated conductivity measurements found below the mining areas). While these discharges from mining areas are having an impact on the aquatic community, EPA does not believe, overall, that the level of stress placed on the aquatic community is sufficient to warrant an A&I use designation.

This segment of Cane Creek (Oakman Segment) is located below the discharge of the Oakman WWTP (with a discharge design flow of 90,000 gallons per day). ADEM provided to EPA a draft UAA which indicated the reason for not upgrading this stream segment is due to the presumed inability of the WWTP to meet NPDES permit limits for carbonaceous BOD that are necessary to achieve the F&W DO criterion.

As indicated above, however, the potential inability of a particular discharger to meet certain permit limits should not alone determine the appropriate use classification for the entire water body. In any case, the facility is currently scheduled to upgrade its existing treatment system. Because the quality of the discharge from this facility should therefore improve, EPA does not believe that the facility-specific concerns previously expressed by the State should alone be relied upon to conclude that the F&W use is unattainable within the meaning of the CWA. Taking into account the totality of the available information, including the biological and chemical information described above, EPA does not believe that the presumption of attainability has been rebutted for this segment. EPA proposes to upgrade this stream segment to the F&W use designation.

4. Flint Creek

The A&I segment of Flint Creek is located downstream from the Hartselle WWTP and between two segments classified by the State as F&W. EPA is aware that the Flint Creek watershed (including waters classified as F&W by the State) is generally subject to adverse water quality impacts. Both EPA and the State have committed substantial resources to evaluating the sources and the extent of these impacts, as well as potential solutions. These efforts have resulted in water quality improvements over the last several years. For example, in 1992 and 1995, ADEM performed a macroinvertebrate bioassessment on the segment of Flint Creek subject to this proposal, and concluded that water quality had improved, as reflected by an increase in taxa richness, diversity and equitableness during that period. EPA has developed a total maximum daily load (TMDL) for the watershed indicating the reduction in pollutant loads that would achieve the DO criterion for F&W uses.

While the Agency recognizes that currently this segment is not as vital and robust a water body as it could be, EPA believes that there are sufficient indicators of both actual and potential uses of this water to support the F&W use. This conclusion is supported by the fact that the State has classified certain segments in the watershed as F&W, and those segments are comparable to the segment the State has classified as A&I. EPA is not aware of information that would justify treating these segments differently than other F&W stream segments in the watershed. Therefore, EPA is proposing to upgrade this stream segment to the F&W use designation.

5. Cane and Town Creeks (Jasper Segments)

In September 1997, EPA conducted a biological survey of the Jasper Segments of Town and Cane Creeks. These two streams are currently classified as A&I at their confluence, Town Creek from its mouth to a distance 1.1 miles upstream, and Cane Creek from the confluence to Mulberry Branch. This survey indicated that viable benthic macroinvertebrate populations exist within both creeks, except within one segment of Town Creek, just downstream from the discharge from the Jasper WWTP. While the Cane Creek A&I segment was sufficiently impacted by the discharge to warrant an impaired rating in ADEM's biotic survey, that aquatic community was significantly improved as compared to the aquatic community of the upstream A&I Town Creek segment impacted by the Jasper WWTP.

Further, the ADEM biotic survey indicates that the A&I segment of Cane Creek has good potential to further improve its ability to support a healthy aquatic community.

Although no data are provided in STORET for the Jasper Segments of Cane and Town Creeks, EPA conducted a sampling investigation in June 1997. The long term BOD results and other data from the June sampling have recently been completed and the data are being used to calibrate and validate the water quality model for these streams. Preliminary analysis of the data indicates that there are natural stagnant flow conditions during low flow periods which may have an adverse impact on DO levels. Further model analysis is necessary to better quantify the impact the Jasper WWTP is having on the stream water quality and to better assess the natural DO levels in the streams during critical low flow conditions. The Jasper WWTP is currently undergoing an upgrade, which includes the installation of an equalization basin to assist in control and treatment of high infiltration and inflow from the collection system. The installation of this basin is expected to enhance treatment plant performance, which should result in improved DO levels in the stream.

Based on EPA's review of the available information, the Agency has concluded that it is appropriate to propose to upgrade this stream segment to the F&W use designation. As noted above, viable benthic communities are present, except in one segment just downstream from the discharge from the Jasper WWTP. The aquatic community in the lower A&I segment of Cane Creek is comparable to that of the upper F&W segment. While stressed, the aquatic community in both these stream segments currently classified as A&I is not incompatible with the aquatic community found in the F&W segments of Cane and Town Creeks.

While the discharge from the Jasper treatment plant has some impact on water quality, this plant is currently undergoing a facility upgrade that should positively affect conditions in the stream. EPA believes that the totality of the information does not indicate that the F&W use is unattainable. EPA recognizes that additional work is needed to assess the natural DO levels in the stream during critical low flow conditions. A site-specific criterion for DO for these stream segments that would both protect the F&W use classification while recognizing natural conditions may be appropriate (see discussion of site-specific criteria below, section IV.B.).

6. Mobile River

EPA identified numerous studies that have been performed on the Mobile Bay watershed, which includes the Mobile River from its mouth to the Spanish River. Most studies focused on evaluating the factors that contribute to the relatively low levels of DO within the Bay itself. As described further below, several of these studies included the Mobile River. Several studies indicate the occurrence of a diversity of freshwater, estuarine and marine invertebrate and vertebrate species in the Mobile Bay watershed, which supports the presumption that the portion of the Mobile River currently classified as A&I should be able to attain the F&W use designation.

EPA evaluated several years of chemical-specific ambient monitoring data provided in STORET for one station (Station MO2) on the segment of the Mobile River affected by the new use designation. At Station MO2, pH, metals, hardness and salinity are monitored. Station MO2 is located approximately 2 miles downstream from discharges from two pulp and paper facilities, as well as 1 mile downstream from Chickasaw Creek. Of the pollutants for which there are data, Station MO2 reports occasional water quality criteria exceedances for total cadmium and total mercury. There were 28 analyses for total cadmium from 1982 to 1989. Cadmium was detected three times above the criterion, with a maximum of 30 µg/L and a minimum of 10 µg/L. The criterion for that part of the river is 4.5 µg/L (based on the mean hardness value reported in STORET). There were only five analyses for total mercury from 1981 to 1985. Mercury was detected once at 1.4 µg/L; the criterion for mercury is 0.012 µg/L.

Many of the studies of DO within the Mobile Bay estuary show levels of DO below the F&W criterion of 5 mg/L. Several factors have been identified as the potential causes of the low DO levels, including BOD from upstream segments and natural influences associated with tidal movements. Other studies point to the potential impact of past dredging activities within the Mobile River that fundamentally change the hydraulic characteristics of the river, and subsequently affect DO levels.

In EPA's analysis of DO conditions for this proposal, it was determined that the DO criterion applicable to the F&W use designation could be met under low-flow conditions in the A&I segment of the Mobile River, but episodic variations in upstream DO would occasionally cause the standard to be exceeded. Evaluation and control of

some upstream point and nonpoint BOD sources, and control of in-segment point and nonpoint BOD sources would facilitate achievement of the DO criterion with greater consistency.

