

priority water quality problems identified in the State's water quality assessment under section 305(b).

(e) EPA, States, areawide agencies, interstate agencies, local and Regional governments, and designated management agencies (DMAs) are joint participants in the water pollution control program. States may enter into contractual arrangements or intergovernmental agreements with other agencies concerning the performance of water quality planning and management tasks. Such arrangements shall reflect the capabilities of the respective agencies and shall efficiently utilize available funds and funding eligibilities to meet Federal requirements commensurate with State and local priorities. State work programs under section 205(j) shall be developed jointly with local, Regional and other comprehensive planning organizations.

**§ 130.12 Coordination with other programs.**

(a) Relationship to the National Pollutant Discharge Elimination System (NPDES) program. In accordance with section 208(e) of the Act, no NPDES permit may be issued which is in conflict with an approved Water Quality Management (WQM) plan. Where a State has assumed responsibility for the administration of the permit program under section 402, it shall assure consistency with the WQM plan.

(b) Relationship to the municipal construction grants program. In accordance with sections 205(j), 216 and 303(e)(3)(H) of the Act, each State shall develop a system for setting priorities for funding construction of municipal wastewater treatment facilities under section 201 of the Act. The State, or the agency to which the State has delegated WQM planning functions, shall review each facility plan in its area for consistency with the approved WQM plan. Under section 208(d) of the Act, after a waste treatment management agency has been designated and a WQM plan approved, section 201 construction grant funds may be awarded only to those agencies for construction of treatment works in conformity with the approved WQM plan.

(c) Relationship to Federal activities—Each department, agency or in-

strumentality of the executive, legislative and judicial branches of the Federal Government having jurisdiction over any property or facility or engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants shall comply with all Federal, State, interstate and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner and extent as any non-governmental entity in accordance with section 313 of the CWA.

**§ 130.15 Processing application for Indian tribes.**

The Regional Administrator shall process an application of an Indian Tribe submitted under § 130.6(d) in a timely manner. He shall promptly notify the Indian Tribe of receipt of the application.

[54 FR 14360, Apr. 11, 1989, as amended at 59 FR 13818, Mar. 23, 1994]

**PART 131—WATER QUALITY STANDARDS**

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AUTHORITY: 33 U.S.C. 1251 *et seq.*

SOURCE: 48 FR 51405, Nov. 8, 1983, unless otherwise noted.

### Subpart A—General Provisions

#### § 131.1 Scope.

This part describes the requirements and procedures for developing, reviewing, revising, and approving water quality standards by the States as authorized by section 303(c) of the Clean Water Act. Additional specific procedures for developing, reviewing, revising, and approving water quality standards for Great Lakes States or Great Lakes Tribes (as defined in 40 CFR 132.2) to conform to section 118 of the Clean Water Act and 40 CFR part 132, are provided in 40 CFR part 132.

[60 FR 15386, Mar. 23, 1995]

#### § 131.2 Purpose.

A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (the Act). “Serve the purposes of the Act” (as defined in sections 101(a)(2) and 303(c) of the Act) means that water quality standards should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value of public water supplies, propagation of fish, shellfish, and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes including navigation.

Such standards serve the dual purposes of establishing the water quality goals for a specific water body and serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act.

#### § 131.3 Definitions.

(a) *The Act* means the Clean Water Act (Pub. L. 92-500, as amended (33 U.S.C. 1251 *et seq.*)).

(b) *Criteria* are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

(c) *Section 304(a) criteria* are developed by EPA under authority of section 304(a) of the Act based on the latest scientific information on the relationship that the effect of a constituent concentration has on particular aquatic species and/or human health. This information is issued periodically to the States as guidance for use in developing criteria.

(d) *Toxic pollutants* are those pollutants listed by the Administrator under section 307(a) of the Act.

(e) *Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.

(f) *Designated uses* are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

(g) *Use attainability analysis* is a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in § 131.10(g).

(h) *Water quality limited segment* means any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act.

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(i) *Water quality standards* are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

(j) *States* include: The 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and Indian Tribes that EPA determines to be eligible for purposes of water quality standards program.

(k) *Federal Indian Reservation, Indian Reservation, or Reservation* means all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation."

(l) *Indian Tribe* or *Tribe* means any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian reservation.

[48 FR 51405, Nov. 8, 1983, as amended at 56 FR 64893, Dec. 12, 1991; 59 FR 64344, Dec. 14, 1994]

#### § 131.4 State authority.

(a) States (as defined in § 131.3) are responsible for reviewing, establishing, and revising water quality standards. As recognized by section 510 of the Clean Water Act, States may develop water quality standards more stringent than required by this regulation. Consistent with section 101(g) and 518(a) of the Clean Water Act, water quality standards shall not be construed to supersede or abrogate rights to quantities of water.

(b) States (as defined in § 131.3) may issue certifications pursuant to the requirements of Clean Water Act section 401. Revisions adopted by States shall be applicable for use in issuing State certifications consistent with the provisions of § 131.21(c).

(c) Where EPA determines that a Tribe is eligible to the same extent as

a State for purposes of water quality standards, the Tribe likewise is eligible to the same extent as a State for purposes of certifications conducted under Clean Water Act section 401.

[56 FR 64893, Dec. 12, 1991, as amended at 59 FR 64344, Dec. 14, 1994]

#### § 131.5 EPA authority.

(a) Under section 303(c) of the Act, EPA is to review and to approve or disapprove State-adopted water quality standards. The review involves a determination of:

(1) Whether the State has adopted water uses which are consistent with the requirements of the Clean Water Act;

(2) Whether the State has adopted criteria that protect the designated water uses;

(3) Whether the State has followed its legal procedures for revising or adopting standards;

(4) Whether the State standards which do not include the uses specified in section 101(a)(2) of the Act are based upon appropriate technical and scientific data and analyses, and

(5) Whether the State submission meets the requirements included in § 131.6 of this part and, for Great Lakes States or Great Lakes Tribes (as defined in 40 CFR 132.2) to conform to section 118 of the Act, the requirements of 40 CFR part 132.

(b) If EPA determines that the State's or Tribe's water quality standards are consistent with the factors listed in paragraphs (a)(1) through (a)(5) of this section, EPA approves the standards. EPA must disapprove the State's or Tribe's water quality standards and promulgate Federal standards under section 303(c)(4), and for Great Lakes States or Great Lakes Tribes under section 118(c)(2)(C) of the Act, if State or Tribal adopted standards are not consistent with the factors listed in paragraphs (a)(1) through (a)(5) of this section. EPA may also promulgate a new or revised standard when necessary to meet the requirements of the Act.

(c) Section 401 of the Clean Water Act authorizes EPA to issue certifications pursuant to the requirements of section 401 in any case where a State or

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interstate agency has no authority for issuing such certifications.

[48 FR 51405, Nov. 8, 1983, as amended at 56 FR 64894, Dec. 12, 1991; 60 FR 15387, Mar. 23, 1995]

### **§ 131.6 Minimum requirements for water quality standards submission.**

The following elements must be included in each State's water quality standards submitted to EPA for review:

- (a) Use designations consistent with the provisions of sections 101(a)(2) and 303(c)(2) of the Act.
- (b) Methods used and analyses conducted to support water quality standards revisions.
- (c) Water quality criteria sufficient to protect the designated uses.
- (d) An antidegradation policy consistent with § 131.12.
- (e) Certification by the State Attorney General or other appropriate legal authority within the State that the water quality standards were duly adopted pursuant to State law.
- (f) General information which will aid the Agency in determining the adequacy of the scientific basis of the standards which do not include the uses specified in section 101(a)(2) of the Act as well as information on general policies applicable to State standards which may affect their application and implementation.

### **§ 131.7 Dispute resolution mechanism.**

(a) Where disputes between States and Indian Tribes arise as a result of differing water quality standards on common bodies of water, the lead EPA Regional Administrator, as determined based upon OMB circular A-105, shall be responsible for acting in accordance with the provisions of this section.

(b) The Regional Administrator shall attempt to resolve such disputes where:

- (1) The difference in water quality standards results in unreasonable consequences;
- (2) The dispute is between a State (as defined in § 131.3(j) but exclusive of all Indian Tribes) and a Tribe which EPA has determined is eligible to the same extent as a State for purposes of water quality standards;

(3) A reasonable effort to resolve the dispute without EPA involvement has been made;

(4) The requested relief is consistent with the provisions of the Clean Water Act and other relevant law;

(5) The differing State and Tribal water quality standards have been adopted pursuant to State and Tribal law and approved by EPA; and

(6) A valid written request has been submitted by either the Tribe or the State.

(c) Either a State or a Tribe may request EPA to resolve any dispute which satisfies the criteria of paragraph (b) of this section. Written requests for EPA involvement should be submitted to the lead Regional Administrator and must include:

- (1) A concise statement of the unreasonable consequences that are alleged to have arisen because of differing water quality standards;
- (2) A concise description of the actions which have been taken to resolve the dispute without EPA involvement;
- (3) A concise indication of the water quality standards provision which has resulted in the alleged unreasonable consequences;
- (4) Factual data to support the alleged unreasonable consequences; and
- (5) A statement of the relief sought from the alleged unreasonable consequences.

(d) Where, in the Regional Administrator's judgment, EPA involvement is appropriate based on the factors of paragraph (b) of this section, the Regional Administrator shall, within 30 days, notify the parties in writing that he/she is initiating an EPA dispute resolution action and solicit their written response. The Regional Administrator shall also make reasonable efforts to ensure that other interested individuals or groups have notice of this action. Such efforts shall include but not be limited to the following:

- (1) Written notice to responsible Tribal and State Agencies, and other affected Federal agencies,
- (2) Notice to the specific individual or entity that is alleging that an unreasonable consequence is resulting from differing standards having been adopted on a common body of water,

(3) Public notice in local newspapers, radio, and television, as appropriate,

(4) Publication in trade journal newsletters, and

(5) Other means as appropriate.

(e) If in accordance with applicable State and Tribal law an Indian Tribe and State have entered into an agreement that resolves the dispute or establishes a mechanism for resolving a dispute, EPA shall defer to this agreement where it is consistent with the Clean Water Act and where it has been approved by EPA.

(f) EPA dispute resolution actions shall be consistent with one or a combination of the following options:

(1) *Mediation.* The Regional Administrator may appoint a mediator to mediate the dispute. Mediators shall be EPA employees, employees from other Federal agencies, or other individuals with appropriate qualifications.

(i) Where the State and Tribe agree to participate in the dispute resolution process, mediation with the intent to establish Tribal-State agreements, consistent with Clean Water Act section 518(d), shall normally be pursued as a first effort.

(ii) Mediators shall act as neutral facilitators whose function is to encourage communication and negotiation between all parties to the dispute.

(iii) Mediators may establish advisory panels, to consist in part of representatives from the affected parties, to study the problem and recommend an appropriate solution.

(iv) The procedure and schedule for mediation of individual disputes shall be determined by the mediator in consultation with the parties.

(v) If formal public hearings are held in connection with the actions taken under this paragraph, Agency requirements at 40 CFR 25.5 shall be followed.

(2) *Arbitration.* Where the parties to the dispute agree to participate in the dispute resolution process, the Regional Administrator may appoint an arbitrator or arbitration panel to arbitrate the dispute. Arbitrators and panel members shall be EPA employees, employees from other Federal agencies, or other individuals with appropriate qualifications. The Regional administrator shall select as arbitrators and arbitration panel members in-

dividuals who are agreeable to all parties, are knowledgeable concerning the requirements of the water quality standards program, have a basic understanding of the political and economic interests of Tribes and States involved, and are expected to fulfill the duties fairly and impartially.

(i) The arbitrator or arbitration panel shall conduct one or more private or public meetings with the parties and actively solicit information pertaining to the effects of differing water quality permit requirements on upstream and downstream dischargers, comparative risks to public health and the environment, economic impacts, present and historical water uses, the quality of the waters subject to such standards, and other factors relevant to the dispute, such as whether proposed water quality criteria are more stringent than necessary to support designated uses, more stringent than natural background water quality or whether designated uses are reasonable given natural background water quality.

(ii) Following consideration of relevant factors as defined in paragraph (f)(2)(i) of this section, the arbitrator or arbitration panel shall have the authority and responsibility to provide all parties and the Regional Administrator with a written recommendation for resolution of the dispute. Arbitration panel recommendations shall, in general, be reached by majority vote. However, where the parties agree to binding arbitration, or where required by the Regional Administrator, recommendations of such arbitration panels may be unanimous decisions. Where binding or non-binding arbitration panels cannot reach a unanimous recommendation after a reasonable period of time, the Regional Administrator may direct the panel to issue a non-binding decision by majority vote.

(iii) The arbitrator or arbitration panel members may consult with EPA's Office of General Counsel on legal issues, but otherwise shall have no *ex parte* communications pertaining to the dispute. Federal employees who are arbitrators or arbitration panel members shall be neutral and shall not be predisposed for or against the position of any disputing party based on

any Federal Trust responsibilities which their employers may have with respect to the Tribe. In addition, arbitrators or arbitration panel members who are Federal employees shall act independently from the normal hierarchy within their agency.

(iv) The parties are not obligated to abide by the arbitrator's or arbitration panel's recommendation unless they voluntarily entered into a binding agreement to do so.

(v) If a party to the dispute believes that the arbitrator or arbitration panel has recommended an action contrary to or inconsistent with the Clean Water Act, the party may appeal the arbitrator's recommendation to the Regional Administrator. The request for appeal must be in writing and must include a description of the statutory basis for altering the arbitrator's recommendation.

(vi) The procedure and schedule for arbitration of individual disputes shall be determined by the arbitrator or arbitration panel in consultation with parties.

(vii) If formal public hearings are held in connection with the actions taken under this paragraph, Agency requirements at 40 CFR 25.5 shall be followed.

(3) *Dispute resolution default procedure.* Where one or more parties (as defined in paragraph (g) of this section) refuse to participate in either the mediation or arbitration dispute resolution processes, the Regional Administrator may appoint a single official or panel to review available information pertaining to the dispute and to issue a written recommendation for resolving the dispute. Review officials shall be EPA employees, employees from other Federal agencies, or other individuals with appropriate qualifications. Review panels shall include appropriate members to be selected by the Regional Administrator in consultation with the participating parties. Recommendations of such review officials or panels shall, to the extent possible given the lack of participation by one or more parties, be reached in a manner identical to that for arbitration of disputes specified in paragraphs (f)(2)(i) through (f)(2)(vii) of this section.

(g) *Definitions.* For the purposes of this section:

(1) *Dispute Resolution Mechanism* means the EPA mechanism established pursuant to the requirements of Clean Water Act section 518(e) for resolving unreasonable consequences that arise as a result of differing water quality standards that may be set by States and Indian Tribes located on common bodies of water.

(2) *Parties* to a State-Tribal dispute include the State and the Tribe and may, at the discretion of the Regional Administrator, include an NPDES permittee, citizen, citizen group, or other affected entity.

[56 FR 64894, Dec. 12, 1991, as amended at 59 FR 64344, Dec. 14, 1994]

**§ 131.8 Requirements for Indian Tribes to administer a water quality standards program.**

(a) The Regional Administrator, as determined based on OMB Circular A-105, may accept and approve a tribal application for purposes of administering a water quality standards program if the Tribe meets the following criteria:

(1) The Indian Tribe is recognized by the Secretary of the Interior and meets the definitions in § 131.3 (k) and (l),

(2) The Indian Tribe has a governing body carrying out substantial governmental duties and powers,

(3) The water quality standards program to be administered by the Indian Tribe pertains to the management and protection of water resources which are within the borders of the Indian reservation and held by the Indian Tribe, within the borders of the Indian reservation and held by the United States in trust for Indians, within the borders of the Indian reservation and held by a member of the Indian Tribe if such property interest is subject to a trust restriction on alienation, or otherwise within the borders of the Indian reservation, and

(4) The Indian Tribe is reasonably expected to be capable, in the Regional Administrator's judgment, of carrying out the functions of an effective water quality standards program in a manner consistent with the terms and purposes of the Act and applicable regulations.

(b) Requests by Indian Tribes for administration of a water quality standards program should be submitted to the lead EPA Regional Administrator. The application shall include the following information:

(1) A statement that the Tribe is recognized by the Secretary of the Interior.