EPA recognizes that the periodic low DO conditions in the Mobile River are current impairments to development of a more robust aquatic community. Nonetheless, available ambient monitoring data does not show significant exceedance of criteria for metals. Moreover, even under low-flow conditions, monthly average DO conditions at most times are consistent with a F&W use designation. Taken together, EPA believes that, while existing conditions may be somewhat impaired, there is not sufficient information to conclude that the F&W use designation is not attainable for this stream segment. Therefore, EPA is proposing to upgrade this stream segment to the F&W use designation.

7. Chickasaw Creek

EPA conducted water quality assessments of Chickasaw Creek in 1974 and 1990. In EPA's 1974 assessment, DO levels were found to be zero or nearly zero in the lower portions of the water column within Chickasaw Creek. The 1990 assessment showed improvement from 1974, but DO values were still depressed in the lower portions of the water column. However, the 1990 assessment concluded that surface DO values met DO criteria for the F&W use at all monitoring stations.

EPA also extracted ambient monitoring data from STORET for two stations on Chickasaw Creek. As reported in the STORET data set, data indicate relatively few instances where ambient conditions do not meet F&W water quality criteria. The stations are located at U.S. Highway 43 near the City of Mobile, and halfway between this upstream station and the mouth of Chickasaw Creek at Mobile River.

Occasionally, total cadmium, total copper, and total mercury exceeded the applicable F&W water quality criteria at the upstream U.S. Highway 43 Station. There were 28 analyses for total cadmium between 1981 and 1991. Cadmium was detected twice above the criterion, once at 20 µg/L and once at 10 µg/L. The total cadmium criterion for that part of the river is 1.5 µg/L (based on the mean hardness value reported in STORET). Also, there were 41 analyses for total copper from 1974 to 1991. Copper was detected six times above the criterion at a maximum of 250 µg/L and a minimum of 10 µg/L. The mean of the detected values was 57 µg/L. The total copper criterion for that part of the river is 25 µg/L. There were only five

analyses for total mercury between 1981 and 1985. Mercury was detected once at 1.4 µg/L; the criterion for mercury is 0.012 µg/L.

The downstream station reports occasional exceedances of F&W water quality criteria for total cadmium, total copper, and total mercury. There were 26 analyses of total cadmium between 1981 and 1991. Cadmium was detected above the criterion once at 30 µg/L. The criterion for that part of the river is 3.8 µg/L (based on the mean hardness value reported in STORET). There were 44 total copper analyses between 1974 and 1991. Copper was detected seven times, with a mean of 57 µg/L. On one occasion, however, copper was detected at 230 µg/L, an exceedance of the 76.4 µg/L criterion for this part of the river. In addition, there were five analyses for total mercury between 1981 and 1985. Mercury was detected once at 1.4 µg/L; the criterion for mercury is 0.012 µg/L. Thus, monitoring indicates that the water segment meets the F&W criteria in most cases.

Based on analysis of STORET data for Chickasaw Creek, a 5/4 mg/L DO standard would not be achieved under low-flow conditions without additional evaluation and control of upstream point (Prichard Brooks WWTP) and nonpoint sources of BOD. Additional evaluation and control of point (Chickasaw Lagoon WWTP and Shell Oil) and nonpoint sources of BOD within the segment would facilitate achievement of the DO criterion on a more consistent basis.

While existing conditions in Chickasaw Creek indicate depressed DO levels, monitoring for other pollutants (cadmium, copper and mercury) indicate that the stream segment meets the F&W criteria in most cases. EPA recognizes that additional controls on point and nonpoint sources would need to be implemented in order to support a robust F&W use. However, based on currently available information, it has not been demonstrated that implementation of such control measures is not feasible (impacts of achieving reductions through point source controls are discussed further in section V. below). Therefore, EPA is proposing to upgrade the use of this segment to the F&W use designation.

8. Three Mile Creek

Ambient monitoring data were provided in STORET for one monitoring station on Three Mile Creek which has several years of chemical-specific data. The data show relatively few instances during which ambient concentrations exceeded the water quality criteria for total copper, total lead, and total

mercury. There were 40 analyses for total copper from 1974 to 1991. Copper was detected five times, with a maximum of 230 µg/L and a minimum of 20 µg/L. The mean of the detected values was 106 µg/L. The criterion for that part of the river is 32 µg/L (based on the mean hardness value reported in STORET). There were 27 measurements of total lead from 1981 to 1991. Lead was detected once above the criterion at 20 µg/L. The criterion for that part of the river is 3.9 µg/L. There were only five analyses for total mercury between 1981 and 1985. Mercury was detected once at 2.1 µg/L. The criterion for mercury is 0.012 µg/L.

For Three Mile Creek, a 5/4 DO standard could be met under low-flow conditions by controlling the BOD discharges from the Mobile Smith and Prichard Morris WWTPs. Control of upstream point and nonpoint, as well as in-segment point and nonpoint, sources of BOD would facilitate achievement of the DO criterion with greater consistency.

While existing conditions in this segment currently indicate some difficulty in meeting F&W-based DO limits, the data for other pollutants generally indicates no substantial impairment of the F&W use. EPA recognizes that additional control measures would be needed to support a robust F&W use. However, available information does not indicate that implementation of such measures would be infeasible (impacts of point source controls are discussed in section V. below). Therefore, EPA is proposing to upgrade this stream segment to the F&W use designation.

C. Request for Comment and Data

EPA believes the above proposed designated uses are appropriate considering the requirements of the CWA and the data and information available to EPA at the time of today's proposal. EPA acknowledges that additional data and information may exist which may further support or refute the attainment of today's proposed designated uses. Accordingly, the Agency will evaluate any data and information submitted to EPA by the close of the public comment period with regard to designating uses for these nine stream segments. Based on that evaluation EPA will make a final decision whether the designated uses in today's proposal are appropriate and consistent with the Act. To assist the Agency in ensuring that these decisions are based on the best available information, the Agency is soliciting additional information. To assist commenters, the following paragraphs

provide guidance on the type of information EPA considers as relevant.

Specifically EPA is seeking information that would assist in determining whether the beneficial uses identified above are currently being attained or have been attained in the past; whether natural conditions or features or human caused conditions prevent the attainment of these uses and whether these conditions can or cannot be remedied or would cause more environmental damage to correct than to leave in place; or whether the controls more stringent than those required by section 301(b) and 306 of the CWA would be needed to attain the uses and implementation of such controls would result in substantial and widespread social and economic impact. Below is a general discussion of the types of data/information requested by the Agency:

Ambient Monitoring Information: (1) Any in-stream data for any of the above stream segments reflecting either natural conditions (e.g., in-stream flow data or other data relating to stream hydrology) or irretrievable human-caused conditions which cannot be remedied and which prevent the uses or water quality criteria from being attained; (2) any available in-stream biological data; (3) any chemical and biological monitoring data that verify improvements to water quality as a result of treatment plant/facility upgrades and/or expansions; and (4) any in-stream data reflecting nonpoint sources of pollution or best management practices that have been implemented for nonpoint source control.

Current and Historical Effluent Data: (1) Any data and information relating to mass loadings from point source discharges of pollutants such as BOD, NH₃-N, chlorine, metals (e.g., As, Cd, Cr, Cu, Pb, Hg, Ni, Ag, Zn), other toxics (e.g., volatile organic chemicals such as benzene or toluene, acid extractables such as pentachlorophenol, base neutrals such as anthracene, fluorene or pyrene, and pesticides such as aldrin, lindane, DDT, dieldrin, endrin and toxaphene); (2) data and information related to facility or treatment plant effluent quality; and (3) any information related to releases of pollutants from other sources such as landfills, transportation facilities, construction sites, agriculture/silviculture, incinerators, and contaminated sediments.

Water Quality Modeling Information: (1) Any data or information on analytical models which can be used to evaluate or predict stream quality, flow, morphology; (2) any physical, biological or chemical characteristics relating to beneficial uses; and (3) the results of

any such models which can be used to evaluate the attainment of beneficial uses.

Economic Data: Any information relating to costs and benefits associated or incurred as a result of facility or treatment plant expansions or upgrades. This information includes: (1) Qualitative descriptions or quantitative estimates of any costs and benefits associated with facility or treatment plant expansions or upgrades, or associated with facilities or treatment plants meeting limits; (2) any information on costs to households in the community with facility or treatment plant expansions or upgrades, whether through an increase in user fees, an increase in taxes, or a combination of both; (3) descriptions of the geographical area affected; (4) any changes in median household income, employment, and overall net debt as a percent of full market value of taxable property; and (5) any effects of changes in tax revenues if the private-sector entity were to go out of business, including changes in income to the community if workers lose their jobs, and effects on other businesses both directly and indirectly influenced by the continued operation of the private sector entity.

IV. Alternative Regulatory Approaches and Implementation Mechanisms

As explained above in section II., EPA's regulation supports a rebuttable presumption approach for designation of beneficial uses. Today's proposal reflects EPA's determination of appropriate use designations for these nine streams, based upon the information available to EPA at this time. EPA will consider any data or information submitted to the Agency by the close of the comment period in developing a final rule. However, it is possible that data and information may become available after completion of this rulemaking that will be material to water quality standards for these streams. If EPA ultimately promulgates federal use designations for these nine streams, there are several mechanisms available to ensure that the water quality standards and their implementing mechanisms appropriately take into account such information. These mechanisms are described below.

A. Designating Uses

States have considerable discretion in designating uses. The State may find that changes in use designations are warranted. As stated above, EPA will review any new or revised use designations adopted by the State for

any of the water bodies in today's proposal to determine if the standards meet the requirements of the CWA and implementing regulations. If approved, EPA would subsequently initiate withdrawal of any final federal water quality standards which may result from today's proposal. However, EPA cautions the State that it must conduct a use attainability analyses as described in 40 CFR 131.3(g) when adopting water quality standards which result in uses which are not specified in section 101(a)(2) of the CWA, or which result in subcategories of uses specified in section 101(a)(2) which require less stringent criteria.

B. Site-Specific Criteria

The State may also develop data which indicates a site-specific water quality criteria for a particular pollutant is appropriate and take action to adopt such a criteria into their water quality standards. Site specific criteria are allowed by regulation and are subject to EPA review and approval. 40 CFR 131.11 requires States to adopt criteria to protect designated uses which are based on sound scientific rationale and which contain sufficient parameters or constituents to protect the designated use. In adopting water quality criteria, States must establish numerical values based on 304(a) criteria, 304(a) criteria modified to reflect site specific conditions, or other scientifically defensible methods, or establish narrative criteria where numerical criteria cannot be determined, or to supplement narrative criteria.

Currently, EPA guidance has specified three procedures for States and Tribes to follow in deriving site-specific criteria. These are the Recalculation Procedure, the Water-Effect Ratio Procedure and the Resident Species Procedure. These procedures can be found in the *Water Quality Standards Handbook* (EPA-823-B940005a, 1994). There is not currently any specific guidance for the development of site-specific criteria for the protection of human health, although the Agency is developing options for such guidance which it expects to include in the proposed revisions to the *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health*, expected in early 1998. EPA also recognizes there may be naturally occurring concentrations of pollutants which may exceed the national criteria published under section 304(a) of the CWA, and has issued policy guidance on establishing site specific aquatic life criteria equal to natural background. (Memo from Tudor T. Davies, Director, Office of Science and Technology to the

Regional Water Management Division Directors, and State and Tribal Water Quality Management Program Directors, dated 11/5/97)

C. Variances

Water quality standards variances are another alternative which can provide a facility with a limited period of time to comply with water quality standards. EPA recognizes that Alabama has chosen not to include a variance procedure in its State standards. Such procedures have, however, been adopted in many States and been approved by EPA. The Agency is providing an explanation of this procedure as additional information the public may find useful, and as discussed below, the proposed rule contains a federal variance procedure.

EPA believes variances are particularly suitable when the cause of unattainment is discharger-specific and/or it appears that the designated use in question will eventually be attainable. EPA has approved the granting of water quality standards variances by States in circumstances which would otherwise justify changing a use designation on grounds of unattainability (i.e., the six circumstances contained in 40 CFR 131.10(g)). In contrast to a change in standards which removes a use designation for a water body, a water quality standards variance can apply only to the discharger to whom it is granted and only to the pollutant parameter(s) upon which the finding of unattainability was based; the underlying standard remains in effect for all other purposes.

For example, if a designated aquatic life use is currently precluded because of high levels of metals from past mining activities which cannot be remediated in the short term, but it is expected that water quality will eventually improve, a temporary variance may be granted to a discharger with relaxed criteria for such metals, until remediation progresses and the use becomes attainable. The practical effect of such a variance is to allow a permit to be written using less stringent criteria, while encouraging ultimate attainment of the underlying standard. A water quality standards variance provides a mechanism for assuring compliance with sections 301(b)(1)(C) and 402(a)(1) of the CWA that require NPDES permits to meet applicable water quality standards, while granting temporary relief to point source dischargers.

While 40 CFR 131.13 allows States to adopt variance procedures for State-adopted water quality standards, such State procedures may not be used to

grant variances from federally adopted standards. EPA believes that it is appropriate to provide comparable federal procedures where, as proposed here, EPA adopts use designations which rely, at least in part, on a rebuttable presumption that fishable/swimmable uses are attainable or adopts more stringent criteria for the State's use designations. Therefore, EPA is proposing to authorize the Region 4 Regional Administrator to grant water quality standard variances where a permittee submits data indicating that an EPA-designated use is not attainable for any of the reasons in 40 CFR 131.10(g). This variance procedure will apply to standards promulgated by EPA for the specific stream segments named in today's proposal.

Today's proposed rule spells out the process for applying for and granting such variances. The Administrator is delegating to the Regional Administrator the authority to propose and grant these variances. This delegation should expedite the processing of variance requests. EPA is proposing to use informal adjudication processes in reviewing and granting variance requests. That process is contained in 40 CFR 131.34(b)(4) of today's proposed rule. Because water quality standard variances are technically revised water quality standards, the proposal provides that the Regional Administrator will provide public notice of the proposed variance and provide for an opportunity for public comment. EPA understands that variance related issues can often arise in the context of permit issuance. EPA Region 4 will seek to work closely with the State permitting authorities to ensure that variance requests will be considered in tandem with the State NPDES permitting process.

The proposed variance procedures require an applicant for a water quality standards variance to submit a request to the Regional Administrator (or his delegatee) with supporting information.

The burden is on the applicant to demonstrate to EPA's satisfaction that the designated use is unattainable for one of the reasons specified in 40 CFR 131.10(g). A variance may not be granted if the use could be attained, at a minimum, by all dischargers implementing effluent limitations required under sections 301(b) and 306 of the CWA and the applicant implementing reasonable best management practices for nonpoint source control.