(2) A descriptive statement demonstrating that the Tribal governing body is currently carrying out substantial governmental duties and powers over a defined area. The statement should:

(i) Describe the form of the Tribal government;

(ii) Describe the types of governmental functions currently performed by the Tribal governing body such as, but not limited to, the exercise of police powers affecting (or relating to) the health, safety, and welfare of the affected population, taxation, and the exercise of the power of eminent domain; and

(iii) Identify the source of the Tribal government's authority to carry out the governmental functions currently being performed.

(3) A descriptive statement of the Indian Tribe's authority to regulate water quality. The statement should include:

(i) A map or legal description of the area over which the Indian Tribe asserts authority to regulate surface water quality;

(ii) A statement by the Tribe's legal counsel (or equivalent official) which describes the basis for the Tribes assertion of authority and which may include a copy of documents such as Tribal constitutions, by-laws, charters, executive orders, codes, ordinances, and/or resolutions which support the Tribe's assertion of authority; and

(iii) An identification of the surface waters for which the Tribe proposes to establish water quality standards.

(4) A narrative statement describing the capability of the Indian Tribe to administer an effective water quality standards program. The narrative statement should include:

(i) A description of the Indian Tribe's previous management experience which may include the administration of programs and services authorized by

the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 *et seq.*), the Indian Mineral Development Act (25 U.S.C. 2101 *et seq.*), or the Indian Sanitation Facility Construction Activity Act (42 U.S.C. 2004a);

(ii) A list of existing environmental or public health programs administered by the Tribal governing body and copies of related Tribal laws, policies, and regulations;

(iii) A description of the entity (or entities) which exercise the executive, legislative, and judicial functions of the Tribal government;

(iv) A description of the existing, or proposed, agency of the Indian Tribe which will assume primary responsibility for establishing, reviewing, implementing and revising water quality standards;

(v) A description of the technical and administrative capabilities of the staff to administer and manage an effective water quality standards program or a plan which proposes how the Tribe will acquire additional administrative and technical expertise. The plan must address how the Tribe will obtain the funds to acquire the administrative and technical expertise.

(5) Additional documentation required by the Regional Administrator which, in the judgment of the Regional Administrator, is necessary to support a Tribal application.

(6) Where the Tribe has previously qualified for eligibility or "treatment as a state" under a Clean Water Act or Safe Drinking Water Act program, the Tribe need only provide the required information which has not been submitted in a previous application.

(c) Procedure for processing an Indian Tribe's application.

(1) The Regional Administrator shall process an application of an Indian Tribe submitted pursuant to § 131.8(b) in a timely manner. He shall promptly notify the Indian Tribe of receipt of the application.

(2) Within 30 days after receipt of the Indian Tribe's application the Regional Administrator shall provide appropriate notice. Notice shall:

(i) Include information on the substance and basis of the Tribe's assertion of authority to regulate the quality of reservation waters; and

(ii) Be provided to all appropriate governmental entities.

(3) The Regional Administrator shall provide 30 days for comments to be submitted on the Tribal application. Comments shall be limited to the Tribe's assertion of authority.

(4) If a Tribe's asserted authority is subject to a competing or conflicting claim, the Regional Administrator, after due consideration, and in consideration of other comments received, shall determine whether the Tribe has adequately demonstrated that it meets the requirements of § 131.8(a)(3).

(5) Where the Regional Administrator determines that a Tribe meets the requirements of this section, he shall promptly provide written notification to the Indian Tribe that the Tribe is authorized to administer the Water Quality Standards program.

[56 FR 64895, Dec. 12, 1991, as amended at 59 FR 64344, Dec. 14, 1994]

## Subpart B—Establishment of Water Quality Standards

### § 131.10 Designation of uses.

(a) Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation. In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.

(b) In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

(c) States may adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses, for instance, to differentiate between cold water and warm water fisheries.

(d) At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under sections 301(b) and 306 of the Act and cost-effective and reasonable best management practices for nonpoint source control.

(e) Prior to adding or removing any use, or establishing sub-categories of a use, the State shall provide notice and an opportunity for a public hearing under § 131.20(b) of this regulation.

(f) States may adopt seasonal uses as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria should be adjusted to reflect the seasonal uses, however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season.

(g) States may remove a designated use which is *not* an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

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

(2) 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

(3) 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

(4) 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 that would result in the attainment of the use; or

(5) 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

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

(h) States may not remove designated uses if:

(1) They are existing uses, as defined in § 131.3, unless a use requiring more stringent criteria is added; or

(2) Such uses will be attained by implementing effluent limits required under sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

(i) Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.

(j) A State must conduct a use attainability analysis as described in § 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria.

(k) A State is not required to conduct a use attainability analysis under this regulation whenever designating uses which include those specified in section 101(a)(2) of the Act.

#### § 131.11 Criteria.

(a) *Inclusion of pollutants.* (1) States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use. For waters with multiple use designations, the criteria shall support the most sensitive use.

(2) *Toxic pollutants.* States must review water quality data and information on discharges to identify specific water bodies where toxic pollutants may be adversely affecting water qual-

ity or the attainment of the designated water use or where the levels of toxic pollutants are at a level to warrant concern and must adopt criteria for such toxic pollutants applicable to the water body sufficient to protect the designated use. Where a State adopts narrative criteria for toxic pollutants to protect designated uses, the State must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria. Such information may be included as part of the standards or may be included in documents generated by the State in response to the Water Quality Planning and Management Regulations (40 CFR part 35).

(b) Form of criteria: In establishing criteria, States should:

(1) Establish numerical values based on:

(i) 304(a) Guidance; or

(ii) 304(a) Guidance modified to reflect site-specific conditions; or

(iii) Other scientifically defensible methods;

(2) Establish narrative criteria or criteria based upon biomonitoring methods where numerical criteria cannot be established or to supplement numerical criteria.

#### § 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing

lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

#### **§ 131.13 General policies.**

States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval.

### **Subpart C—Procedures for Review and Revision of Water Quality Standards**

#### **§ 131.20 State review and revision of water quality standards.**

(a) *State review.* The State shall from time to time, but at least once every three years, hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Any water body segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act shall be re-examined every three years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the

State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process.

(b) *Public participation.* The State shall hold a public hearing for the purpose of reviewing water quality standards, in accordance with provisions of State law, EPA's water quality management regulation (40 CFR 130.3(b)(6)) and public participation regulation (40 CFR part 25). The proposed water quality standards revision and supporting analyses shall be made available to the public prior to the hearing.

(c) *Submittal to EPA.* The State shall submit the results of the review, any supporting analysis for the use attainability analysis, the methodologies used for site-specific criteria development, any general policies applicable to water quality standards and any revisions of the standards to the Regional Administrator for review and approval, within 30 days of the final State action to adopt and certify the revised standard, or if no revisions are made as a result of the review, within 30 days of the completion of the review.

#### **§ 131.21 EPA review and approval of water quality standards.**

(a) After the State submits its officially adopted revisions, the Regional Administrator shall either:

(1) Notify the State within 60 days that the revisions are approved, or

(2) Notify the State within 90 days that the revisions are disapproved. Such notification of disapproval shall specify the changes needed to assure compliance with the requirements of the Act and this regulation, and shall explain why the State standard is not in compliance with such requirements. Any new or revised State standard must be accompanied by some type of supporting analysis.

(b) The Regional Administrator's approval or disapproval of a State water quality standard shall be based on the requirements of the Act as described in §§ 131.5 and 131.6, and, with respect to Great Lakes States or Tribes (as defined in 40 CFR 132.2), 40 CFR part 132.

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40 CFR Ch. I (7–1–98 Edition)

(c) A State water quality standard remains in effect, even though disapproved by EPA, until the State revises it or EPA promulgates a rule that supersedes the State water quality standard.

(d) EPA shall, at least annually, publish in the FEDERAL REGISTER a notice of approvals under this section.

[48 FR 51405, Nov. 8, 1983, as amended at 60 FR 15387, Mar. 23, 1995]

**§ 131.22 EPA promulgation of water quality standards.**

(a) If the State does not adopt the changes specified by the Regional Administrator within 90 days after notification of the Regional Administrator's disapproval, the Administrator shall promptly propose and promulgate such standard.

(b) The Administrator may also propose and promulgate a regulation, applicable to one or more States, setting forth a new or revised standard upon determining such a standard is necessary to meet the requirements of the Act.

(c) In promulgating water quality standards, the Administrator is subject to the same policies, procedures, analyses, and public participation requirements established for States in these regulations.

**Subpart D—Federally Promulgated Water Quality Standards**

**§ 131.31 Arizona.**

(a) Article 6, part 2 is amended as follows:

(1) Reg. 6–2–6.11 shall read:

*Reg. 6–2–6.11 Nutrient Standards.* A. The mean annual total phosphate and mean annual total nitrate concentrations of the following waters shall not exceed the values given below nor shall the total phosphate or total nitrate concentrations of more than 10 percent of the samples in any year exceed the 90 percent values given below. Unless otherwise specified, indicated values also apply to tributaries to the named waters.

	Mean 90 pct annual value	
	Total phosphates as PO <sub>4</sub> mg/l	Total nitrates as NO <sub>3</sub> mg/l
1. Colorado River from Utah border to Willow Beach (main stem)	0.04–0.06	4–7
2. Colorado River from Willow Beach to Parker Dam (main stem)	0.06–0.10	5
3. Colorado River from Parker Dam to Imperial Dam (main stem)	0.08–0.12	5–7
4. Colorado River from Imperial Dam to Morelos Dam (main stem)	0.10–0.10	5–7
5. Gila River from New Mexico border to San Carlos Reservoir (excluding San Carlos Reservoir)	0.50–0.80	.....
6. Gila River from San Carlos Reservoir to Ashurst Hayden Dam (including San Carlos Reservoir)	0.30–0.50	.....
7. San Pedro River	0.30–0.50	.....
8. Verde River (except Granite Creek)	0.20–0.30	.....
9. Salt River above Roosevelt Lake	0.20–0.30	.....
10. Santa Cruz River from international boundary near Nogales to Sahuarita	0.50–0.80	.....
11. Little Colorado River above Lyman Reservoir	0.30–0.50	.....

B. The above standards are intended to protect the beneficial uses of the named waters. Because regulation of nitrates and phosphates alone may not be adequate to protect waters from eutrophication, no substance shall be added to any surface water which produces aquatic growth to the extent that such growths create a public nuisance or interference with beneficial uses of the water defined and designated in Reg. 6–2–6.5.

(2) Reg. 6–2–6.10 Subparts A and B are amended to include Reg. 6–2–6.11 in series with Regs. 6–2–6.6, 6–2–6.7 and 6–2–6.8.

(b) The following waters have, in addition to the uses designated by the State, the designated use of fish consumption as defined in R18–11–101 (which is available from the Arizona Department of Environmental Quality, Water Quality Division, 3033 North Central Ave., Phoenix, AZ 85012):

COLORADO MAIN STEM RIVER BASIN:  
Hualapai Wash  
MIDDLE GILA RIVER BASIN:

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Agua Fria River (Camelback Road to Avondale WWTP)  
Galena Gulch  
Gila River (Felix Road to the Salt River)  
Queen Creek (Headwaters to the Superior WWTP)  
Queen Creek (Below Potts Canyon)  
SAN PEDRO RIVER BASIN:  
Copper Creek  
SANTA CRUZ RIVER BASIN:  
Agua Caliente Wash  
Nogales Wash  
Sonoita Creek (Above the town of Patagonia)  
Tanque Verde Creek  
Tinaja Wash  
Davidson Canyon  
UPPER GILA RIVER BASIN  
Chase Creek

(c) To implement the requirements of R18-11-108.A.5 with respect to effects of mercury on wildlife, EPA (or the State with the approval of EPA) shall implement a monitoring program to assess attainment of the water quality standard.

(Sec. 303, Federal Water Pollution Control Act, as amended, 33 U.S.C. 1313, 86 Stat. 816 *et seq.*, Pub. L. 92-500; Clean Water Act, Pub. L. 92-500, as amended; 33 U.S.C. 1251 *et seq.*)

[41 FR 25000, June 22, 1976; 41 FR 48737, Nov. 5, 1976. Redesignated and amended at 42 FR 56740, Oct. 28, 1977. Further redesignated and amended at 48 FR 51408, Nov. 8, 1983; 61 FR 20693, May 7, 1996]

### § 131.32 Pennsylvania.

(a) *Antidegradation policy.* This antidegradation policy shall be applicable to all waters of the United States within the Commonwealth of Pennsylvania, including wetlands.

(1) Existing in-stream uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Commonwealth finds, after full satisfaction of the inter-governmental coordination and public participation provisions of the Commonwealth's continuing planning process, that allowing lower water quality is necessary to accommodate

important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Commonwealth shall assure water quality adequate to protect existing uses fully. Further, the Commonwealth shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint sources.

(3) Where high quality waters are identified as constituting an outstanding National resource, such as waters of National and State parks and wildlife refuges and water of exceptional recreational and ecological significance, that water quality shall be maintained and protected.

(b) [Reserved]

[61 FR 64822, Dec. 9, 1996]

### § 131.33 Idaho.

(a) *Temperature criteria for bull trout.*

(1) Except for those streams or portions of streams located in Indian country, or as may be modified by the Regional Administrator, EPA Region X, pursuant to paragraph (a)(3) of this section, a temperature criterion of 10 °C, expressed as an average of daily maximum temperatures over a seven-day period, applies to the waterbodies identified in paragraph (a)(2) of this section during the months of June, July, August and September.

(2) The following waters are protected for bull trout spawning and rearing:

(i) BOISE-MORE BASIN: Devils Creek, East Fork Sheep Creek, Sheep Creek.

(ii) BROWNLEE RESERVOIR BASIN: Crooked River, Indian Creek.

(iii) CLEARWATER BASIN: Big Canyon Creek, Cougar Creek, Feather Creek, Laguna Creek, Lolo Creek, Orofino Creek, Talapus Creek, West Fork Potlatch River.

(iv) COEUR D'ALENE LAKE BASIN: Cougar Creek, Fernan Creek, Kid Creek, Mica Creek, South Fork Mica Creek, Squaw Creek, Turner Creek.

(v) HELLS CANYON BASIN: Dry Creek, East Fork Sheep Creek, Getta Creek, Granite Creek, Kurry Creek, Little Granite Creek, Sheep Creek.

(vi) LEMHI BASIN: Adams Creek, Alder Creek, Basin Creek, Bear Valley Creek, Big Eightmile Creek, Big Springs Creek, Big Timber Creek, Bray Creek, Bull Creek, Cabin Creek, Canyon Creek, Carol Creek, Chamberlain Creek, Clear Creek, Climb Creek, Cooper Creek, Dairy Creek, Deer Creek, Deer Park Creek, East Fork Hayden Creek, Eighteenmile Creek, Falls Creek, Ferry Creek, Ford Creek, Geertson Creek, Grove Creek, Hawley Creek, Hayden Creek, Kadletz Creek, Kenney Creek, Kirtley Creek, Lake Creek, Lee Creek, Lemhi River (above Big Eightmile Creek), Little Eightmile Creek, Little Mill Creek, Little Timber Creek, Middle Fork Little Timber Creek, Milk Creek, Mill Creek, Mogg Creek, North Fork Kirtley Creek, North Fork Little Timber Creek, Paradise Creek, Patterson Creek, Payne Creek, Poison Creek, Prospect Creek, Rocky Creek, Short Creek, Squaw Creek, Squirrel Creek, Tobias Creek, Trail Creek, West Fork Hayden Creek, Wright Creek.

(vii) LITTLE LOST BASIN: Badger Creek, Barney Creek, Bear Canyon, Bear Creek, Bell Mountain Creek, Big Creek, Bird Canyon, Black Creek, Buck Canyon, Bull Creek, Cedar Run Creek, Chicken Creek, Coal Creek, Corral Creek, Deep Creek, Dry Creek, Dry Creek Canal, Firbox Creek, Garfield Creek, Hawley Canyon, Hawley Creek, Horse Creek, Horse Lake Creek, Iron Creek, Jackson Creek, Little Lost River (above Badger Creek), Mahogany Creek, Main Fork Sawmill Creek, Massacre Creek, Meadow Creek, Mill Creek, Moffett Creek, Moonshine Creek, Quigley Creek, Red Rock Creek, Sands Creek, Sawmill Creek, Slide Creek, Smithie Fork, Squaw Creek, Summerhouse Canyon, Summit Creek, Timber Creek, Warm Creek, Wet Creek, Williams Creek.

(viii) LITTLE SALMON BASIN: Bascum Canyon, Boulder Creek, Brown Creek, Campbell Ditch, Castle Creek, Copper Creek, Granite Fork Lake Fork Rapid River, Hard Creek, Hazard Creek, Lake Fork Rapid River, Little Salmon River (above Hazard Creek), Paradise Creek, Pony Creek, Rapid River, Squirrel Creek, Trail Creek, West Fork Rapid River.

(ix) LOCHSA BASIN: Apgar Creek, Badger Creek, Bald Mountain Creek, Beaver Creek, Big Flat Creek, Big Stew Creek, Boulder Creek, Brushy Fork, Cabin Creek, Castle Creek, Chain Creek, Cliff Creek, Coolwater Creek, Cooperation Creek, Crab Creek, Crooked Fork Lochsa River, Dan Creek, Deadman Creek, Doe Creek, Dutch Creek, Eagle Creek, East Fork Papoose Creek, East Fork Split Creek, East Fork Squaw Creek, Eel Creek, Fern Creek, Fire Creek, Fish Creek, Fish Lake Creek, Fox Creek, Gass Creek, Gold Creek, Ham Creek, Handy Creek, Hard Creek, Haskell Creek, Heather Creek, Hellgate Creek, Holly Creek, Hopeful Creek, Hungry Creek, Indian Grave Creek, Jay Creek, Kerr Creek, Kube Creek, Lochsa River, Lone Knob Creek, Lottie Creek, Macaroni Creek, Maud Creek, Middle Fork Clearwater River, No-see-um Creek, North Fork Spruce Creek, North Fork Storm Creek, Nut Creek, Otter Slide Creek, Pack Creek, Papoose Creek, Parachute Creek, Pass Creek, Pedro Creek, Pell Creek, Pete King Creek, Placer Creek, Polar Creek, Postoffice Creek, Queen Creek, Robin Creek, Rock Creek, Rye Patch Creek, Sardine Creek, Shoot Creek, Shotgun Creek, Skookum Creek, Snowshoe Creek, South Fork Spruce Creek, South Fork Storm Creek, Split Creek, Sponge Creek, Spring Creek, Spruce Creek, Squaw Creek, Storm Creek, Tick Creek, Tomcat Creek, Tumble Creek, Twin Creek, Wag Creek, Walde Creek, Walton Creek, Warm Springs Creek, Weir Creek, Wendover Creek, West Fork Boulder Creek, West Fork Papoose Creek, West Fork Squaw Creek, West Fork Wendover Creek, White Sands Creek, Willow Creek.

(x) LOWER CLARK FORK BASIN: Cascade Creek, East Fork, East Fork Creek, East Forkast Fork Creek, Gold Creek, Johnson Creek, Lightning Creek, Mosquito Creek, Porcupine Creek, Rattle Creek, Spring Creek, Twin Creek, Wellington Creek.

(xi) LOWER KOOTENAI BASIN: Ball Creek, Boundary Creek, Brush Creek, Cabin Creek, Caribou Creek, Cascade Creek, Cooks Creek, Cow Creek, Curley Creek, Deep Creek, Grass Creek, Jim Creek, Lime Creek, Long Canyon Creek, Mack Creek, Mission Creek,

Myrtle Creek, Peak Creek, Snow Creek, Trout Creek.

(xii) LOWER MIDDLE FORK SALMON BASIN: Acorn Creek, Alpine Creek, Anvil Creek, Arrastra Creek, Bar Creek, Beagle Creek, Beaver Creek, Belvidere Creek, Big Creek, Birdseye Creek, Boulder Creek, Brush Creek, Buck Creek, Bull Creek, Cabin Creek, Camas Creek, Canyon Creek, Castle Creek, Clark Creek, Coin Creek, Corner Creek, Coxey Creek, Crooked Creek, Doe Creek, Duck Creek, East Fork Holy Terror Creek, Fawn Creek, Flume Creek, Fly Creek, Forge Creek, Furnace Creek, Garden Creek, Government Creek, Grouse Creek, Hammer Creek, Hand Creek, Holy Terror Creek, J Fell Creek, Jacobs Ladder Creek, Lewis Creek, Liberty Creek, Lick Creek, Lime Creek, Little Jacket Creek, Little Marble Creek, Little White Goat Creek, Little Woodtick Creek, Logan Creek, Lookout Creek, Loon Creek, Martindale Creek, Meadow Creek, Middle Fork Smith Creek, Monumental Creek, Moore Creek, Mulligan Creek, North Fork Smith Creek, Norton Creek, Placer Creek, Pole Creek, Rams Creek, Range Creek, Routson Creek, Rush Creek, Sawlog Creek, Sheep Creek, Sheldon Creek, Shellrock Creek, Ship Island Creek, Shovel Creek, Silver Creek, Smith Creek, Snowslide Creek, Soldier Creek, South Fork Camas Creek, South Fork Chamberlain Creek, South Fork Holy Terror Creek, South Fork Norton Creek, South Fork Rush Creek, South Fork Sheep Creek, Spider Creek, Spletts Creek, Telephone Creek, Trail Creek, Two Point Creek, West Fork Beaver Creek, West Fork Camas Creek, West Fork Monumental Creek, West Fork Rush Creek, White Goat Creek, Wilson Creek.

(xiii) LOWER NORTH FORK CLEARWATER BASIN: Adair Creek, Badger Creek, Bathtub Creek, Beaver Creek, Black Creek, Brush Creek, Buck Creek, Butte Creek, Canyon Creek, Caribou Creek, Crimper Creek, Dip Creek, Dog Creek, Elmer Creek, Falls Creek, Fern Creek, Goat Creek, Isabella Creek, John Creek, Jug Creek, Jungle Creek, Lightning Creek, Little Lost Lake Creek, Little North Fork Clearwater River, Lost Lake Creek, Lund Creek, Montana Creek, Mowitch Creek, Papoose Creek, Pitchfork Creek, Rocky

Run, Rutledge Creek, Spotted Louis Creek, Triple Creek, Twin Creek, West Fork Montana Creek, Willow Creek.

(xiv) LOWER SALMON BASIN: Bear Gulch, Berg Creek, East Fork John Day Creek, Elkhorn Creek, Fiddle Creek, French Creek, Hurley Creek, John Day Creek, Kelly Creek, Klip Creek, Lake Creek, Little Slate Creek, Little Van Buren Creek, No Business Creek, North Creek, North Fork Slate Creek, North Fork White Bird Creek, Partridge Creek, Slate Creek, Slide Creek, South Fork John Day Creek, South Fork White Bird Creek, Warm Springs Creek.

(xv) LOWER SELWAY BASIN: Anderson Creek, Bailey Creek, Browns Spring Creek, Buck Lake Creek, Butte Creek, Butter Creek, Cabin Creek, Cedar Creek, Chain Creek, Chute Creek, Dent Creek, Disgrace Creek, Double Creek, East Fork Meadow Creek, East Fork Moose Creek, Elbow Creek, Fivemile Creek, Fourmile Creek, Gate Creek, Gedney Creek, Goddard Creek, Horse Creek, Indian Hill Creek, Little Boulder Creek, Little Schwar Creek, Matteson Creek, Meadow Creek, Monument Creek, Moose Creek, Moss Creek, Newsome Creek, North Fork Moose Creek, Rhoda Creek, Saddle Creek, Schwar Creek, Shake Creek, Spook Creek, Spur Creek, Tamarack Creek, West Fork Anderson Creek, West Fork Gedney Creek, West Moose Creek, Wounded Doe Creek.

(xvi) MIDDLE FORK CLEARWATER BASIN: Baldy Creek, Big Cedar Creek, Browns Spring Creek, Clear Creek, Middle Fork Clear Creek, Pine Knob Creek, South Fork Clear Creek.

(xvii) MIDDLE FORK PAYETTE BASIN: Bull Creek, Middle Fork Payette River (above Fool Creek), Oxtail Creek, Silver Creek, Sixteen-to-one Creek.

(xviii) MIDDLE SALMON-CHAMBERLAIN BASIN: Arrow Creek, Bargamin Creek, Bat Creek, Bay Creek, Bear Creek, Bend Creek, Big Elkhorn Creek, Big Harrington Creek, Big Mallard Creek, Big Squaw Creek, Bleak Creek, Bronco Creek, Broomtail Creek, Brown Creek, Cayuse Creek, Center Creek, Chamberlain Creek, Cliff Creek, Colt Creek, Corn Creek, Crooked Creek, Deer Creek, Dennis Creek, Disappointment Creek, Dismal Creek,

Dog Creek, East Fork Fall Creek, East Fork Horse Creek, East Fork Noble Creek, Fall Creek, Filly Creek, Fish Creek, Flossie Creek, Game Creek, Gap Creek, Ginger Creek, Green Creek, Grouse Creek, Guard Creek, Hamilton Creek, Horse Creek, Hot Springs Creek, Hotzel Creek, Hungry Creek, Iodine Creek, Jack Creek, Jersey Creek, Kitchen Creek, Lake Creek, Little Horse Creek, Little Lodgepole Creek, Little Mallard Creek, Lodgepole Creek, Mayflower Creek, McCalla Creek, Meadow Creek, Moose Creek, Moose Jaw Creek, Mule Creek, Mustang Creek, No Name Creek, Owl Creek, Poet Creek, Pole Creek, Porcupine Creek, Prospector Creek, Pup Creek, Queen Creek, Rainey Creek, Ranch Creek, Rattlesnake Creek, Red Top Creek, Reynolds Creek, Rim Creek, Ring Creek, Rock Creek, Root Creek, Runaway Creek, Sabe Creek, Saddle Creek, Salt Creek, Schissler Creek, Sheep Creek, Short Creek, Shovel Creek, Skull Creek, Slaughter Creek, Slide Creek, South Fork Cottonwood Creek, South Fork Chamberlain Creek, South Fork Kitchen Creek, South Fork Salmon River, Spread Creek, Spring Creek, Starvation Creek, Steamboat Creek, Steep Creek, Stud Creek, Warren Creek, Webfoot Creek, West Fork Chamberlain Creek, West Fork Rattlesnake Creek, West Horse Creek, Whimstick Creek, Wind River, Woods Fork Horse Creek.

(xix) MIDDLE SALMON-PANTHER BASIN: Allen Creek, Arnett Creek, Beaver Creek, Big Deer Creek, Blackbird Creek, Boulder Creek, Cabin Creek, Camp Creek, Carmen Creek, Clear Creek, Colson Creek, Copper Creek, Corral Creek, Cougar Creek, Cow Creek, Deadhorse Creek, Deep Creek, East Boulder Creek, Elkhorn Creek, Fawn Creek, Fourth Of July Creek, Freeman Creek, Homet Creek, Hughes Creek, Hull Creek, Indian Creek, Iron Creek, Jackass Creek, Jefferson Creek, Jesse Creek, Lake Creek, Little Deep Creek, Little Hat Creek, Little Sheep Creek, McConn Creek, McKim Creek, Mink Creek, Moccasin Creek, Moose Creek, Moyer Creek, Musgrove Creek, Napias Creek, North Fork Hughes Creek, North Fork Iron Creek, North Fork Salmon River, North Fork Williams Creek, Opal

Creek, Otter Creek, Owl Creek, Panther Creek, Park Creek, Phelan Creek, Pine Creek, Pony Creek, Porphyry Creek, Pruvan Creek, Rabbit Creek, Rancherio Creek, Rapps Creek, Salt Creek, Salzer Creek, Saw Pit Creek, Sharkey Creek, Sheep Creek, South Fork Cabin Creek, South Fork Iron Creek, South Fork Moyer Creek, South Fork Phelan Creek, South Fork Sheep Creek, South Fork Williams Creek, Spring Creek, Squaw Creek, Trail Creek, Twelvemile Creek, Twin Creek, Weasel Creek, West Fork Blackbird Creek, West Fork Iron Creek, Williams Creek, Woodtick Creek.

(xx) MOYIE BASIN: Brass Creek, Bussard Creek, Copper Creek, Deer Creek, Faro Creek, Keno Creek, Kreist Creek, Line Creek, McDougal Creek, Mill Creek, Moyie River (above Skin Creek), Placer Creek, Rutledge Creek, Skin Creek, Spruce Creek, West Branch Deer Creek.

(xxi) NORTH AND MIDDLE FORK BOISE BASIN: Abby Creek, Arrastra Creek, Bald Mountain Creek, Ballentyne Creek, Banner Creek, Bayhouse Creek, Bear Creek, Bear River, Big Gulch, Big Silver Creek, Billy Creek, Blackwarrior Creek, Bow Creek, Browns Creek, Buck Creek, Cabin Creek, Cahhah Creek, Camp Gulch, China Fork, Coma Creek, Corbus Creek, Cow Creek, Crooked River, Cub Creek, Decker Creek, Dutch Creek, Dutch Frank Creek, East Fork Roaring River, East Fork Swanholm Creek, East Fork Yuba River, Flint Creek, Flytrip Creek, Gotch Creek, Graham Creek, Granite Creek, Grays Creek, Greylock Creek, Grouse Creek, Hot Creek, Hungarian Creek, Joe Daley Creek, Johnson Creek, Kid Creek, King Creek, La Mayne Creek, Leggit Creek, Lightning Creek, Little Queens River, Little Silver Creek, Louise Creek, Lynx Creek, Mattingly Creek, McKay Creek, McLeod Creek, McPhearson Creek, Middle Fork Boise River (above Roaring River), Middle Fork Corbus Creek, Middle Fork Roaring River, Mill Creek, Misfire Creek, Montezuma Creek, North Fork Boise River (above Bear River), Phifer Creek, Pikes Fork, Quartz Gulch, Queens River, Rabbit Creek, Right Creek, Roaring River, Robin Creek, Rock Creek, Rockey Creek, Sawmill Creek, Scenic Creek,

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Scotch Creek, Scott Creek, Shorip Creek, Smith Creek, Snow Creek, Snowslide Creek, South Fork Corbus Creek, South Fork Cub Creek, Spout Creek, Steamboat Creek, Steel Creek, Steppe Creek, Swanholm Creek, Timpa Creek, Trail Creek, Trapper Creek, Tripod Creek, West Fork Creek, West Warrior Creek, Willow Creek, Yuba River.

(xxii) NORTH FORK PAYETTE BASIN: Gold Fork River, North Fork Gold Fork River, Pearsol Creek.

(xxiii) AHSIMEROI BASIN: Baby Creek, Bear Creek, Big Creek, Big Gulch, Burnt Creek, Christian Gulch, Dead Cat Canyon, Ditch Creek, Donkey Creek, Doublespring Creek, Dry Canyon, Dry Gulch, East Fork Burnt Creek, East Fork Morgan Creek, East Fork Pahsimeroi River, East Fork Patterson Creek, Elkhorn Creek, Falls Creek, Goldberg Creek, Hillside Creek, Inyo Creek, Long Creek, Mahogany Creek, Mill Creek, Morgan Creek, Morse Creek, Mulkey Gulch, North Fork Big Creek, North Fork Morgan Creek, Pahsimeroi River (above Big Creek), Patterson Creek, Rock Spring Canyon, Short Creek, Snowslide Creek, South Fork Big Creek, Spring Gulch, Squaw Creek, Stinking Creek, Tater Creek, West Fork Burnt Creek, West Fork North Fork Big Creek.

(xxiv) PAYETTE BASIN: Squaw Creek, Third Fork Squaw Creek.

(xxv) PEND OREILLE LAKE BASIN: Branch North Gold Creek, Cheer Creek, Chloride Gulch, Dry Gulch, Dyree Creek, Flume Creek, Gold Creek, Granite Creek, Grouse Creek, Kick Bush Gulch, North Fork Grouse Creek, North Gold Creek, Plank Creek, Rapid Lightning Creek, South Fork Grouse Creek, Strong Creek, Thor Creek, Trestle Creek, West Branch Pack River, West Gold Creek, Wylie Creek, Zuni Creek.

(xxvi) PRIEST BASIN: Abandon Creek, Athol Creek, Bath Creek, Bear Creek, Bench Creek, Blacktail Creek, Bog Creek, Boulder Creek, Bugle Creek, Canyon Creek, Caribou Creek, Cedar Creek, Chicopee Creek, Deadman Creek, East Fork Trapper Creek, East River, Fedar Creek, Floss Creek, Gold Creek, Granite Creek, Horton Creek, Hughes Fork, Indian Creek, Jackson Creek, Jost Creek, Kalispell Creek, Kent Creek, Keokee Creek, Lime

Creek, Lion Creek, Lost Creek, Lucky Creek, Malcom Creek, Middle Fork East River, Muskegon Creek, North Fork Granite Creek, North Fork Indian Creek, Packer Creek, Rock Creek, Ruby Creek, South Fork Granite Creek, South Fork Indian Creek, South Fork Lion Creek, Squaw Creek, Tango Creek, Tarlac Creek, The Thorofare, Trapper Creek, Two Mouth Creek, Uleda Creek, Priest R. (above Priest Lake), Zero Creek.