Under the proposal, a variance may not exceed 3 years or the term of the NPDES permit, whichever is less. A variance may be renewed if the permittee demonstrates that the use in

question is still not attainable. Renewal of the variance may be denied if EPA finds that the conditions of 40 CFR 131.10(g) are not met.

EPA is soliciting comment on the need for a variance process for EPA-promulgated use designations, the appropriateness of the particular procedures proposed today, and whether the proposed variance procedures are sufficiently detailed.

D. Total Maximum Daily Loads (TMDLs)

State development of TMDLs are also an alternative approach for allocating loads of pollutants and ensuring attainment of designated uses in these water bodies. Section 303(d) of the CWA and its implementing regulations establish the TMDL process to provide a mechanism for allocating more stringent water quality-based requirements when technology-based controls are inadequate to achieve State water quality standards. The TMDL process can broaden the opportunity for public participation, expedite water quality based NPDES permitting, and lead to technically sound and legally defensible decisions for attaining and maintaining water quality standards. In addition, the TMDL process provides a mechanism for integrating the management of both point and nonpoint pollution sources that together may contribute to a water body's impairment. (See Guidance for Water Quality-based Decisions: The TMDL Process, EPA 440-4-91-001, April 1991)

V. Regulatory Impact Analysis

As explained more fully below in section VII. (Regulatory Flexibility Act), EPA's proposed rule does not itself establish any requirements directly applicable to regulated entities. While implementation of today's proposed rule may ultimately result in some new or revised permit conditions for some dischargers, EPA's action today does not impose any of these as yet unknown requirements on dischargers. Nonetheless, EPA is attempting, within the limits of these uncertainties, to make an estimate of the possible indirect costs which might ultimately result from this rulemaking.

The following is a summary of the proposed methodology being used for the regulatory impact analysis (RIA) prepared for this proposed rule. Further discussion is included in the full RIA, which is included in the docket as part of this rulemaking.

In the time prior to proposal EPA attempted to assess, to the best of its ability, compliance costs for facilities that could eventually be indirectly

affected by the designated uses of today's proposed rule. As described below, EPA searched available data sources in order to estimate as accurately as possible these potential costs. Although the costs are not expected to be significant, EPA has developed a methodology to estimate the potential indirect cost impacts on facilities discharging pollutants to waters subject to the numeric water quality criteria and uses established by this proposal.

However, because of data limitations, EPA's methodology and analysis is restricted to estimating costs associated with controls to reduce pollutants from industrial and municipal point source discharges in the nine stream segments covered by today's proposal. As such, EPA's methodology is unable to directly take into account the use of more cost-effective "best management practices and control technologies" that could be applied to other point sources (e.g., storm water outfalls) and nonpoint sources (e.g., runoff from agricultural and animal farming operations) that would improve water quality and reduce or possibly eliminate treatment costs for these industrial and municipal facilities.

EPA is soliciting public comment and supporting data on the fourteen facilities and nine stream segments it evaluated as part of the RIA, and on the methodology used to estimate costs associated with implementation of the proposed rule, as well as information and data on other point and nonpoint sources of pollution affecting the proposed F&W stream segments. EPA will review the comments and data provided by the public as well as any information and data it gathers during the public comment period, and will revise as necessary, the potential costs to facilities as an indirect result of attaining uses proposed in this rule. EPA will include this information as part of the final rulemaking.

A. Evaluation of Possible Pollutant Reduction Responsibilities

As explained previously, in proposing F&W Use designations for the 9 stream segments in today's proposal, EPA recognizes that, in certain cases, contributions from point and nonpoint sources may be impacting existing water quality. The State of Alabama has considerable discretion in determining how to allocate pollutant load reductions in order to achieve applicable water quality standards (see discussion of TMDLs, above). In many cases, the most efficient and cost-effective means of reducing pollutant discharges may be through controls of

nonpoint source contributions instead of requiring point sources to bear the brunt of the responsibility for meeting water quality standards in the water body. Indeed, when faced with the possibility of imposing significant treatment costs on point sources, EPA believes that all other feasible alternatives for achieving the CWA's goals should be fully explored.

For purposes of the RIA, however, EPA has effectively made the "worst-case" assumption from a costing perspective under its high-end scenario that point sources in the segments covered by this rule will bear full responsibility for bringing about any pollutant reductions that would be associated with meeting criteria applicable to the F&W Use designation for these waters. EPA made this assumption not because it believes that the State should choose to exercise its discretion in this fashion. Indeed, EPA would fully anticipate that the State would seek to rationally apportion any pollutant reduction responsibilities in a more cost-effective manner. Rather, EPA took this approach first because detailed information was not available regarding nonpoint source pollutant contributions to these waters and the measures that could reduce such nonpoint source loadings. Second, EPA wanted to ensure that the impacts to point sources located in these nine stream segments would be subject to complete analysis by the Agency and review by the public. The Agency believes that this approach ensures fully informed decision-making about possible worst-case impacts from the proposed rule. Thus, while it is conceivable that the costs described below could be incurred by point source discharges indirectly affected by the rule, it should not be assumed that such costs would actually be incurred. If EPA finalizes these use designations, the Agency will work closely with the State to ensure that responsibilities for meeting water quality standards are rationally apportioned among the sources of pollution. As discussed above in section IV., various options for regulatory alternatives and implementation mechanisms are available.

B. Overview of Methodology to Estimate Potential Costs Related to New Use Designations

The use designations being proposed by EPA, by themselves, will have no impact or effect. However, when the Alabama water quality criteria to protect these uses are applied to dischargers through the National Pollutant Discharge Elimination System (NPDES) permit program, then costs may be

incurred by regulated entities (i.e., point source dischargers) but these costs can vary significantly because of the wide range of control strategies available to dischargers. Due to the flexibility and discretion available in implementing water quality criteria, analysis of all potential costs would be difficult to perform for all potentially affected entities. EPA attempted to estimate the potential costs attributable to the proposal by developing detailed cost estimates for the 14 point source dischargers that may be impacted by the proposed rule. The following discussion addresses the approach that EPA used and is planning to follow as more data are obtained through the public comment and rulemaking process.

The actual impact of the proposed rule will depend upon (1) the procedures and policy decisions that will be established by the permitting authority to implement the rule, and (2) the control strategy the discharger selects in order to bring the facility into compliance. The procedures and policy decisions established by the permitting authority typically provide the methods to determine the need for water quality-based effluent limits (WQBELs) and, if WQBELs are required, how to derive WQBELs from applicable water quality criteria. The implementation procedures used to derive WQBELs for this analysis were based on the methods recommended in the EPA "Technical Support Document for Water Quality-based Toxics Control" (or TSD) EPA/505/2-90-001; March 1991). Specifically, a projected effluent quality (PEQ) was calculated and compared to the projected WQBEL. A PEQ is considered an effluent value statistically adjusted for uncertainty to estimate a maximum value that may occur.

For each facility, EPA performed an evaluation of reasonable potential to exceed WQBELs based on applicable water quality criteria to protect the proposed federal use designations (i.e., fish and wildlife). EPA considered any pollutant for which water quality criteria existed and for which data were available. EPA assumed that reasonable potential existed if a permit limit for the pollutant of concern was included in the existing permit for the facility. In the absence of a permit limit, but where monitoring data were available, EPA evaluated reasonable potential based on the monitoring data and the procedures contained in the TSD. To account for the possible effect of the oxygen demand potential from these facilities, EPA assumed that any discharger with a permit limit for dissolved oxygen, biochemical oxygen demand, or chemical oxygen demand had a

reasonable potential to exceed the dissolved oxygen criteria.