(xxvii) SOUTH FORK BOISE BASIN: Badger Creek, Bear Creek, Bear Gulch, Big Smoky Creek, Big Water Gulch, Boardman Creek, Burnt Log Creek, Cayuse Creek, Corral Creek, Cow Creek, Edna Creek, Elk Creek, Emma Creek, Feather River, Fern Gulch, Grape Creek, Gunsight Creek, Haypress Creek, Heather Creek, Helen Creek, Johnson Creek, Lincoln Creek, Little Cayuse Creek, Little Rattlesnake Creek, Little Skeleton Creek, Little Smoky Creek, Loggy Creek, Mule Creek, North Fork Ross Fork, Pinto Creek, Rattlesnake Creek, Ross Fork, Russel Gulch, Salt Creek, Shake Creek, Skeleton Creek, Slater Creek, Smokey Dome Canyon, South Fork Ross Fork, Three Forks Creek, Tipton Creek, Vienna Creek, Weeks Gulch, West Fork Big Smoky Creek, West Fork Salt Creek, West Fork Skeleton Creek, Willow Creek.

(xxviii) SOUTH FORK CLEAR-WATER BASIN: American River, Baker Gulch, Baldy Creek, Bear Creek, Beaver Creek, Big Canyon Creek, Big Elk Creek, Blanco Creek, Boundary Creek, Box Sing Creek, Boyer Creek, Cartwright Creek, Cole Creek, Crooked River, Dawson Creek, Deer Creek, Ditch Creek, East Fork American River, East Fork Crooked River, Elk Creek, Fivemile Creek, Flint Creek, Fourmile Creek, Fox Creek, French Gulch, Galena Creek, Gospel Creek, Hagen Creek, Hays Creek, Johns Creek, Jungle Creek, Kirks Fork American River, Little Elk Creek, Little Moose Creek, Little Siegel Creek, Loon Creek, Mackey Creek, Meadow Creek, Melton Creek, Middle Fork Red River, Mill Creek, Monroe Creek, Moores Creek, Moores Lake Creek, Moose Butte Creek, Morgan Creek, Mule Creek, Newsome Creek, Nuggett Creek, Otterson Creek, Pat Brennan Creek,



Pilot Creek, Quartz Creek, Queen Creek, Rabbit Creek, Rainbow Gulch, Red River, Relief Creek, Ryan Creek, Sally Ann Creek, Sawmill Creek, Schooner Creek, Schwartz Creek, Sharmon Creek, Siegel Creek, Silver Creek, Sixmile Creek, Sixtysix Creek, Snoose Creek, Sourdough Creek, South Fork Red River, Square Mountain Creek, Swale Creek, Swift Creek, Taylor Creek, Tenmile Creek, Trail Creek, Trapper Creek, Trout Creek, Twentymile Creek, Twin Lakes Creek, Umatilla Creek, West Fork Big Elk Creek, West Fork Crooked River, West Fork Gospel Creek, West Fork Newsome Creek, West Fork Red River, West Fork Twentymile Creek, Whiskey Creek, Whitaker Creek, Williams Creek.

(xxix) SOUTH FORK PAYETTE BASIN: Archie Creek, Ash Creek, Baron Creek, Basin Creek, Bear Creek, Beaver Creek, Big Spruce Creek, Bitter Creek, Blacks Creek, Blue Jay Creek, Burn Creek, Bush Creek, Camp Creek, Canyon Creek, Casner Creek, Cat Creek, Chapman Creek, Charters Creek, Clear Creek, Coski Creek, Cup Creek, Dead Man Creek, Deadwood River, Deer Creek, East Fork Deadwood Creek, East Fork Warm Springs Creek, Eby Creek, Elkhorn Creek, Emma Creek, Fall Creek, Fence Creek, Fern Creek, Fivemile Creek, Fox Creek, Garney Creek, Gates Creek, Goat Creek, Grandjem Creek, Grouse Creek, Habit Creek, Helende Creek, Horse Creek, Huckleberry Creek, Jackson Creek, Kettle Creek, Kirkham Creek, Lake Creek, Lick Creek, Little Tenmile Creek, Logging Gulch, Long Creek, MacDonald Creek, Meadow Creek, Middle Fork Warm Springs Creek, Miller Creek, Monument Creek, Moulding Creek, Ninemile Creek, No Man Creek, No Name Creek, North Fork Baron Creek, North Fork Canyon Creek, North Fork Deer Creek, North Fork Whitehawk Creek, O'Keefe Creek, Packsaddle Creek, Park Creek, Pass Creek, Pinchot Creek, Pine Creek, Pitchfork Creek, Pole Creek, Richards Creek, Road Fork Rock Creek, Rock Creek, Rough Creek, Scott Creek, Silver Creek, Sixmile Creek, Smith Creek, Smokey Creek, South Fork Beaver Creek, South Fork Canyon Creek, South Fork Clear Creek, South Fork

Payette River (above Rock Creek), South Fork Scott Creek, South Fork Warm Spring Creek, Spring Creek, Steep Creek, Stratton Creek, Topnotch Creek, Trail Creek, Wapiti Creek, Warm Spring Creek, Warm Springs Creek, Whangdoodle Creek, Whitehawk Creek, Wild Buck Creek, Wills Gulch, Wilson Creek, Wolf Creek.

(xxx) SOUTH FORK SALMON BASIN: Alez Creek, Back Creek, Bear Creek, Bishop Creek, Blackmare Creek, Blue Lake Creek, Buck Creek, Buckhorn Bar Creek, Buckhorn Creek, Burgdorf Creek, Burntlog Creek, Cabin Creek, Calf Creek, Camp Creek, Cane Creek, Caton Creek, Cinnabar Creek, Cliff Creek, Cly Creek, Cougar Creek, Cow Creek, Cox Creek, Curtis Creek, Deep Creek, Dollar Creek, Dutch Creek, East Fork South Fork Salmon River, East Fork Zena Creek, Elk Creek, Enos Creek, Falls Creek, Fernan Creek, Fiddle Creek, Fitsum Creek, Flat Creek, Fourmile Creek, Goat Creek, Grimmer Creek, Grouse Creek, Halfway Creek, Hanson Creek, Hays Creek, Holdover Creek, Hum Creek, Indian Creek, Jeanette Creek, Johnson Creek, Josephine Creek, Jungle Creek, Knee Creek, Krassel Creek, Lake Creek, Landmark Creek, Lick Creek, Little Buckhorn Creek, Little Indian Creek, Lodgepole Creek, Loon Creek, Maverick Creek, Meadow Creek, Middle Fork Elk Creek, Missouri Creek, Moose Creek, Mormon Creek, Nasty Creek, Nethker Creek, Nick Creek, No Mans Creek, North Fork Bear Creek, North Fork Buckhorn Creek, North Fork Camp Creek, North Fork Dollar Creek, North Fork Fitsum Creek, North Fork Lake Fork, North Fork Lick Creek, North Fork Riordan Creek, North Fork Six-bit Creek, Oompaul Creek, Paradise Creek, Park Creek, Peanut Creek, Pepper Creek, Phoebe Creek, Piah Creek, Pid Creek, Pilot Creek, Pony Creek, Porcupine Creek, Porphyry Creek, Prince Creek, Profile Creek, Quartz Creek, Reeves Creek, Rice Creek, Riordan Creek, Roaring Creek, Ruby Creek, Rustican Creek, Ryan Creek, Salt Creek, Sand Creek, Secesh River, Sheep Creek, Silver Creek, Sister Creek, Six-Bit Creek, South Fork Bear Creek, South Fork Blackmare Creek, South Fork Buckhorn Creek, South Fork Cougar Creek, South Fork

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Elk Creek, South Fork Fitsum Creek, South Fork Fourmile Creek, South Fork Salmon River, South Fork Threemile Creek, Split Creek, Steep Creek, Sugar Creek, Summit Creek, Tamarack Creek, Teepee Creek, Threemile Creek, Trail Creek, Trapper Creek, Trout Creek, Tsum Creek, Two-bit Creek, Tyndall Creek, Vein Creek, Victor Creek, Wardenhoff Creek, Warm Lake Creek, Warm Spring Creek, West Fork Buckhorn Creek, West Fork Elk Creek, West Fork Enos Creek, West Fork Zena Creek, Whangdoodle Creek, Willow Basket Creek, Willow Creek, Zena Creek.

(xxxi) ST. JOE R. BASIN: Bad Bear Creek, Bean Creek, Bear Creek, Beaver Creek, Bedrock Creek, Berge Creek, Bird Creek, Blue Grouse Creek, Boulder Creek, Broadaxe Creek, Bruin Creek, California Creek, Cherry Creek, Clear Creek, Color Creek, Copper Creek, Dolly Creek, Dump Creek, Eagle Creek, East Fork Bluff Creek, East Fork Gold Creek, Emerald Creek, Fishhook Creek, Float Creek, Fly Creek, Fuzzy Creek, Gold Creek, Heller Creek, Indian Creek, Kelley Creek, Malin Creek, Marble Creek, Medicine Creek, Mica Creek, Mill Creek, Mosquito Creek, North Fork Bean Creek, North Fork Saint Joe River, North Fork Simmons Creek, Nugget Creek, Packsaddle Creek, Periwinkle Creek, Prospector Creek, Quartz Creek, Red Cross Creek, Red Ives Creek, Ruby Creek, Saint Joe River (above Siwash Creek), Setzer Creek, Sherlock Creek, Simmons Creek, Siwash Creek, Skookum Creek, Thomas Creek, Thorn Creek, Three Lakes Creek, Timber Creek, Tinear Creek, Trout Creek, Tumbledown Creek, Wahoo Creek, Washout Creek, Wilson Creek, Yankee Bar Creek.

(xxxii) UPPER COEUR D'ALENE BASIN: Brown Creek, Falls Creek, Graham Creek.

(xxxiii) UPPER KOOTENAI BASIN: Halverson Cr, North Callahan Creek, South Callahan Creek, West Fork Keeler Creek

(xxxiv) UPPER MIDDLE FORK SALMON BASIN: Asher Creek, Automatic Creek, Ayers Creek, Baldwin Creek, Banner Creek, Bear Creek, Bear Valley Creek, Bearskin Creek, Beaver Creek, Bernard Creek, Big Chief Creek, Big Cottonwood Creek, Birch Creek,

Blue Lake Creek, Blue Moon Creek, Boundary Creek, Bridge Creek, Browning Creek, Buck Creek, Burn Creek, Cabin Creek, Cache Creek, Camp Creek, Canyon Creek, Cap Creek, Cape Horn Creek, Casner Creek, Castle Fork, Casto Creek, Cat Creek, Chokebore Creek, Chuck Creek, Cliff Creek, Cold Creek, Collie Creek, Colt Creek, Cook Creek, Corley Creek, Cornish Creek, Cottonwood Creek, Cougar Creek, Crystal Creek, Cub Creek, Cultus Creek, Dagger Creek, Deer Creek, Deer Horn Creek, Doe Creek, Dry Creek, Duffield Creek, Dynamite Creek, Eagle Creek, East Fork Elk Creek, East Fork Indian Creek, East Fork Mayfield Creek, Elk Creek, Elkhorn Creek, Endoah Creek, Fall Creek, Fawn Creek, Feltham Creek, Fir Creek, Flat Creek, Float Creek, Foresight Creek, Forty-five Creek, Forty-four Creek, Fox Creek, Full Moon Creek, Fuse Creek, Grays Creek, Grenade Creek, Grouse Creek, Gun Creek, Half Moon Creek, Hogback Creek, Honeymoon Creek, Hot Creek, Ibex Creek, Indian Creek, Jose Creek, Kelly Creek, Kerr Creek, Knapp Creek, Kwiskwis Creek, Lime Creek, Lincoln Creek, Little Beaver Creek, Little Cottonwood Creek, Little East Fork Elk Creek, Little Indian Creek, Little Loon Creek, Little Pistol Creek, Lola Creek, Loon Creek, Lucinda Creek, Lucky Creek, Luger Creek, Mace Creek, Mack Creek, Marble Creek, Marlin Creek, Marsh Creek, Mayfield Creek, McHoney Creek, McKee Creek, Merino Creek, Middle Fork Elkhorn Creek, Middle Fork Indian Creek, Middle Fork Salmon River (above Soldier Creek), Mine Creek, Mink Creek, Moonshine Creek, Mowitch Creek, Muskeg Creek, Mystery Creek, Nelson Creek, New Creek, No Name Creek, North Fork Elk Creek, North Fork Elkhorn Creek, North Fork Sheep Creek, North Fork Sulphur Creek, Papoose Creek, Parker Creek, Patrol Creek, Phillips Creek, Pierson Creek, Pinyon Creek, Pioneer Creek, Pistol Creek, Placer Creek, Poker Creek, Pole Creek, Popgun Creek, Porter Creek, Prospect Creek, Rabbit Creek, Rams Horn Creek, Range Creek, Rapid River, Rat Creek, Remington Creek, Rock Creek, Rush Creek, Sack Creek, Safety Creek, Salt Creek, Savage Creek, Scratch Creek, Seafoam Creek, Shady Creek, Shake Creek,

Sheep Creek, Sheep Trail Creek, Shell Creek, Shrapnel Creek, Siah Creek, Silver Creek, Slide Creek, Snowshoe Creek, Soldier Creek, South Fork Cottonwood Creek, South Fork Sheep Creek, Spike Creek, Springfield Creek, Squaw Creek, Sulphur Creek, Sunnyside Creek, Swamp Creek, Tennessee Creek, Thatcher Creek, Thicket Creek, Thirty-two Creek, Tomahawk Creek, Trail Creek, Trapper Creek, Trigger Creek, Twenty-two Creek, Vader Creek, Vanity Creek, Velvet Creek, Walker Creek, Wampum Creek, Warm Spring Creek, West Fork Elk Creek, West Fork Little Loon Creek, West Fork Mayfield Creek, White Creek, Wickiup Creek, Winchester Creek, Winnemucca Creek, Wyoming Creek.

(xxxv) UPPER NORTH FORK CLEARWATER BASIN: Adams Creek, Avalanche Creek, Bacon Creek, Ball Creek, Barn Creek, Barnard Creek, Barren Creek, Bear Creek, Beaver Dam Creek, Bedrock Creek, Bill Creek, Bostonian Creek, Boundary Creek, Burn Creek, Butter Creek, Camp George Creek, Canyon Creek, Cayuse Creek, Chamberlain Creek, Clayton Creek, Cliff Creek, Coffee Creek, Cold Springs Creek, Collins Creek, Colt Creek, Cool Creek, Copper Creek, Corral Creek, Cougar Creek, Craig Creek, Crater Creek, Cub Creek, Davis Creek, Deadwood Creek, Deer Creek, Dill Creek, Drift Creek, Elizabeth Creek, Fall Creek, Fire Creek, Fix Creek, Flame Creek, Fly Creek, Fourth of July Creek, Fro Creek, Frog Creek, Frost Creek, Gilfillian Creek, Goose Creek, Grass Creek, Gravey Creek, Grizzly Creek, Hanson Creek, Heather Creek, Henry Creek, Hidden Creek, Howard Creek, Independence Creek, Jam Creek, Japanese Creek, Johnagan Creek, Johnny Creek, Junction Creek, Kelly Creek, Kid Lake Creek, Kodiak Creek, Lake Creek, Laundry Creek, Lightning Creek, Little Moose Creek, Little Weitas Creek, Liz Creek, Long Creek, Marten Creek, Meadow Creek, Middle Creek, Middle North Fork Kelly Creek, Mill Creek, Mire Creek, Monroe Creek, Moose Creek, Negro Creek, Nettle Creek, Niagara Gulch, North Fork Clearwater River (Fourth of July Creek), Nub Creek, Osier Creek, Perry Creek, Pete Ott Creek, Placer Creek, Polar Creek, Post Creek, Potato Creek,

Quartz Creek, Rapid Creek, Rawhide Creek, Roaring Creek, Rock Creek, Rocky Ridge Creek, Ruby Creek, Saddle Creek, Salix Creek, Scurry Creek, Seat Creek, Short Creek, Shot Creek, Siam Creek, Silver Creek, Skull Creek, Slide Creek, Smith Creek, Snow Creek, South Fork Kelly Creek, Spud Creek, Spy Creek, Stolen Creek, Stove Creek, Sugar Creek, Swamp Creek, Tinear Creek, Tinkle Creek, Toboggan Creek, Trail Creek, Vanderbilt Gulch, Wall Creek, Weitas Creek, Williams Creek, Windy Creek, Wolf Creek, Young Creek.