To calculate WQBELs, EPA used the TSD procedures to derive maximum daily and monthly average limits. Background concentrations were based on the average of data contained in STORET for upstream monitoring stations (including nearby tributaries); in the absence of background data, EPA assumed the background value to be zero. Critical low flows were extracted from the NPDES permit files or calculated from data contained in the United States Geological Survey (USGS) Daily Flow file data base for nearby gage stations. As required in Chapter 335 of the Alabama Department of Environmental Management Regulations, the 7-day, 10-year low flow (7Q10) was used for chronic aquatic life protection. In the absence of stream flow data, EPA conservatively assumed zero low flow. Once WQBELs were derived, EPA derived cost estimates that represent the cost to remove the incremental amount of pollutant(s) to levels needed to comply with WQBELs.

Prior to estimating compliance costs, an engineering analysis of how each facility could comply with the projected WQBEL was performed. The costs were then estimated based on the decisions and assumptions made in the analysis. To ensure consistency and reasonableness in estimating the general types of controls that would be necessary for a facility to comply with the proposal (assuming that implementation of the rule resulted in more stringent discharge requirements), as well as to integrate into the cost analysis the other alternatives available to regulated facilities, a costing decision matrix was used for each facility. Specific rules were established in the matrix to provide the reviewing engineers with guidance for consistently selecting options.

Under the decision matrix, costs for minor treatment plant operation and facility changes were considered first. Minor, low-cost modification or adjustment of existing treatment was determined to be feasible where literature indicated that the existing treatment process could achieve the projected WQBEL and where the additional pollutant reduction was relatively small (e.g., 10 to 25 percent of current discharge levels).

Where it was not technically feasible to simply adjust existing operations, the next most attractive control strategy was determined to be waste minimization/pollution prevention controls. However, costs for these controls were estimated only where they were considered feasible based on the reviewing

engineer's understanding of the process(es) at a facility. The practicality of techniques was determined based on several criteria established in the decision matrix. Decision considerations included the level of pollutant reduction achievable through waste minimization/pollution prevention techniques, appropriateness of waste minimization/pollution prevention for the specific pollutant, and knowledge of the manufacturing processes generating the pollutant of concern.

If waste minimization/pollution prevention alone was deemed not feasible to reduce pollutant levels to those needed to comply with the F&W-based WQBELs, a combination of waste minimization/pollution prevention, simple treatment, and/or process optimization was considered. If these relatively low-cost controls could not achieve the projected WQBELs, more expensive controls (e.g., end-of-pipe treatment) were considered.

The decision to add new treatment systems or to supplement existing treatment systems was based on a review of existing treatment at each facility. For determining the need for additional or supplemental treatment, sources of performance information included the EPA Office of Research and Development (ORD), Risk Reduction Engineering Laboratory's "RREL Treatability Database" (Version 4.0). The pollutant removal capabilities of the existing treatment systems and/or any proposed additional or supplemental systems were evaluated based on the following criteria: (1) The effluent levels that were being achieved currently at the facility; and (2) the levels that are documented in the EPA "RREL Treatability Database." If this analysis showed that additional treatment was needed, unit processes that would achieve compliance with the projected WQBELs were chosen using the same documentation.

Due to the uncertainty of the State's approach to implementation at this time, a range of costs was developed to represent a potential range of impacts based on certain implementation assumptions. The following generally

describes how the low-and high-end of the range of costs were developed for this study.

Under the low-end cost scenario, if the F&W-based permit limit was more stringent than existing effluent concentrations, costs were estimated for the incremental pollutant reductions required to achieve the F&W-based limit. In the absence of any monitoring data, it was assumed that no impact would occur even if a permit limit exists that is less stringent than the F&W-based permit limit. (It was assumed that if a permitted facility was not monitoring for a pollutant, it was not expected to be present in the effluent.) If monitoring data were available, but all values were reported below analytical detection levels, it was assumed that no costs would occur. Finally, if the estimated annualized cost for removal of a pollutant exceeded \$200 per toxic pounds-equivalent, it was assumed that dischargers would explore the use of alternative regulatory approaches. When it was assumed that facilities would pursue regulatory alternatives, no treatment cost was estimated for a facility. However, costs associated with the pursuit of the regulatory alternative were estimated for the facility and included in the total estimated costs for the proposal.

Under the high-end cost scenario, if the F&W-based permit limit was more stringent than the existing permit limit (or detectable effluent concentration in the absence of a permit limit), costs were estimated for the incremental pollutant reductions required to achieve the F&W-based limit. If there were no permit limit and all monitored values were reported below analytical detection levels, it was assumed that no impacts would occur. Finally, acknowledging that opportunities for the use of alternative regulatory approaches may be limited depending upon the particular circumstances for a facility, it was assumed that no alternative regulatory approaches would be allowed, and therefore, the \$200 per toxic pounds-equivalent trigger was removed from the decision matrix for the high-end cost scenario.

The \$200 per toxic pounds-equivalent trigger should not be construed as an absolute measure of when a facility should pursue regulatory alternatives or be granted relief from installing additional treatment. This trigger, based on the one used for the low-end in the EPA Assessment of Compliance Costs Resulting from Implementation of the Final Great Lakes Water Quality Guidance (March 13, 1995), was used to establish the low-end of a potential range of costs that reflects the flexibility available when implementing and complying with water quality-based permit limits. EPA acknowledges that some additional treatment costs could result from the rule for a facility, even if a regulatory alternative is granted for an individual pollutant. This could occur since some incremental level of treatment could be required as a condition of the action to grant the regulatory alternative. Therefore, the actual cost of this rule is expected to fall somewhere between the low-and high-end cost estimates. For this proposed action, EPA believes the actual cost will most likely occur below the mid-point of the estimated cost range because, as described earlier, EPA's methodology did not account for more cost-effective best management practices and control technologies that could be applied to other upstream and in-segment point and nonpoint sources of pollution to reduce or possibly eliminate treatment costs associated with industrial and municipal facilities discharging directly to stream segments covered by today's proposal.

C. Results for Stream Segments With Federal Use Designations

EPA identified 14 facilities that possess NPDES permits to discharge to stream segments with specific use designations for which new use designations are being proposed in this rule. Of these 14 facilities, 11 are classified as major dischargers, and 3 are classified as minor dischargers. The following table presents the universe of facilities EPA analyzed for today's proposed rulemaking.

SUMMARY OF DISCHARGERS TO STREAM SEGMENTS WITH PROPOSED FEDERAL USE DESIGNATIONS

Stream Segment	Facility name	NPDES permit number	Major (M)/minor (m) dis-charger	SIC code*
Buck Creek	Alabaster WWTP	AL0002801	M	4952
Cane Creek (Oakman Segment)	Oakman WWTP	AL0025348	m	4952
Chickasaw Creek	Chickasaw Lagoon	AL0020885	M	4952
Chickasaw Creek	Occidental Chemical	AL0003514	M	2812

SUMMARY OF DISCHARGERS TO STREAM SEGMENTS WITH PROPOSED FEDERAL USE DESIGNATIONS—Continued

Stream Segment	Facility name	NPDES permit number	Major (M)/minor (m) dis-charger	SIC code*
Chickasaw Creek	Shell Oil Company	AL0055859	M	2911
Chickasaw Creek	UOP Molecular Sieve	AL0002666	M	2819
Flint Creek	Hartselle WWTP	AL0054640	M	4952
Lost Creek	Carbon Hill WWTP	AL0024341	m	4952
Mobile River	International Paper—Mobile Mill	AL0002780	M	2621
Mobile River	Kimberly Clark Tissue	AL0002801	M	2621
Three Mile Creek	City of Mobile (Smith WWTP)	AL0023094	M	4952
Three Mile Creek	Cavenham Forest Industries	AL0001104	m	2491
Three Mile Creek	City of Prichard (Carlos A. Morris WWTP)	AL0023205	M	4952
Town and Cane (Jasper Segment) Creeks	Jasper WWTP	AL0023418	M	4952

* Standard Industrial Classification (SIC) Code.

Based on evaluation of the facilities that may be impacted, EPA estimates that the total potential cost resulting from new designations for the above nine stream segments will range from \$1.6 million to \$14.7 million. Under the low-end, the annual costs for individual facilities ranged from \$0 (i.e., no projected impact) to just over \$780,000. Under the low-end, four facilities were assumed to pursue alternative regulatory approaches. Under the high-end, the annual costs for individual facilities ranged from \$0 (i.e., no projected impact) to over \$8.6 million. Under the high-end, no facilities were assumed to pursue alternative regulatory approaches.

The total baseline pollutant load for the 14 facilities is approximately 240,000 toxic pound-equivalents per

year (pollutant toxic weights were derived using the EPA criterion for copper, 5.6 micrograms per liter, as the standardization factor). The pollutant load reduction under the low-end scenario is 20 percent or about 47,500 toxic pound-equivalents per year. Mercury accounts for over 99 percent of the total pollutant load reduction under the low-end. Under the high-end scenario, the pollutant load reduction is over 90 percent or over 218,000 toxic pound-equivalents per year. Mercury and chromium (VI) account for over 98 percent of the total pollutant load reduction under this scenario.

The overall cost-effectiveness is estimated to be \$34 per toxic pound-equivalent and \$67 per toxic pound-equivalent for the low-and high-end scenarios, respectively. Pollutant load

reductions associated with implementation of the proposed rule do not include estimates of load reductions from controls to comply with applicable Alabama dissolved oxygen criteria. Although costs were estimated for these controls and included in the estimated compliance costs for the proposal, the absence of toxic weights for dissolved oxygen prohibited calculation of toxic-weighted pollutant load reductions for this pollutant. As such, the cost-effectiveness for this proposal is significantly better than estimated above, which only accounts for loads reduced for toxic pollutants (e.g., mercury, lead and cadmium). The estimated costs and load reductions by pollutant, including those associated with compliance with the dissolved oxygen criteria, are presented below.

Pollutant	Low-end scenario		High-end scenario	
	Annual costs	Load reduction (lbs-eq/year)	Annual costs	Load reduction (lbs-eq/year)
Dissolved Oxygen	\$574,122	*406,905	\$3,775,568	*1,374,413
Cadmium	51,362	77	1,773,735	1,685
Chromium (VI)	7,239	0	1,720,120	26,325
Lead	61,034	340	1,916,628	2,066
Mercury	897,616	47,086	4,747,721	188,436
Zinc	9,864	0	749,197	199

*Pollutant load reductions for dissolved oxygen are presented as pounds of BOD reduced each year. Since a toxic weight does not exist for either dissolved oxygen or BOD, toxic-weighted load reductions could not be estimated and included in the total estimated pollutant load reduction for the proposal.

Under the low-end scenario, capital and operation & maintenance (O&M) costs account for over 75 percent of the total costs, and costs associated with pursuit of alternative regulatory approaches account for just over 12 percent of the annual costs. Under the high-end scenario, capital and O&M costs account for over 97 percent of the total costs. Under the low-end, which assumed that more aggressive controls

on indirect dischargers would be utilized (as compared to end-of-pipe treatment under the high-end), waste minimization costs accounted for 8 percent of the total estimated annual costs. Under the high-end, waste minimization costs account for 2 percent of the total annual costs. Under both scenarios, monitoring costs account for less than 1 percent.

EPA is requesting comments, data, and information for the 14 facilities that

could assist EPA in evaluating the potential costs to these facilities, including, but not limited to, descriptions of existing treatment systems and pollutant control systems; pollutants expected in effluent discharge; long-term average pollutant effluent concentrations; long-term average receiving water pollutant concentrations; and critical low flow

values for receiving water stream segments.

While EPA was only able to gather limited economic information on the affected facilities in the time allowed for this proposal, this information and EPA's regulatory impact analysis did not support a finding that the uses in today's rule are not attainable. EPA's analysis indicated that under the high-end scenario two facilities could potentially incur relatively higher costs when compared to the other 12 facilities subject to today's rule. In particular, EPA is concerned about the level of treatment estimated under the high-end scenario that may be required of municipal facilities discharging to Three Mile and Chickasaw Creek if regulatory alternatives such as TMDLs and site-specific criteria are not pursued. It is reasonable to expect, however, that the State or affected municipalities will not ignore regulatory alternatives and implementation options that could, if pursued, substantially reduce the costs to facilities discharging to streams covered by today's proposal.

In addition, EPA is also concerned about the levels of mercury being discharged into Chickasaw Creek. If the limited mercury data are accurate, these levels could present a significant risk to individuals fishing and recreating in this watershed. EPA suspects that the limited discharge data on mercury are inaccurate because the information for one municipal facility indicates that it may be discharging mercury at levels over 1,000 times higher than effluent concentrations observed by EPA using "clean" analytical detection methods. EPA will work with the State to further evaluate the validity of the data.

EPA could not conclude based on the information gathered prior to proposal that costs estimated for this action are not justified or would result in widespread social and economic impact. Should such information become available for any of the facilities, the Agency would consider this information for the final rule. EPA is committed to working with the State and the various stakeholders affected by this rule to ensure protection of public health and the environment, and that costs remain reasonable.

VI. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this proposed rule is not a "significant regulatory action" under the terms of Executive Order 12866, and is therefore not subject to OMB review.

VII. Regulatory Flexibility Act as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), federal agencies generally are required to conduct an initial regulatory flexibility analysis (IRFA) describing the impact of the regulatory action on small entities as part of a proposed rulemaking. However, under section 605(b) of the RFA, if the Administrator for the agency certifies that the proposed rule will not have a significant economic impact on a substantial number of small entities, the agency is not required to prepare an IRFA. The Administrator is today certifying, pursuant to section 605(b) of the RFA, that this proposed rule will not have a significant economic impact on a substantial number of small entities. Therefore, the Agency did not prepare an initial regulatory flexibility analysis.

Under the CWA water quality standards program, states must adopt water quality standards for their waters that must be submitted to EPA for approval; if the Agency disapproves a State standard and the State does not adopt appropriate revisions to address EPA's disapproval, EPA must promulgate standards consistent with the statutory requirements. EPA has authority to promulgate criteria or standards in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of the Act. These State standards (or EPA-promulgated standards) are implemented through various water quality control programs including the National Pollutant Discharge Elimination System (NPDES)

program that limits discharges to navigable waters except in compliance with an EPA permit or permit issued under an approved State program. The CWA requires that all NPDES permits must include any limits on discharges that are necessary to meet State water quality standards.