(xxxvi) UPPER SALMON BASIN: Alder Creek, Alpine Creek, Alta Creek, Alturas Lake Creek, Anderson Creek, Aspen Creek, Basin Creek, Bayhorse Creek, Bear Creek, Beaver Creek, Big Boulder Creek, Block Creek, Blowfly Creek, Blue Creek, Boundary Creek, Bowery Creek, Broken Ridge Creek, Bruno Creek, Buckskin Creek, Cabin Creek, Camp Creek, Cash Creek, Challis Creek, Chamberlain Creek, Champion Creek, Cherry Creek, Cinnabar Creek, Cleveland Creek, Coal Creek, Crooked Creek, Darling Creek, Deadwood Creek, Decker Creek, Deer Creek, Dry Creek, Duffy Creek, East Basin Creek, East Fork Salmon River, East Fork Valley Creek, East Pass Creek, Eddy Creek, Eightmile Creek, Elevenmile Creek, Elk Creek, Ellis Creek, Estes Creek, First Creek, Fisher Creek, Fishhook Creek, Fivemile Creek, Fourth of July Creek, Frenchman Creek, Garden Creek, Germania Creek, Goat Creek, Gold Creek, Gooseberry Creek, Greylock Creek, Hay Creek, Hell Roaring Creek, Herd Creek, Huckleberry Creek, Iron Creek, Job Creek, Jordan Creek, Juliette Creek, Kelly Creek, Kinnikinic Creek, Lick Creek, Lightning Creek, Little Basin Creek, Little Beaver Creek, Little Boulder Creek, Little West Fork Morgan Creek, Lodgepole Creek, Lone Pine Creek, Lost Creek, MacRae Creek, Martin Creek, McKay Creek, Meadow Creek, Mill Creek, Morgan Creek, Muley Creek, Ninemile Creek, Noho Creek, Pack Creek, Park Creek, Pat Hughes Creek, Pig Creek, Pole Creek, Pork Creek, Prospect Creek, Rainbow Creek, Redfish Lake Creek, Road Creek, Rough Creek, Sage Creek, Sagebrush Creek, Salmon River (Redfish

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Lake Creek), Sawmill Creek, Second Creek, Sevenmile Creek, Sheep Creek, Short Creek, Sixmile Creek, Slate Creek, Smiley Creek, South Fork East Fork Salmon River, Squaw Creek, Stanley Creek, Stephens Creek, Summit Creek, Sunday Creek, Swimm Creek, Taylor Creek, Tenmile Creek, Tennial Creek, Thompson Creek, Three Cabins Creek, Trail Creek, Trap Creek, Treavor Creek, Twelvemile Creek, Twin Creek, Valley Creek, Van Horn Creek, Vat Creek, Warm Spring Creek, Warm Springs Creek, Washington Creek, West Beaver Creek, West Fork Creek, West Fork East Fork Salmon River, West Fork Herd Creek, West Fork Morgan Creek, West Fork Yankee Fork, West Pass Creek, Wickiup Creek, Williams Creek, Willow Creek, Yankee Fork.

(xxxvii) UPPER SELWAY BASIN: Basin Creek, Bear Creek, Burn Creek, Camp Creek, Canyon Creek, Cliff Creek, Comb Creek, Cooper Creek, Cub Creek, Deep Creek, Eagle Creek, Elk Creek, Fall Creek, Fox Creek, Goat Creek, Gold Pan Creek, Granite Creek, Grass Gulch, Haystack Creek, Hells Half Acre Creek, Indian Creek, Kim Creek, Lake Creek, Langdon Gulch, Little Clearwater River, Lodge Creek, Lunch Creek, Mist Creek, Paloma Creek, Paradise Creek, Peach Creek, Pettibone Creek, Running Creek, Saddle Gulch, Schofield Creek, Selway River (above Pettibone Creek), South Fork Running Creek, South Fork Saddle Gulch, South Fork Surprise Creek, Spruce Creek, Squaw Creek, Stripe Creek, Surprise Creek, Set Creek, Teepee Creek, Thirteen Creek, Three Lakes Creek, Triple Creek, Wahoo Creek, White Cap Creek, Wilkerson Creek, Witter Creek.

(xxxviii) WEISER BASIN: Anderson Creek, Bull Corral Creek, Dewey Creek, East Fork Weiser River, Little Weiser River, above Anderson Creek, Sheep Creek, Wolf Creek.

(3) Procedures for site specific modification of listed waterbodies or temperature criteria for bull trout.

(i) The Regional Administrator may, in his discretion, determine that the temperature criteria in paragraph (a)(1) of this section shall not apply to a specific waterbody or portion thereof listed in paragraph (a)(2) of this section. Any such determination shall be

made consistent with §131.11 and shall be based on a finding that bull trout spawning and rearing is not an existing use in such waterbody or portion thereof.

(ii) The Regional Administrator may, in his discretion, raise the temperature criteria in paragraph (a)(1) of this section as they pertain to a specific waterbody or portion thereof listed in paragraph (a)(2) of this section. Any such determination shall be made consistent with §131.11, and shall be based on a finding that bull trout would be fully supported at the higher temperature criteria.

(iii) For any determination made under paragraphs (a)(3)(i) or (a)(3)(ii) of this section, the Regional Administrator shall, prior to making such a determination, provide for public notice of and comment on a proposed determination. For any such proposed determination, the Regional Administrator shall prepare and make available to the public a technical support document addressing each waterbody or portion thereof that would be deleted or modified and the justification for each proposed determination. This document shall be made available to the public not later than the date of public notice.

(iv) The Regional Administrator shall maintain and make available to the public an updated list of determinations made pursuant to paragraphs (a)(3)(i) and (a)(3)(ii) of this section as well as the technical support documents for each determination.

(v) Nothing in this paragraph (a)(3) shall limit the Administrator's authority to modify the temperature criteria in paragraph (a)(1) of this section or the list of waterbodies in paragraph (a)(2) of this section through rule-making.

(b) *Use designations for surface waters.* In addition to the State adopted use designations, the following water body segments in Idaho are designated for cold water biota: Canyon Creek (PB 121)—below mining impact; South Fork Coeur d'Alene River (PB 140S)—Daisy Gulch to mouth; Shields Gulch (PB 148S)—below mining impact; Blackfoot River (USB 360)—Equalizing Dam to

mouth, except for any portion in Indian country; Soda Creek (BB 310)—source to mouth.

(c) *Excluded waters.* Lakes, ponds, pools, streams, and springs outside public lands but located wholly and entirely upon a person's land are not protected specifically or generally for any beneficial use, unless such waters are designated in Idaho 16.01.02.110. through 160., or, although not so designated, are waters of the United States as defined at 40 CFR 122.2.

(d) *Water quality standard variances.*

(1) The Regional Administrator, EPA Region X, is authorized to grant variances from the water quality standards in paragraph (b) of this section where the requirements of this paragraph (d) 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 (d)(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 con-

servation 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 waterbody 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 waterbody, 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 not later than the date the applicant applies for an NPDES permit which would implement the variance, except that an application may be filed later if the need for the variance arises or the data supporting the variance becomes available after the NPDES permit application is filed. 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 (d)(3) of this section. If the Regional Administrator preliminarily determines that grounds exist for granting a variance, he shall publish notice of the proposed variance. Notice of a final decision to grant a variance shall also be published. EPA will incorporate into the permittee's NPDES permit all conditions needed to implement the variance.

(5) A variance may not exceed 5 years or the term of the NPDES permit, whichever is less. A variance may be renewed if the applicant reapplies and

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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.

[62 FR 41183, July 31, 1997]

### § 131.34 [Reserved]

### § 131.35 Colville Confederated Tribes Indian Reservation.

The water quality standards applicable to the waters within the Colville Indian Reservation, located in the State of Washington.

(a) *Background.* (1) It is the purpose of these Federal water quality standards to prescribe minimum water quality requirements for the surface waters located within the exterior boundaries of the Colville Indian Reservation to ensure compliance with section 303(c) of the Clean Water Act.

(2) The Colville Confederated Tribes have a primary interest in the protection, control, conservation, and utilization of the water resources of the Colville Indian Reservation. Water quality standards have been enacted into tribal law by the Colville Business Council of the Confederated Tribes of the Colville Reservation, as the Colville Water Quality Standards Act, CTC Title 33 (Resolution No. 1984-526 (August 6, 1984) as amended by Resolution No. 1985-20 (January 18, 1985)).

(b) *Territory covered.* The provisions of these water quality standards shall apply to all surface waters within the exterior boundaries of the Colville Indian Reservation.

(c) *Applicability, Administration and Amendment.* (1) The water quality standards in this section shall be used by the Regional Administrator for establishing any water quality based National Pollutant Discharge Elimination System Permit (NPDES) for point sources on the Colville Confederated Tribes Reservation.

(2) In conjunction with the issuance of section 402 or section 404 permits, the Regional Administrator may designate mixing zones in the waters of the United States on the reservation on a case-by-case basis. The size of such mixing zones and the in-zone water quality in such mixing zones shall be consistent with the applicable

procedures and guidelines in EPA's Water Quality Standards Handbook and the Technical Support Document for Water Quality Based Toxics Control.

(3) Amendments to the section at the request of the Tribe shall proceed in the following manner.

(i) The requested amendment shall first be duly approved by the Confederated Tribes of the Colville Reservation (and so certified by the Tribes Legal Counsel) and submitted to the Regional Administrator.

(ii) The requested amendment shall be reviewed by EPA (and by the State of Washington, if the action would affect a boundary water).

(iii) If deemed in compliance with the Clean Water Act, EPA will propose and promulgate an appropriate change to this section.

(4) Amendment of this section at EPA's initiative will follow consultation with the Tribe and other appropriate entities. Such amendments will then follow normal EPA rulemaking procedures.

(5) All other applicable provisions of this part 131 shall apply on the Colville Confederated Tribes Reservation. Special attention should be paid to §§ 131.6, 131.10, 131.11 and 131.20 for any amendment to these standards to be initiated by the Tribe.

(6) All numeric criteria contained in this section apply at all in-stream flow rates greater than or equal to the flow rate calculated as the minimum 7-consecutive day average flow with a recurrence frequency of once in ten years (7Q10); narrative criteria (§ 131.35(e)(3)) apply regardless of flow. The 7Q10 low flow shall be calculated using methods recommended by the U.S. Geological Survey.

(d) *Definitions.* (1) *Acute toxicity* means a deleterious response (e.g., mortality, disorientation, immobilization) to a stimulus observed in 96 hours or less.

(2) *Background conditions* means the biological, chemical, and physical conditions of a water body, upstream from the point or non-point source discharge under consideration. Background sampling location in an enforcement action will be upstream from the point of discharge, but not upstream from other

inflows. If several discharges to any water body exist, and an enforcement action is being taken for possible violations to the standards, background sampling will be undertaken immediately upstream from each discharge.

(3) *Ceremonial and Religious water use* means activities involving traditional Native American spiritual practices which involve, among other things, primary (direct) contact with water.

(4) *Chronic toxicity* means the lowest concentration of a constituent causing observable effects (i.e., considering lethality, growth, reduced reproduction, etc.) over a relatively long period of time, usually a 28-day test period for small fish test species.

(5) *Council or Tribal Council* means the Colville Business Council of the Colville Confederated Tribes.

(6) *Geometric mean* means the *n*th root of a product of *n* factors.

(7) *Mean retention time* means the time obtained by dividing a reservoir's mean annual minimum total storage by the non-zero 30-day, ten-year low-flow from the reservoir.

(8) *Mixing zone* or *dilution zone* means a limited area or volume of water where initial dilution of a discharge takes place; and where numeric water quality criteria can be exceeded but acutely toxic conditions are prevented from occurring.

(9) *pH* means the negative logarithm of the hydrogen ion concentration.

(10) *Primary contact recreation* means activities where a person would have direct contact with water to the point of complete submergence, including but not limited to skin diving, swimming, and water skiing.

(11) *Regional Administrator* means the Administrator of EPA's Region X.

(12) *Reservation* means all land within the limits of the Colville Indian Reservation, established on July 2, 1872 by Executive Order, presently containing 1,389,000 acres more or less, and under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

(13) *Secondary contact recreation* means activities where a person's water contact would be limited to the extent that bacterial infections of eyes,

ears, respiratory, or digestive systems or urogenital areas would normally be avoided (such as wading or fishing).

(14) *Surface water* means all water above the surface of the ground within the exterior boundaries of the Colville Indian Reservation including but not limited to lakes, ponds, reservoirs, artificial impoundments, streams, rivers, springs, seeps and wetlands.

(15) *Temperature* means water temperature expressed in Centigrade degrees (C).

(16) *Total dissolved solids* (TDS) means the total filterable residue that passes through a standard glass fiber filter disk and remains after evaporation and drying to a constant weight at 180 degrees C. it is considered to be a measure of the dissolved salt content of the water.

(17) *Toxicity* means acute and/or chronic toxicity.

(18) *Tribe or Tribes* means the Colville Confederated Tribes.

(19) *Turbidity* means the clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter.

(20) *Wildlife habitat* means the waters and surrounding land areas of the Reservation used by fish, other aquatic life and wildlife at any stage of their life history or activity.

(e) *General considerations.* The following general guidelines shall apply to the water quality standards and classifications set forth in the use designation Sections.

(1) *Classification boundaries.* At the boundary between waters of different classifications, the water quality standards for the higher classification shall prevail.

(2) *Antidegradation policy.* This antidegradation policy shall be applicable to all surface waters of the Reservation.

(i) Existing in-stream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(ii) Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the Regional Administrator finds, after full satisfaction of

the inter-governmental coordination and public participation provisions of the Tribes' continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the Regional Administrator shall assure water quality adequate to protect existing uses fully. Further, the Regional Administrator shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(iii) Where high quality waters are identified as constituting an outstanding national or reservation resource, such as waters within areas designated as unique water quality management areas and waters otherwise of exceptional recreational or ecological significance, and are designated as special resource waters, that water quality shall be maintained and protected.

(iv) In those cases where potential water quality impairment associated with a thermal discharge is involved, this antidegradation policy's implementing method shall be consistent with section 316 of the Clean Water Act.

(3) *Aesthetic qualities.* All waters within the Reservation, including those within mixing zones, shall be free from substances, attributable to wastewater discharges or other pollutant sources, that:

(i) Settle to form objectionable deposits;

(ii) Float as debris, scum, oil, or other matter forming nuisances;

(iii) Produce objectionable color, odor, taste, or turbidity;

(iv) Cause injury to, are toxic to, or produce adverse physiological responses in humans, animals, or plants; or

(v) produce undesirable or nuisance aquatic life.

(4) *Analytical methods.* (i) The analytical testing methods used to measure or otherwise evaluate compliance with water quality standards shall to the extent practicable, be in accordance with

the "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (40 CFR part 136). When a testing method is not available for a particular substance, the most recent edition of "Standard Methods for the Examination of Water and Wastewater" (published by the American Public Health Association, American Water Works Association, and the Water Pollution Control Federation) and other or superseding methods published and/or approved by EPA shall be used.

(f) *General water use and criteria classes.* The following criteria shall apply to the various classes of surface waters on the Colville Indian Reservation:

(1) *Class I (Extraordinary)*—(i) *Designated uses.* The designated uses include, but are not limited to, the following:

(A) Water supply (domestic, industrial, agricultural).

(B) Stock watering.

(C) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting; other fish migration, rearing, spawning, and harvesting.

(D) Wildlife habitat.

(E) Ceremonial and religious water use.

(F) Recreation (primary contact recreation, sport fishing, boating and aesthetic enjoyment).

(G) Commerce and navigation.

(ii) *Water quality criteria.* (A) Bacteriological Criteria. The geometric mean of the enterococci bacteria densities in samples taken over a 30 day period shall not exceed 8 per 100 milliliters, nor shall any single sample exceed an enterococci density of 35 per 100 milliliters. These limits are calculated as the geometric mean of the collected samples approximately equally spaced over a thirty day period.

(B) Dissolved oxygen—The dissolved oxygen shall exceed 9.5 mg/l.

(C) Total dissolved gas—concentrations shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures at any point of sample collection.

(D) Temperature—shall not exceed 16.0 degrees C due to human activities. Temperature increases shall not, at any time, exceed  $t=23/(T+5)$ .



(1) When natural conditions exceed 16.0 degrees C, no temperature increase will be allowed which will raise the receiving water by greater than 0.3 degrees C.

(2) For purposes hereof, “t” represents the permissive temperature change across the dilution zone; and “T” represents the highest existing temperature in this water classification outside of any dilution zone.

(3) Provided that temperature increase resulting from nonpoint source activities shall not exceed 2.8 degrees C, and the maximum water temperature shall not exceed 10.3 degrees C.

(E) pH shall be within the range of 6.5 to 8.5 with a human-caused variation of less than 0.2 units.

(F) Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

(G) Toxic, radioactive, nonconventional, or deleterious material concentrations shall be less than those of public health significance, or which may cause acute or chronic toxic conditions to the aquatic biota, or which may adversely affect designated water uses.

(2) *Class II (Excellent)*—(i) *Designated uses*. The designated uses include but are not limited to, the following:

(A) Water supply (domestic, industrial, agricultural).

(B) Stock watering.

(C) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting; other fish migration, rearing, spawning, and harvesting; crayfish rearing, spawning, and harvesting.

(D) Wildlife habitat.

(E) Ceremonial and religious water use.

(F) Recreation (primary contact recreation, sport fishing, boating and aesthetic enjoyment).

(G) Commerce and navigation.

(ii) *Water quality criteria*. (A) *Bacteriological Criteria*—The geometric mean of the enterococci bacteria densities in samples taken over a 30 day period shall not exceed 16/100 ml, nor shall any single sample exceed an enterococci density of 75 per 100 milliliters. These limits are calculated as

the geometric mean of the collected samples approximately equally spaced over a thirty day period.

(B) *Dissolved oxygen*—The dissolved oxygen shall exceed 8.0 mg/l.

(C) *Total dissolved gas*—concentrations shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures at any point of sample collection.

(D) *Temperature*—shall not exceed 18.0 degrees C due to human activities. Temperature increases shall not, at any time, exceed  $t=28/(T+7)$ .

(1) When natural conditions exceed 18 degrees C no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3 degrees C.

(2) For purposes hereof, “t” represents the permissive temperature change across the dilution zone; and “T” represents the highest existing temperature in this water classification outside of any dilution zone.

(3) Provided that temperature increase resulting from non-point source activities shall not exceed 2.8 degrees C, and the maximum water temperature shall not exceed 18.3 degrees C.

(E) pH shall be within the range of 6.5 to 8.5 with a human-caused variation of less than 0.5 units.

(F) Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

(G) Toxic, radioactive, nonconventional, or deleterious material concentrations shall be less than those of public health significance, or which may cause acute or chronic toxic conditions to the aquatic biota, or which may adversely affect designated water uses.

(3) *Class III (Good)*—(i) *Designated uses*. The designated uses include but are not limited to, the following:

(A) Water supply (industrial, agricultural).

(B) Stock watering.

(C) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting; other fish migration, rearing, spawning, and harvesting; crayfish rearing, spawning, and harvesting.

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(D) Wildlife habitat.

(E) Recreation (secondary contact recreation, sport fishing, boating and aesthetic enjoyment).

(F) Commerce and navigation.

(ii) *Water quality criteria.* (A) Bacteriological Criteria—The geometric mean of the enterococci bacteria densities in samples taken over a 30 day period shall not exceed 33/100 ml, nor shall any single sample exceed an enterococci density of 150 per 100 milliliters. These limits are calculated as the geometric mean of the collected samples approximately equally spaced over a thirty day period.

(B) Dissolved oxygen.

	Early life stages <sup>1,2</sup>	Other life stages
7 day mean .....	9.5 (6.5)	<sup>3</sup> NA
1 day minimum <sup>4</sup> .....	8.0 (5.0)	6.5

<sup>1</sup>These are water column concentrations recommended to achieve the required intergravel dissolved oxygen concentrations shown in parentheses. The 3 mg/L differential is discussed in the dissolved oxygen criteria document (EPA 440/5-86-003, April 1986). For species that have early life stages exposed directly to the water column, the figures in parentheses apply.

<sup>2</sup>Includes all embryonic and larval stages and all juvenile forms to 30-days following hatching.

<sup>3</sup>NA (not applicable)

<sup>4</sup>All minima should be considered as instantaneous concentrations to be achieved at all times.

(C) Total dissolved gas concentrations shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures at any point of sample collection.

(D) Temperature shall not exceed 21.0 degrees C due to human activities. Temperature increases shall not, at any time, exceed  $t=34/(T+9)$ .

(f) When natural conditions exceed 21.0 degrees C no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3 degrees C.

(2) For purposes hereof, "t" represents the permissive temperature change across the dilution zone; and "T" represents the highest existing temperature in this water classification outside of any dilution zone.

(3) Provided that temperature increase resulting from nonpoint source activities shall not exceed 2.8 degrees C, and the maximum water temperature shall not exceed 21.3 degrees C.

(E) pH shall be within the range of 6.5 to 8.5 with a human-caused variation of less than 0.5 units.

(F) Turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

(G) Toxic, radioactive, nonconventional, or deleterious material concentrations shall be less than those of public health significance, or which may cause acute or chronic toxic conditions to the aquatic biota, or which may adversely affect designated water uses.

(4) *Class IV (Fair)—(i) Designated uses.* The designated uses include but are not limited to, the following:

(A) Water supply (industrial).

(B) Stock watering.

(C) Fish (salmonid and other fish migration).

(D) Recreation (secondary contact recreation, sport fishing, boating and aesthetic enjoyment).

(E) Commerce and navigation.

(ii) *Water quality criteria.* (A) Dissolved oxygen.

	During periods of salmonid and other fish migration	During all other time periods
30 day mean .....	6.5	5.5
7 day mean .....	<sup>1</sup> NA	<sup>1</sup> NA
7 day mean minimum .....	5.0	4.0
1 day minimum <sup>2</sup> .....	4.0	3.0

<sup>1</sup>NA (not applicable).

<sup>2</sup>All minima should be considered as instantaneous concentrations to be achieved at all times.

(B) Total dissolved gas—concentrations shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures at any point of sample collection.

(C) Temperature shall not exceed 22.0 degrees C due to human activities. Temperature increases shall not, at any time, exceed  $t=20/(T+2)$ .

(f) When natural conditions exceed 22.0 degrees C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3 degrees C.

(2) For purposes hereof, "t" represents the permissive temperature change across the dilution zone; and

“T” represents the highest existing temperature in this water classification outside of any dilution zone.

(D) pH shall be within the range of 6.5 to 9.0 with a human-caused variation of less than 0.5 units.

(E) Turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

(F) Toxic, radioactive, nonconventional, or deleterious material concentrations shall be less than those of public health significance, or which may cause acute or chronic toxic conditions to the aquatic biota, or which may adversely affect designated water uses.

(5) *Lake Class*—(i) *Designated uses*. The designated uses include but are not limited to, the following:

(A) Water supply (domestic, industrial, agricultural).

(B) Stock watering.

(C) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting; other fish migration, rearing, spawning, and harvesting; crayfish rearing, spawning, and harvesting.

(D) Wildlife habitat.

(E) Ceremonial and religious water use.

(F) Recreation (primary contact recreation, sport fishing, boating and aesthetic enjoyment).

(G) Commerce and navigation.

(ii) *Water quality criteria*. (A) *Bacteriological Criteria*. The geometric mean of the enterococci bacteria densities in samples taken over a 30 day period shall not exceed 33/100 ml, nor shall any single sample exceed an enterococci density of 150 per 100 milliliters. These limits are calculated as the geometric mean of the collected samples approximately equally spaced over a thirty day period.

(B) Dissolved oxygen—no measurable decrease from natural conditions.

(C) Total dissolved gas concentrations shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures at any point of sample collection.

(D) Temperature—no measurable change from natural conditions.

(E) pH—no measurable change from natural conditions.

(F) Turbidity shall not exceed 5 NTU over natural conditions.

(G) Toxic, radioactive, nonconventional, or deleterious material concentrations shall be less than those which may affect public health, the natural aquatic environment, or the desirability of the water for any use.

(6) *Special Resource Water Class (SRW)*—(i) *General characteristics*. These are fresh or saline waters which comprise a special and unique resource to the Reservation. Water quality of this class will be varied and unique as determined by the Regional Administrator in cooperation with the Tribes.

(ii) *Designated uses*. The designated uses include, but are not limited to, the following:

(A) Wildlife habitat.

(B) Natural foodchain maintenance.

(iii) *Water quality criteria*.

(A) Enterococci bacteria densities shall not exceed natural conditions.

(B) Dissolved oxygen—shall not show any measurable decrease from natural conditions.

(C) Total dissolved gas shall not vary from natural conditions.

(D) Temperature—shall not show any measurable change from natural conditions.

(E) pH shall not show any measurable change from natural conditions.

(F) Settleable solids shall not show any change from natural conditions.

(G) Turbidity shall not exceed 5 NTU over natural conditions.

(H) Toxic, radioactive, or deleterious material concentrations shall not exceed those found under natural conditions.

(g) *General classifications*. General classifications applying to various surface waterbodies not specifically classified under § 131.35(h) are as follows:

(1) All surface waters that are tributaries to Class I waters are classified Class I, unless otherwise classified.

(2) Except for those specifically classified otherwise, all lakes with existing average concentrations less than 2000 mg/L TDS and their feeder streams on the Colville Indian Reservation are classified as Lake Class and Class I, respectively.

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(3) All lakes on the Colville Indian Reservation with existing average concentrations of TDS equal to or exceeding 2000 mg/L and their feeder streams are classified as Lake Class and Class I respectively unless specifically classified otherwise.

(4) All reservoirs with a mean detention time of greater than 15 days are classified Lake Class.

(5) All reservoirs with a mean detention time of 15 days or less are classified the same as the river section in which they are located.

(6) All reservoirs established on pre-existing lakes are classified as Lake Class.

(7) All wetlands are assigned to the Special Resource Water Class.

(8) All other waters not specifically assigned to a classification of the reservation are classified as Class II.

(h) *Specific classifications.* Specific classifications for surface waters of the Colville Indian Reservation are as follows:

### (1) Streams:

Alice Creek .....	Class III
Anderson Creek .....	Class III
Armstrong Creek .....	Class III
Barnaby Creek .....	Class II
Bear Creek .....	Class III
Beaver Dam Creek .....	Class II
Bridge Creek .....	Class II
Brush Creek .....	Class III
Buckhorn Creek .....	Class III
Cache Creek .....	Class III
Canteen Creek .....	Class I
Capoose Creek .....	Class III
Cobbs Creek .....	Class III
Columbia River from Chief Joseph Dam to Wells Dam.	
Columbia River from northern Reservation boundary to Grand Coulee Dam (Roosevelt Lake).	
Columbia River from Grand Coulee Dam to Chief Joseph Dam.	
Cook Creek .....	Class I
Cooper Creek .....	Class III
Cornstalk Creek .....	Class III
Cougar Creek .....	Class I
Coyote Creek .....	Class II
Deerhorn Creek .....	Class III
Dick Creek .....	Class III
Dry Creek .....	Class I
Empire Creek .....	Class III
Faye Creek .....	Class I
Forty Mile Creek .....	Class III
Gibson Creek .....	Class I
Gold Creek .....	Class II
Granite Creek .....	Class II
Grizzly Creek .....	Class III
Haley Creek .....	Class III
Hall Creek .....	Class II
Hall Creek, West Fork .....	Class I
Iron Creek .....	Class III

Jack Creek .....	Class III
Jerred Creek .....	Class I
Joe Moses Creek .....	Class III
John Tom Creek .....	Class III
Jones Creek .....	Class I
Kartar Creek .....	Class III
Kincaid Creek .....	Class III
King Creek .....	Class III
Klondyke Creek .....	Class I
Lime Creek .....	Class III
Little Jim Creek .....	Class III
Little Nespelem .....	Class II
Louie Creek .....	Class III
Lynx Creek .....	Class II
Manila Creek .....	Class III
McAllister Creek .....	Class III
Meadow Creek .....	Class III
Mill Creek .....	Class II
Mission Creek .....	Class III
Nespelem River .....	Class II
Nez Perce Creek .....	Class III
Nine Mile Creek .....	Class II
Nineteen Mile Creek .....	Class III
No Name Creek .....	Class II
North Nanamkin Creek .....	Class III
North Star Creek .....	Class III
Okanogan River from Reservation north boundary to Columbia River.	
Olds Creek .....	Class I
Omak Creek .....	Class II
Onion Creek .....	Class II
Parmenter Creek .....	Class III
Peel Creek .....	Class III
Peter Dan Creek .....	Class III
Rock Creek .....	Class I
San Poil River .....	Class I
Sanpoil, River West Fork .....	Class II
Seventeen Mile Creek .....	Class III
Silver Creek .....	Class III
Sitdown Creek .....	Class III
Six Mile Creek .....	Class III
South Nanamkin Creek .....	Class III
Spring Creek .....	Class III
Stapaloop Creek .....	Class III
Stepstone Creek .....	Class III
Stranger Creek .....	Class II
Strawberry Creek .....	Class III
Swimptkin Creek .....	Class III
Three Forks Creek .....	Class I
Three Mile Creek .....	Class III
Thirteen Mile Creek .....	Class II
Thirty Mile Creek .....	Class II
Trail Creek .....	Class III
Twentyfive Mile Creek .....	Class III
Twentyone Mile Creek .....	Class III
Twentythree Mile Creek .....	Class III
Wannacot Creek .....	Class III
Wells Creek .....	Class I
Whitelaw Creek .....	Class III
Wilmont Creek .....	Class II

### (2) Lakes:

Apex Lake .....	LC
Big Goose Lake .....	LC
Bourgeau Lake .....	LC
Buffalo Lake .....	LC
Cody Lake .....	LC
Crawfish Lakes .....	LC
Camille Lake .....	LC
Elbow Lake .....	LC
Fish Lake .....	LC
Gold Lake .....	LC
Great Western Lake .....	LC
Johnson Lake .....	LC
LaFleur Lake .....	LC
Little Goose Lake .....	LC

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Little Owhi Lake .....	LC
McGinnis Lake .....	LC
Nicholas Lake .....	LC
Omak Lake .....	SRW
Owhi Lake .....	SRW
Penley Lake .....	SRW
Rebecca Lake .....	LC
Round Lake .....	LC
Simpson Lake .....	LC
Soap Lake .....	LC
Sugar Lake .....	LC
Summit Lake .....	LC
Twin Lakes .....	SRW

[54 FR 28625, July 6, 1989]

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**§ 131.36 Toxics criteria for those states not complying with Clean Water Act section 303(c)(2)(B).**

(a) *Scope.* This section is not a general promulgation of the section 304(a) criteria for priority toxic pollutants but is restricted to specific pollutants in specific States.