Thus, under the CWA, EPA's promulgation of water quality standards establishes standards that the State implements through the NPDES permit process. The State has discretion in deciding how to meet the water quality standards and in developing discharge limits as needed to meet the standards. While the State's implementation of federally-promulgated water quality standards may result in new or revised discharge limits being placed on small entities, the standards themselves do not apply to any discharger, including small entities.

Today's proposed rule, as explained above, does not itself establish any requirements that are applicable to small entities. As a result of this action, the State of Alabama will need to ensure that permits it issues include any limitations on discharges necessary to comply with the standards established in the final rule. In doing so, the State will have a number of discretionary choices associated with permit writing. While Alabama's implementation of the final rule may ultimately result in some new or revised permit conditions for some dischargers, including small entities, EPA's action today does not impose any of these as yet unknown requirements on small entities.

The RFA requires analysis of the impacts of a rule on the small entities subject to the rule's requirements. See *United States Distribution Companies v. FERC*, 88 F.3d 1105, 1170 (D.C. Cir. 1996). Today's proposed rule establishes no requirements applicable to small entities, and so is not susceptible to regulatory flexibility analysis as prescribed by the RFA. ("[N]o [regulatory flexibility] analysis is necessary when an agency determines that the rule will not have a significant economic impact on a substantial number of small entities that are subject to the requirements of the rule," *United Distribution* at 1170, quoting *Mid-Tex Elec. Co-op v. FERC*, 773 F.2d 327, 342 (D.C. Cir. 1985) (emphasis added by *United Distribution* court).) The Agency is thus certifying that today's proposed rule will not have a significant economic impact on a substantial number of small entities, within the meaning of the RFA.

VIII. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal Mandates" that may result in expenditures to State, local, and Tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including Tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of the affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's proposed rule contains no federal mandates (under the regulatory provisions of Title II of the UMRA) for State, local or Tribal governments or the private sector. The proposed rule imposes no enforceable duty on the State or any local government or the private sector; rather, this rule proposes designated uses for certain stream segments of Alabama, which, when combined with State adopted water quality criteria constitute water quality standards for those stream segments. The State may use these resulting water quality standards in implementing its water quality control programs. Today's proposed rule does not regulate or affect any entity and therefore, is not subject

to the requirements of sections 202 and 205 of the UMRA.

EPA has determined that this proposed rule contains no regulatory requirements that might significantly or uniquely affect small governments. As stated above, the rule imposes no enforceable requirements on any party, including small governments. Moreover, any water quality standards, including those proposed here, apply broadly to dischargers and are not uniquely applicable to small governments. Thus, this proposed rule is not subject to the requirements of section 203 of UMRA.

IX. Paperwork Reduction Act

This action requires no new or additional information collection activities subject to the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*). Therefore, no Information Collection request will be submitted to the Office of Management and Budget for review in compliance with the Paperwork Reduction Act.

X. Executive Order 12875

Under Executive Order 12875, EPA may not issue a regulation that is not required by statute and that creates a mandate upon a State, local or Tribal government unless the Federal Government provides the necessary funds to pay the direct costs incurred by the State, local or Tribal government or EPA provides to the Office of Management and Budget a description of the extent of the prior consultation and written communications with representatives of affected State, local and Tribal governments and an Agency statement supporting the need to issue the regulation. In addition, Executive Order 12875 requires EPA to develop an effective process permitting elected officials and other representatives of State, local and Tribal governments "to provide meaningful and timely input in the development of regulatory proposals containing significant unfunded mandates."

For the same reasons as stated above in section VIII., EPA has determined this proposed rule does not impose federal mandates on State, local or Tribal governments. Moreover, this rulemaking proposal is required by statute. See CWA 303(c)(4) (requiring the Administrator to promptly propose regulations setting forth revised or new water quality standards where the Agency has disapproved State standards as being inconsistent with the Act). Thus today's proposed rule is not subject to E.O. 12875.

Nonetheless, EPA has involved State and local governments in the development of this rule. Prior to this

proposed rulemaking action, EPA had numerous phone calls, meetings and exchanges of written correspondence with representatives of Alabama's Division of Environmental Management to discuss EPA's concerns with the State's water quality standards, possible remedies for addressing the disapproved sections of the water quality standards, the use designations in today's proposal and the federal rulemaking process. The data and descriptive information from these exchanges was essential to evaluating and analyzing the attainment of use designations for the nine stream segments in today's proposal. In addition, EPA issued a notice in the **Federal Register** on January 29, 1997, requesting information from the public on specific streams in Alabama, and held a public hearing in Montgomery, Alabama on February 26, 1997. EPA will continue to work with affected parties before finalizing these water quality standards for Alabama.

EPA has scheduled a public hearing on April 22, 1998, in Montgomery, Alabama. EPA's public notification process is targeting parties across a wide range of interests, both within and outside of government, to ensure them the opportunity for involvement. For additional information contact the person listed under the **FOR ADDITIONAL INFORMATION CONTACT** section at the beginning of this preamble.

XI. Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires federal agencies, in consultation with the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS), to ensure their actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat of such species which have been designated as "critical." Consultation is designed to assist federal agencies in complying with the requirements of section 7 by supplying a process within which FWS and NMFS provide such agencies with advice and guidance on whether an action complies with the substantive requirements of ESA.

As a result of consultation under section 7 of the ESA between EPA and FWS, the FWS issued a biological opinion dated October 8, 1997 regarding the State of Alabama's Water Quality Standards program. The opinion determined that the Alabama water quality standards program is not likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of species' critical habitat. The opinion also concluded that the standards will

result in "take" of listed species, including water bodies classified with the Fish and Wildlife use. An Incidental Take Statement was issued with the opinion that authorizes "take" associated with the Alabama Water Quality Standard program. Within the body of the opinion, the FWS stated that:

Any reclassification and/or classification of uses to less than fishable/swimmable in stream segments harboring listed species would be subject to section 7 (of the ESA) consultation on a case-by-case basis, and would include an evaluation of the appropriateness of criteria values at that time. (page 29)

In a letter dated June 5, 1997, the Fish and Wildlife Service notified EPA that further consultation will not be necessary for actions establishing F&W use designations for Alabama stream segments. In today's proposed federal rulemaking, EPA is proposing F&W use designations for nine stream segments.

XII. National Technology Transfer and Advancement Act

Under section 12(d) of the National Technology Transfer and Advancement

Act (NTTAA), the Agency is required to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, business practices, etc.) that are developed or adopted by voluntary consensus standard bodies. Where available and potentially applicable voluntary consensus standards are not used by EPA, the Act requires the Agency to provide Congress, through the Office and Management and Budget, an explanation of the reasons for not using such standards.

The Agency does not believe that this proposed rule addresses any technical standards subject to the NTTAA. A commenter who disagrees with this conclusion should indicate how today's notice is subject to the NTTAA and identify any potentially applicable voluntary consensus standards.

List of Subjects in 40 CFR Part 131

Environmental protection, Intergovernmental relations, Water pollution control.

Dated: February 27, 1998.

Carol M. Browner,
Administrator.

For the reasons set forth in the preamble, EPA proposes to amend 40 CFR Part 131 as follows:

PART 131—WATER QUALITY STANDARDS

1. The authority citation for part 131 continues to read as follows:

Authority: 33 U.S.C. 1251 et seq.

Subpart D—[Amended]

2. Section 131.34 is added to read as follows:

§ 131.34 Alabama.

(a) *Use designations for surface waters.* In addition to the State adopted use designations, the following water body segments in Alabama have the beneficial uses designated in paragraph (a) of this section.