(b)(1) *EPA's Section 304(a) Criteria for Priority Toxic Pollutants.*

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( # ) C O M P O U N D	C A S N u m b e r	B F R E S H W A T E R		C S A L T W A T E R		D H U M A N   H E A L T H (10 <sup>-6</sup> risk for carcinogens)	
		Criterion Maximum Conc. d (ug/L) B1	Criterion Continuous Conc. d (ug/L) B2	Criterion Maximum Conc. d (ug/L) C1	Criterion Continuous Conc. d (ug/L) C2	For Consumption of: Water & Organisms Only (ug/L) D1	Organisms Only (ug/L) D2
1 Antimony	7440360					14 a	4300 a
2 Arsenic	7440382	360 m	190 m	69 m	36 m	0.018 abc	0.14 abc
3 Beryllium	7440417					n	n
4 Cadmium	7440439	3.7 e	1.0 e	42 m	9.3 m	n	n
5a Chromium (III)	16065831	550 e	180 e			n	n
b Chromium (VI)	18540299	15 m	10 m	1100 m	50 m	n	n
6 Copper	7440508	17 e	11 e	2.4 m	2.4 m		
7 Lead	7439921	65 e	2.5 e	210 m	8.1 m	n	n
8 Mercury	7439976	2.1 m	0.012 i,p	1.8 m	0.025 i,p	0.14	0.15
9 Nickel	7440020	1400 e	160 e	74 m	8.2 m	610 a	4600 a
10 Selenium	7782492	20 p	5 p	290 m	71 m	n	n
11 Silver	7440224	3.4 e		1.9 m			
12 Thallium	7440280					1.7 a	6.3 a
13 Zinc	7440666	110 e	100 e	90 m	81 m		
14 Cyanide	57125	22	5.2	1	1	700 a	220000 aj
15 Asbestos	1332214					7,000,000 fibers/L	k
16 2,3,7,8-TCDD (Dioxin)	1746016					0.00000013 c	0.00000014 c
17 Acrolein	107028					320	780
18 Acrylonitrile	107131					0.059 ac	0.66 ac
19 Benzene	71432					1.2 ac	71 ac
20 Bromoform	75252					4.3 ac	360 ac
21 Carbon Tetrachloride	56235					0.25 ac	4.4 ac
22 Chlorobenzene	108907					680 a	21000 aj
23 Chlorodibromomethane	124481					0.41 ac	34 ac
24 Chloroethane	75003						
25 2-Chloroethylvinyl Ether	110758						
26 Chloroform	67663					5.7 ac	470 ac
27 Dichlorobromomethane	75274					0.27 ac	22 ac
28 1,1-Dichloroethane	75343						

A		B		C		D	
		FRESHWATER		SALTWATER		HUMAN HEALTH (10 <sup>-6</sup> risk for carcinogens)	
#	COMPOUND	CAS Number	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	For Consumption of: Water & Organisms Only (ug/L)
			B1	B2	C1	C2	D1 D2
29	1,2-Dichloroethane	107062					0.38 ac 99 ac
30	1,1-Dichloroethylene	75354					0.057 ac 3.2 ac
31	1,2-Dichloropropane	78875					
32	1,3-Dichloropropylene	542756					10 a 1700 a
33	Ethylbenzene	100414					3100 a 29000 a
34	Methyl Bromide	74839					48 a 4000 a
35	Methyl Chloride	74873					n n
36	Methylene Chloride	75092					4.7 ac 1600 ac
37	1,1,2,2-Tetrachloroethane	79345					0.17 ac 11 ac
38	Tetrachloroethylene	127184					0.8 c 8.85 c
39	Toluene	108883					6800 a 200000 a
40	1,2-Trans-Dichloroethylene	156605					
41	1,1,1-Trichloroethane	71556					n n
42	1,1,2-Trichloroethane	79005					0.60 ac 42 ac
43	Trichloroethylene	79016					2.7 c 81 c
44	Vinyl Chloride	75014					2 c 525 c
45	2-Chlorophenol	95578					
46	2,4-Dichlorophenol	120832					93 a 790 aj
47	2,4-Dimethylphenol	105679					
48	2-Methyl-4,6-Dinitrophenol	534521					13.4 765
49	2,4-Dinitrophenol	51285					70 a 14000 a
50	2-Nitrophenol	88755					
51	4-Nitrophenol	100027					
52	3-Methyl-4-Chlorophenol	59507					
53	Pentachlorophenol	87865	20 f	13 f	13	7.9	0.28 ac 8.2 acj
54	Phenol	108952					21000 a 4600000 aj
55	2,4,6-Trichlorophenol	88062					2.1 ac 6.5 ac
56	Acenaphthene	83329					
57	Acenaphthylene	208968					
58	Anthracene	120127					9600 a 110000 a

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#	COMPOUND	CAS Number	B FRESHWATER		C SALTWATER		D HUMAN HEALTH (10 <sup>-6</sup> risk for carcinogens)	
			Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	For Consumption of: Water & Organisms Only (ug/L)	Organisms Only (ug/L)
			B1	B2	C1	C2	D1	D2
59	Benzidine	92875					0.00012 ac	0.00054 ac
60	Benzo(a)Anthracene	56553					0.0028 c	0.031 c
61	Benzo(a)Pyrene	50328					0.0028 c	0.031 c
62	Benzo(b)Fluoranthene	205992					0.0028 c	0.031 c
63	Benzo(ghi)Perylene	191242						
64	Benzo(k)Fluoranthene	207089					0.0028 c	0.031 c
65	Bis(2-Chloroethoxy)Methane	111911						
66	Bis(2-Chloroethyl)Ether	111444					0.031 ac	1.4 ac
67	Bis(2-Chloroisopropyl)Ether	108601					1400 a	170000 a
68	Bis(2-Ethylhexyl)Phthalate	117817					1.8 ac	5.9 ac
69	4-Bromophenyl Phenyl Ether	101553						
70	Butylbenzyl Phthalate	85687						
71	2-Chloronaphthalene	91587						
72	4-Chlorophenyl Phenyl Ether	7005723						
73	Chrysene	218019					0.0028 c	0.031 c
74	Dibenzo(a,h)Anthracene	53703					0.0028 c	0.031 c
75	1,2-Dichlorobenzene	95501					2700 a	17000 a
76	1,3-Dichlorobenzene	541731					400	2600
77	1,4-Dichlorobenzene	106467					400	2600
78	3,3'-Dichlorobenzidine	91941					0.04 ac	0.077 ac
79	Diethyl Phthalate	84662					23000 a	120000 a
80	Dimethyl Phthalate	131113					313000	2900000
81	Di-n-Butyl Phthalate	84742					2700 a	12000 a
82	2,4-Dinitrotoluene	121142					0.11 c	9.1 c
83	2,6-Dinitrotoluene	606202						
84	Di-n-Octyl Phthalate	117840						
85	1,2-Diphenylhydrazine	122667					0.040 ac	0.54 ac
86	Fluoranthene	206440					300 a	370 a
87	Fluorene	86737					1300 a	14000 a
88	Hexachlorobenzene	118741					0.00075 ac	0.00077 ac



A		B		C		D	
		FRESHWATER		SALT WATER		HUMAN HEALTH (10 <sup>-6</sup> risk for carcinogens)	
(#)	COMPOUND	CAS Number	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	For Consumption of: Water & Organisms Only (ug/L)
			B1	B2	C1	C2	D1 D2
89	Hexachlorobutadiene	87683					0.44 ac 50 ac
90	Hexachlorocyclopentadiene	77474					240 a 17000 aj
91	Hexachloroethane	67721					1.9 ac 8.9 ac
92	Indeno(1,2,3-cd)Pyrene	193395					0.0028 c 0.031 c
93	Isophorone	78591					8.4 ac 600 ac
94	Naphthalene	91203					
95	Nitrobenzene	98953					17 a 1900 aj
96	N-Nitrosodimethylamine	62759					0.00069 ac 8.1 ac
97	N-Nitrosodi-n-Propylamine	621647					
98	N-Nitrosodiphenylamine	86306					5.0 ac 16 ac
99	Phenanthrene	85018					
100	Pyrene	129000					960 a 11000 a
101	1,2,4-Trichlorobenzene	120821					
102	Aldrin	309002	3 g		1.3 g		0.00013 ac 0.00014 ac
103	alpha-BHC	319846					0.0039 ac 0.013 ac
104	beta-BHC	319857					0.014 ac 0.046 ac
105	gamma-BHC	58899	2 g	0.08 g	0.16 g		0.019 c 0.063 c
106	delta-BHC	319868					
107	Chlordane	57749	2.4 g	0.0043 g	0.09 g	0.004 g	0.00057 ac 0.00059 ac
108	4,4'-DDT	50293	1.1 g	0.001 g	0.13 g	0.001 g	0.00059 ac 0.00059 ac
109	4,4'-DDE	72559					0.00059 ac 0.00059 ac
110	4,4'-DDD	72548					0.00083 ac 0.00084 ac
111	Dieldrin	60571	2.5 g	0.0019 g	0.71 g	0.0019 g	0.00014 ac 0.00014 ac
112	alpha-Endosulfan	959988	0.22 g	0.056 g	0.034 g	0.0087 g	0.93 a 2.0 a
113	beta-Endosulfan	33213659	0.22 g	0.056 g	0.034 g	0.0087 g	0.93 a 2.0 a
114	Endosulfan Sulfate	1031078					0.93 a 2.0 a
115	Endrin	72208	0.18 g	0.0023 g	0.037 g	0.0023 g	0.76 a 0.81 aj
116	Endrin Aldehyde	7421934					0.76 a 0.81 aj
117	Heptachlor	76448	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00021 ac 0.00021 ac

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A		B		C		D		
		FRESHWATER		SALTWATER		HUMAN HEALTH (10 <sup>-6</sup> risk for carcinogens)		
#	COMPOUND	CAS Number	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	Criterion Maximum Conc. d (ug/L)	Criterion Continuous Conc. d (ug/L)	For Consumption of: Water & Organisms (ug/L)	Organisms Only (ug/L)
			B1	B2	C1	C2	D1	D2
118	Heptachlor Epoxide	1024573	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00010 ac	0.00011 ac
119	PCB-1242	53469219		0.014 g		0.03 g	0.000044 ac	0.000045 ac
120	PCB-1254	11097691		0.014 g		0.03 g	0.000044 ac	0.000045 ac
121	PCB-1221	11104282		0.014 g		0.03 g	0.000044 ac	0.000045 ac
122	PCB-1232	11141165		0.014 g		0.03 g	0.000044 ac	0.000045 ac
123	PCB-1248	12672296		0.014 g		0.03 g	0.000044 ac	0.000045 ac
124	PCB-1260	11096825		0.014 g		0.03 g	0.000044 ac	0.000045 ac
125	PCB-1016	12674112		0.014 g		0.03 g	0.000044 ac	0.000045 ac
126	Toxaphene	8001352	0.73	0.0002	0.21	0.0002	0.00073 ac	0.00075 ac
Total No. of Criteria (h) =			24	29	23	27	91	90

## Footnotes:

a. Criteria revised to reflect current agency  $q_1^*$  or RfD, as contained in the Integrated Risk Information System (IRIS). The fish tissue bioconcentration factor (BCF) from the 1980 criteria documents was retained in all cases.

b. The criteria refers to the inorganic form only.

c. Criteria in the matrix based on carcinogenicity ( $10^{-6}$  risk). For a risk level of  $10^{-5}$ , move the decimal point in the matrix value one place to the right.

d. Criteria Maximum Concentration (CMC) = the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) without deleterious effects. Criteria Continuous Concentration (CCC) = the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.  $\mu\text{g/L}$  = micrograms per liter

e. Freshwater aquatic life criteria for these metals are expressed as a function of total hardness ( $\text{mg/L}$  as  $\text{CaCO}_3$ ), the pollutant's water effect ratio (WER) as defined in § 131.36(c) and multiplied by an appropriate dissolved conversion factor as defined in § 131.36(b)(2). For comparative purposes, the values displayed in this matrix are shown as dissolved metal and correspond to a total hardness of 100  $\text{mg/L}$  and a water effect ratio of 1.0.

f. Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows. Values displayed above in the matrix correspond to a pH of 7.8.

$$\text{CMC} = \exp(1.005(\text{pH}) - 4.830) \quad \text{CCC} = \exp(1.005(\text{pH}) - 5.290)$$

g. Aquatic life criteria for these compounds were issued in 1980 utilizing the 1980 Guidelines for criteria development. The acute values shown are final acute values (FAV) which by the 1980 Guidelines are instantaneous values as contrasted with a CMC which is a one-hour average.

h. These totals simply sum the criteria in each column. For aquatic life, there are 30 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 91 priority toxic pollutants with either "water + fish" or "fish only" criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority toxic pollutants includes only a single listing for chromium.

i. If the CCC for total mercury exceeds 0.012  $\mu\text{g/L}$  more than once in a 3-year period in the ambient water, the edible portion of aquatic species of concern must be analyzed

to determine whether the concentration of methyl mercury exceeds the FDA action level (1.0  $\text{mg/kg}$ ). If the FDA action level is exceeded, the State must notify the appropriate EPA Regional Administrator, initiate a revision of its mercury criterion in its water quality standards so as to protect designated uses, and take other appropriate action such as issuance of a fish consumption advisory for the affected area.

j. No criteria for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.

k. The criterion for asbestos is the MCL (56 FR 3526, January 30, 1991).

l. [Reserved: this letter not used as a footnote].

m. Criteria for these metals are expressed as a function of the water effect ratio, WER, as defined in 40 CFR 131.36(c).

CMC = column B1 or C1 value  $\times$  WER

CCC = column B2 or C2 value  $\times$  WER

n. EPA is not promulgating human health criteria for this contaminant. However, permit authorities should address this contaminant in NPDES permit actions using the State's existing narrative criteria for toxics.

o. [Reserved: This letter not used as a footnote].

p. Criterion expressed as total recoverable.

## General Notes:

1. This chart lists all of EPA's priority toxic pollutants whether or not criteria recommendations are available. Blank spaces indicate the absence of criteria recommendations. Because of variations in chemical nomenclature systems, this listing of toxic pollutants does not duplicate the listing in Appendix A of 40 CFR Part 423. EPA has added the Chemical Abstracts Service (CAS) registry numbers, which provide a unique identification for each chemical.

2. The following chemicals have organoleptic based criteria recommendations that are not included on this chart (for reasons which are discussed in the preamble): copper, zinc, chlorobenzene, 2-chlorophenol, 2,4-dichlorophenol, acenaphthene, 2,4-dimethylphenol, 3-methyl-4-chlorophenol, hexachlorocyclopentadiene, pentachlorophenol, phenol

3. For purposes of this rulemaking, freshwater criteria and saltwater criteria apply as specified in 40 CFR 131.36(c).

Note to paragraph (b)(1): On April 14, 1995, the Environmental Protection Agency issued a stay of certain criteria in paragraph (b)(1) of this section as follows: the criteria in columns B and C for arsenic, cadmium, chromium (VI), copper, lead, nickel, silver, and

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zinc; the criteria in B1 and C1 for mercury; the criteria in column B for chromium (III); and the criteria in column C for selenium. The stay remains in effect until further notice.

### (2) Factors for Calculating Hardness-Dependent, Freshwater Metals Criteria

CMC=WER exp {  $m_A[\ln(\text{hardness})]+b_A$  }  
 x Acute Conversion Factor  
 CCC=WER exp {  $m_C[\ln(\text{hardness})]+b_C$  } x  
 Chronic Conversion Factor  
 Final CMC and CCC values should be rounded to two significant figures.

Metal	$m_A$	$b_A$	$m_C$	$b_C$	Freshwater conversion factors	
					Acute	Chronic
Cadmium .....	1.128	-3.828	0.7852	-3.490	<sup>a</sup> 0.944	<sup>a</sup> 0.909
Chromium (III) .....	0.8190	3.688	0.8190	1.561	0.316	0.860
Copper .....	0.9422	-1.464	0.8545	-1.465	0.960	0.960
Lead .....	1.273	-1.460	1.273	-4.705	<sup>a</sup> 0.791	<sup>a</sup> 0.791
Nickel .....	0.8460	3.3612	0.8460	1.1645	0.998	0.997
Silver .....	1.72	-6.52	<sup>b</sup> N/A	<sup>b</sup> N/A	0.85	<sup>b</sup> N/A
Zinc .....	0.8473	0.8604	0.8473	0.7614	0.978	0.986

Note to table: The term "exp" represents the base e exponential function.

Footnotes to table:

<sup>a</sup>The freshwater conversion factors (CF) for cadmium and lead are hardness-dependent and can be calculated for any hardness [see limitations in § 131.36(c)(4)] using the following equations:

Cadmium

Acute: CF=1.136672—[(ln hardness)/(0.041838)]

Chronic: CF=1.101672—[(ln hardness)/(0.041838)]

Lead (Acute and Chronic): CF = 1.46203—[(ln hardness)/(0.145712)]

<sup>b</sup>No chronic criteria are available for silver.

(c) *Applicability.* (1) The criteria in paragraph (b) of this section apply to the States' designated uses cited in paragraph (d) of this section and supersede any criteria adopted by the State, except when State regulations contain criteria which are more stringent for a particular use in which case the State's criteria will continue to apply.

(2) The criteria established in this section are subject to the State's general rules of applicability in the same way and to the same extent as are the other numeric toxics criteria when applied to the same use classifications including mixing zones, and low flow values below which numeric standards can be exceeded in flowing fresh waters.

(i) For all waters with mixing zone regulations or implementation procedures, the criteria apply at the appropriate locations within or at the boundary of the mixing zones; otherwise the criteria apply throughout the waterbody including at the end of any discharge pipe, canal or other discharge point.