Basin	Stream Segment	From	To	Classification
CAHABA	Buck Creek	Cahaba Valley Creek	Shelby Co. Road 44	FISH&WILDLIFE.
MOBILE BAY	Chickasaw Creek	Mobile River	Limits of Tidal Effects (Highway 43).	FISH&WILDLIFE.
MOBILE BAY	Mobile River	Its Mouth	Spanish River	FISH&WILDLIFE.
MOBILE BAY	Three Mile Creek	Mobile River	Its Source	FISH&WILDLIFE.
TENNESSEE	Flint Creek	Alabama Highway 36	Shoal Creek	FISH&WILDLIFE.
WARRIOR	Cane Creek (Jasper)	Mulberry Fork	Town Creek	FISH&WILDLIFE.
WARRIOR	Cane Creek (Oakman)	County Road 2.5 Miles Southeast of Oakman.	Alabama Highway 69	FISH&WILDLIFE.
WARRIOR	Lost Creek	Downey Branch	US Highway 78 crossing one mile southeast of Carbon Hill.	FISH&WILDLIFE.
WARRIOR	Town Creek	Cane Creek (Jasper)	100 Yards Upstream of Southern Railway Crossing (1.1 Miles Upstream of Cane Creek).	FISH&WILDLIFE.

(b) *Water quality standard variances.*

(1) The Regional Administrator, EPA Region 4, is authorized to grant variances from the water quality standards in paragraph (a) of this section where the requirements of this paragraph (b) are met. A water quality standard variance applies only to the permittee requesting the variance and only to the pollutant or pollutants specified in the variance; the underlying water quality standard otherwise remains in effect.

(2) A water quality standard variance shall not be granted if:

(i) Standards will be attained by implementing effluent limitations required under sections 301(b) and 306

of the CWA and by the permittee implementing reasonable best management practices for nonpoint source control; or

(ii) The variance would likely jeopardize the continued existence of any threatened or endangered species listed under section 4 of the Endangered Species Act or result in the destruction or adverse modification of such species' critical habitat.

(3) Subject to paragraph (b)(2) of this section, a water quality standards variance may be granted if the applicant demonstrates to EPA that attaining the water quality standard is not feasible because:

(i) Naturally occurring pollutant concentrations prevent the attainment of the use; or

(ii) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or

(iii) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(iv) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way which would result in the attainment of the use; or

(v) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like unrelated to water quality, preclude attainment of aquatic life protection uses; or

(vi) Controls more stringent than those required by sections 301(b) and 306 of the CWA would result in substantial and widespread economic and social impact.

(4) *Procedures.* An applicant for a water quality standards variance shall submit a request to the Regional Administrator of EPA Region 4. The application shall include all relevant information showing that the requirements for a variance have been satisfied. The burden is on the applicant to demonstrate to EPA's satisfaction that the designated use is unattainable for one of the reasons specified in paragraph (b)(3) of this section. If the Regional Administrator preliminarily determines that grounds exist for granting a variance, he shall provide public notice of the proposed variance and provide an opportunity for public comment. Any activities required as a condition of the Regional Administrator's granting of a variance shall be included as conditions of the NPDES permit for the applicant. These terms and conditions shall be incorporated into the applicant's NPDES permit through the permit reissuance process or through a modification of the permit pursuant to the applicable permit modification provisions of Alabama's NPDES program.

(5) A variance may not exceed 3 years or the term of the NPDES permit, whichever is less. A variance may be renewed if the applicant reapplies and demonstrates that the use in question is still not attainable. Renewal of the variance may be denied if the applicant did not comply with the conditions of the original variance, or otherwise does not meet the requirements of this section.

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FEDERAL EMERGENCY MANAGEMENT AGENCY

44 CFR Part 206

RIN 3067-AC72

Disaster Assistance; the Declaration Process

AGENCY: Federal Emergency Management Agency (FEMA).

ACTION: Proposed rule, with request for comments.

SUMMARY: This proposed rule would establish the financial criteria under which a cost-share adjustment would be granted for permanent restorative work and for emergency work unless otherwise adjusted, and caps that cost-share at 90 percent Federal. Secondly, it would phase in the threshold for granting cost-share adjustments to current dollars over a two-year period, and would allow that threshold to be adjusted annually for inflation.

DATES: We invite your comments, which may be submitted on or before May 4, 1998.

ADDRESSES: Please send any comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street SW., room 840, Washington, DC 20472, (facsimile) 202-646-4536.

FOR FURTHER INFORMATION CONTACT: Patricia Stahlschmidt, Response and Recovery Directorate, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, 202-646-4066, (facsimile) 202-646-4060.

SUPPLEMENTARY INFORMATION:

Background

In 1985, the State of West Virginia was struck with an extraordinarily severe disaster (753-DR), for which a cost-share adjustment was granted to the normal 75 percent Federal/25 percent non-Federal cost-share of assistance under sections 403 and 406 of the Disaster Relief Act of 1974 (later amended and named the Robert T. Stafford Disaster Relief and Emergency Assistance Act). (For purposes of this rule the Disaster Relief Act and its successor are called the Stafford Act). That disaster had an impact of \$64 dollars (of Stafford Act costs) per capita, based on statewide population. Since Hurricane Hugo in 1989, a number of extraordinary disasters have continued to occur throughout the United States causing significant impact to the local, State, and Federal governments.

FEMA has used the precedent set in the 1985 West Virginia disaster as a gauge to determine when to recommend

to the President that cost-share adjustments be granted. However, in keeping with the supplemental nature of Federal assistance under the Stafford Act, adjustments were granted to the cost-share only in those rare instances when the disaster had an extraordinary impact.

Since 1985, over 435 major disaster declarations have been made under the Stafford Act and its predecessor. Yet, only 32 cost-share adjustments have been granted. Moreover, since Hurricane Andrew occurred in 1992, there have been no cost-share adjustments for permanent restorative work with greater than a 90% Federal share. This also serves to maintain the supplemental nature of Federal disaster assistance, and ensures at least some level of non-Federal cost-share for disaster assistance.

The purpose of this proposed rule would be two-fold. First, it would establish in regulation the financial criteria under which a cost-share adjustment could be granted for permanent restorative work under section 406 of the Stafford Act, and for emergency work under sections 403 and 407 under the Stafford Act, if not otherwise adjusted for the disaster, and caps that cost-share at 90 percent Federal. Secondly, this proposed rule would phase in the threshold for granting cost-share adjustments to current dollars over a two-year period, and would allow that threshold to be adjusted annually for inflation. Since 1985, the threshold for granting cost-share adjustments has been \$64 per capita. In current dollars, that figure would be raised to \$100 per capita. (Per capita costs are based on actual obligations under the Stafford Act only, excluding FEMA administrative costs and the non-Federal cost-share).

This rule would apply only to sections 403, 406, and 407 of the Stafford Act, which stipulate that the Federal share of assistance will not be less than 75 percent of the total eligible costs. The Stafford Act contains no provision for waiver of cost-sharing for the Individual and Family Grant program (section 411), the construction or site development costs at a manufactured home group site (section 408), or the Hazard Mitigation program (section 404). The Federal share of grants under these sections is limited by law to 75 percent of the total eligible costs.

In order to retain the supplemental nature of disaster assistance, the Consumer Price Index for All Urban Consumers published by the Department of Labor has been applied to the 1985 \$64 per capita figure to raise