(ii) A State shall not use a low flow value below which numeric standards can be exceeded that is less stringent than the following for waters suitable for the establishment of low flow re-

turn frequencies (i.e., streams and rivers):

AQUATIC LIFE  
 Acute criteria (CMC) 1 Q 10 or 1 B 3  
 Chronic criteria (CCC) 7 Q 10 or 4 B 3

HUMAN HEALTH  
 Non-carcinogens 30 Q 5  
 Carcinogens Harmonic mean flow

Where:

CMC—criteria maximum concentration—the water quality criteria to protect against acute effects in aquatic life and is the highest instream concentration of a priority toxic pollutant consisting of a one-hour average not to be exceeded more than once every three years on the average;

CCC—criteria continuous concentration—the water quality criteria to protect against chronic effects in aquatic life is the highest instream concentration of a priority toxic pollutant consisting of a 4-day average not to be exceeded more than once every three years on the average;

1 Q 10 is the lowest one day flow with an average recurrence frequency of once in 10 years determined hydrologically;

1 B 3 is biologically based and indicates an allowable exceedence of once every 3 years. It is determined by EPA's computerized method (DFLOW model);

7 Q 10 is the lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years determined hydrologically;

4 B 3 is biologically based and indicates an allowable exceedence for 4 consecutive days once every 3 years. It is determined by EPA's computerized method (DFLOW model);

30 Q 5 is the lowest average 30 consecutive day low flow with an average recurrence frequency of once in 5 years determined hydrologically; and the harmonic mean flow is a long term mean flow value calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows.

(iii) If a State does not have such a low flow value for numeric standards compliance, then none shall apply and the criteria included in paragraph (d) of this section herein apply at all flows.

(3) The aquatic life criteria in the matrix in paragraph (b) of this section apply as follows:

(i) For waters in which the salinity is equal to or less than 1 part per thousand 95% or more of the time, the applicable criteria are the freshwater criteria in Column B;

(ii) For waters in which the salinity is equal to or greater than 10 parts per thousand 95% or more of the time, the applicable criteria are the saltwater criteria in Column C; and

(iii) For waters in which the salinity is between 1 and 10 parts per thousand as defined in paragraphs (c)(3) (i) and (ii) of this section, the applicable criteria are the more stringent of the freshwater or saltwater criteria. However, the Regional Administrator may approve the use of the alternative freshwater or saltwater criteria if scientifically defensible information and data demonstrate that on a site-specific basis the biology of the waterbody is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; or conversely, the biology of the waterbody is dominated by saltwater aquatic life and that saltwater criteria are more appropriate.

(4) *Application of metals criteria.* (i) For purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, the minimum hardness allowed for use in those equations shall not be less than 25 mg/l, as calcium carbonate, even if the actual ambient hardness is less than 25 mg/l as calcium carbonate. The maximum hardness value for use in those equations shall

not exceed 400 mg/l as calcium carbonate, even if the actual ambient hardness is greater than 400 mg/l as calcium carbonate. The same provisions apply for calculating the metals criteria for the comparisons provided for in paragraph (c)(3)(iii) of this section.

(ii) The hardness values used shall be consistent with the design discharge conditions established in paragraph (c)(2) of this section for flows and mixing zones.

(iii) Except where otherwise noted, the criteria for metals (compounds #2, #4–# 11, and #13, in paragraph (b) of this section) are expressed as dissolved metal. For purposes of calculating aquatic life criteria for metals from the equations in footnote m. in the criteria matrix in paragraph (b)(1) of this section and the equations in paragraphs (b)(2) of this section, the water-effect ratio is computed as a specific pollutant's acute or chronic toxicity values measured in water from the site covered by the standard, divided by the respective acute or chronic toxicity value in laboratory dilution water.

(d) *Criteria for Specific Jurisdictions—*(1) *Rhode Island, EPA Region 1.* (i) All waters assigned to the following use classifications in the Water Quality Regulations for Water Pollution Control adopted under Chapters 46–12, 42–17.1, and 42–35 of the General Laws of Rhode Island are subject to the criteria in paragraph (d)(1)(ii) of this section, without exception:

6.21 Freshwater	6.22 Saltwater:
Class A .....	Class SA
Class B .....	Class SB
Class C .....	Class SC

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(1)(i) of this section:

Use classification	Applicable criteria
Class A	These classifications are assigned the criteria in: Column D1—all
Class B waters where water supply use is designated	
Class B waters where water supply use is not designated;	
Class C;	
Class SA;	

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Use classification	Applicable criteria
Class SB; Class SC	Each of these classifications is assigned the criteria in:

Column D2—all

(iii) The human health criteria shall be applied at the  $10^{-5}$  risk level, consistent with the State policy. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

(2) *Vermont, EPA Region 1.* (i) All waters assigned to the following use classifications in the Vermont Water Quality Standards adopted under the authority of the Vermont Water Pollution Control Act (10 V.S.A., Chapter 47) are subject to the criteria in paragraph (d)(2)(ii) of this section, without exception:

Class A  
Class B  
Class C

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(2)(i) of this section:

Use classification	Applicable criteria
Class A	
Class B waters where water supply use is designated	This classification is assigned the criteria in: Column B1—all Column B2—all Column D1—all
Class B waters where water supply use is not designated	
Class C	These classifications are assigned the criteria in: Column B1—all Column B2—all Column D2—all

(iii) The human health criteria shall be applied at the State-proposed  $10^{-6}$  risk level.

(3) *New Jersey, EPA Region 2.* (i) All waters assigned to the following use classifications in the New Jersey Administrative Code (N.J.A.C.) 7:9-4.1 et seq., Surface Water Quality Standards, are subject to the criteria in paragraph (d)(3)(ii) of this section, without exception.

N.J.A.C. 7:9-4.12(b): Class PL  
N.J.A.C. 7:9-4.12(c): Class FW2  
N.J.A.C. 7:9-4.12(d): Class SE1  
N.J.A.C. 7:9-4.12(e): Class SE2  
N.J.A.C. 7:9-4.12(f): Class SE3  
N.J.A.C. 7:9-4.12(g): Class SC  
N.J.A.C. 7:9-4.13(a): Delaware River Zones 1C, 1D, and 1E  
N.J.A.C. 7:9-4.13(b): Delaware River Zone 2  
N.J.A.C. 7:9-4.13(c): Delaware River Zone 3  
N.J.A.C. 7:9-4.13(d): Delaware River Zone 4  
N.J.A.C. 7:9-4.13(e): Delaware River Zone 5  
N.J.A.C. 7:9-4.13(f): Delaware River Zone 6

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(3)(i) of this section:

Use classification	Applicable criteria
PL (Freshwater Pinelands), FW2	These classifications are assigned the criteria in: Column B1—all except #102, 105, 107, 108, 111, 112, 113, 115, 117, and 118. Column B2—all except #105, 107, 108, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 123, 124, and 125. Column D1—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level. Column D2—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level.
PL (Saline Water Pinelands), SE1, SE2, SE3, SC	These classifications are each assigned the criteria in: Column C1—all except #102, 105, 107, 108, 111, 112, 113, 115, 117, and 118.

Use classification	Applicable criteria	classifications in the Puerto Rico Water Quality Standards (promulgated by Resolution Number R-83-5-2) are subject to the criteria in paragraph (d)(4)(ii) of this section, without exception.
	Column C2—all except #105, 107, 108, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 123, 124, and 125.	Article 2.2.2—Class SB
	Column D2—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level.	Article 2.2.3—Class SC
		Article 2.2.4—Class SD
	These classifications are each assigned the criteria in:	(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(4)(i) of this section:
Delaware River zones 1C, 1D, 1E, 2, 3, 4, 5 and Delaware Bay zone 6	Column B1—all. Column B2—all. Column D1—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level. Column D2—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level.	Use classification
		Class SD
		This Classification is assigned criteria in: Column B1—all, except: 10, 102, 105, 107, 108, 111, 112, 113, 115, 117, and 126. Column B2—all, except: 105, 107, 108, 112, 113, 115, and 117. Column D1—all, except: 6, 14, 105, 112, 113, and 115. Column D2—all, except: 14, 105, 112, 113, and 115.
		Class SB, Class SC
		These Classifications are assigned criteria in: Column C1—all, except: 4, 5b, 7, 8, 10, 11, 13, 102, 105, 107, 108, 111, 112, 113, 115, 117, and 126. Column C2—all, except: 4, 5b, 10, 13, 108, 112, 113, 115, and 117. Column D2—all, except: 14, 105, 112, 113, and 115.
Delaware River zones 3, 4, and 5, and Delaware Bay zone 6	These classifications are each assigned the criteria in: Column C1—all. Column C2—all. Column D2—all at a $10^{-6}$ risk level except #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105; #23, 30, 37, 38, 42, 68, 89, 91, 93, 104, 105, at a $10^{-5}$ risk level.	
		(iii) The human health criteria shall be applied at the State-proposed $10^{-6}$ risk level for EPA rated Class A, B <sub>1</sub> , and B <sub>2</sub> carcinogens; EPA rated Class C carcinogens shall be applied at $10^{-5}$ risk level. To determine appropriate value for carcinogens, see footnote c. in the matrix in paragraph (b)(1) of this section.
		(4) <i>Puerto Rico, EPA Region 2.</i> (i) All waters assigned to the following use
		(5) <i>District of Columbia, EPA Region 3.</i> (i) All waters assigned to the following use classifications in chapter 11 Title 21 DCMR, Water Quality Standards of the District of Columbia are subject to the criteria in paragraph

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(d)(5)(ii) of this section, without exception:

### 1101.2 Class C waters

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classification identified in paragraph (d)(5)(i) of this section:

Use classification	Applicable criteria
Class C	This classification is assigned the additional criteria in: Column B2—#10, 118, 126. Column D1—#15, 16, 44, 67, 68, 79, 80, 81, 88, 114, 116, 118. Column D2—all.

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

### (6) *Florida, EPA Region 4.*

(i) All waters assigned to the following use classifications in Chapter 17-301 of the Florida Administrative Code (i.e., identified in Section 17-302.600) are subject to the criteria in paragraph (d)(6)(ii) of this section, without exception:

Class I  
Class II  
Class III

(ii) The following criteria from the matrix paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(6)(i) of this section:

Use classification	Applicable criteria
Class I	This classification is assigned the criteria in: Column D1—#16
Class II Class III (marine)	This classification is assigned the criteria in: Column D2—#16
Class III (freshwater)	This classification is assigned the criteria in: Column D2—#16

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

### (7) *Michigan, EPA Region 5.*

(i) All waters assigned to the following use classifications in the Michigan

Department of Natural Resources Commission General Rules, R 323.1100 designated uses, as defined at R 323.1043. Definitions; A to N, (i.e., identified in Section (g) "Designated use") are subject to the criteria in paragraph (d)(7)(ii) of this section, without exception:

Agriculture  
Navigation  
Industrial Water Supply  
Public Water Supply at the Point of Water Intake  
Warmwater Fish  
Other Indigenous Aquatic Life and Wildlife  
Partial Body Contact Recreation

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(7)(i) of this section:

Use classification	Applicable criteria
Public Water supply	This classification is assigned the criteria in: Column B1—all, Column B2—all, Column D1—all.
All other designations	These classifications are assigned the criteria in: Column B1—all, Column B2—all, and Column D2—all.

(iii) The human health criteria shall be applied at the State-adopted  $10^{-5}$  risk level. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

### (8) *Arkansas, EPA Region 6.*

(i) All waters assigned to the following use classification in section 4C (Waterbody uses) identified in Arkansas Department of Pollution Control and Ecology's Regulation No. 2 as amended and entitled, "Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas" are subject to the criteria in paragraph (d)(8)(ii) of this section, without exception:

Extraordinary Resource Waters  
Ecologically Sensitive Waterbody  
Natural and Scenic Waterways  
Fisheries:

- (1) Trout
- (2) Lakes and Reservoirs



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- (3) Streams  
 (a) Ozark Highlands Ecoregion  
 (b) Boston Mountains Ecoregion  
 (c) Arkansas River Valley Ecoregion  
 (d) Ouachita Mountains Ecoregion  
 (e) Typical Gulf Coastal Ecoregion  
 (f) Spring Water-influenced Gulf Coastal Ecoregion  
 (g) Least-altered Delta Ecoregion  
 (h) Channel-altered Delta Ecoregion  
 Domestic Water Supply

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classification identified in paragraph (d)(8)(i) of this section:

Use classification	Applicable criteria
Extraordinary Resource Waters	These uses are each assigned the criteria in— Column B1—#4, 5a, 5b, 6, 7, 8, 9, 10, 11, 13, 14 Column B2—#4, 5a, 5b, 6, 7, 8, 9, 10, 13, 14
Ecologically Sensitive Waterbody	
Natural and Scenic Waterways	
Fisheries:	
(1) Trout	
(2) Lakes and Reservoirs	
(3) Streams	
(a) Ozark Highlands Ecoregion	
(b) Boston Mountains Ecoregion	
(c) Arkansas River Valley Ecoregion	
(d) Ouachita Mountains Ecoregion	
(e) Typical Gulf Coastal Ecoregion	
(f) Spring Water-influenced Gulf Coastal Ecoregion	
(g) Least-altered Delta Ecoregion	
(h) Channel-altered Delta Ecoregion	

(9) *Kansas, EPA Region 7.*

(i) All waters assigned to the following use classification in the Kansas Department of Health and Environment regulations, K.A.R. 28-16-28b through K.A.R. 28-16-28f, are subject to the criteria in paragraph (d)(9)(ii) of this section, without exception.

Section 28-16-28d

- Section (2)(A)—Special Aquatic Life Use Waters  
 Section (2)(B)—Expected Aquatic Life Use Waters  
 Section (2)(C)—Restricted Aquatic Life Use Waters  
 Section (3)—Domestic Water Supply  
 Section (6)(c)—Consumptive Recreation Use.

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(9)(i) of this section:

Use classification	Applicable criteria
Sections (2)(A), (2)(B), (2)(C), (6)(C)	These classifications are each assigned all criteria in: Column B1, all except #9, 11, 13, 102, 105, 107, 108, 111–113, 115, 117, and 126; Column B2, all except #9, 13, 105, 107, 108, 111–113, 115, 117, 119–125, and 126; and Column D2, all except #9, 112, 113, and 115.
Section (3)	This classification is assigned all criteria in; Column D1, all except #9, 12, 112, 113, and 115.

(iii) The human health criteria shall be applied at the State-proposed  $10^{-6}$  risk level.

(10) *California, EPA Region 9.*

(i) All waters assigned any aquatic life or human health use classifications in the Water Quality Control Plans for the various Basins of the State (“Basin Plans”), as amended, adopted by the California State Water Resources Control Board (“SWRCB”), except for ocean waters covered by the Water Quality Control Plan for Ocean Waters of California (“Ocean Plan”) adopted by the SWRCB with resolution Number 90–27 on March 22, 1990, are subject to the criteria in paragraph (d)(10)(ii) of this section, without exception. These criteria amend the portions of the existing State standards contained in the Basin Plans. More particularly these criteria amend water quality criteria contained in the Basin Plan Chapters

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specifying water quality objectives (the State equivalent of federal water quality criteria) for the toxic pollutants identified in paragraph (d)(10)(ii) of this section. Although the State has adopted several use designations for each of these waters, for purposes of this action, the specific standards to be applied in paragraph (d)(10)(ii) of this section are based on the presence in all

waters of some aquatic life designation and the presence or absence of the MUN use designation (Municipal and domestic supply). (See Basin Plans for more detailed use definitions.)

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the water and use classifications defined in paragraph (d)(10)(i) of this section and identified below:

Water and use classification	Applicable criteria
Waters of the State defined as bays or estuaries except the Sacramento-San Joaquin Delta and San Francisco Bay	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column C1—pollutant 14 Column C2—pollutant 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-44, 46, 48, 49, 54, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
Waters of the Sacramento—San Joaquin Delta and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column D1—pollutants 1, 12, 15, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-48, 49, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
Waters of the State defined as inland without an MUN use designation	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-44, 46, 48, 49, 54, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
Waters of the San Joaquin River from the mouth of the Merced River to Vernalis	In addition to the criteria assigned to these waters elsewhere in this rule, these waters are assigned the criteria in: Column B2—pollutant 10
Waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River	In addition to the criteria assigned to these waters elsewhere in this rule, these waters are assigned the criteria in: Column B1—pollutant 10 Column B2—pollutant 10
Waters of San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta	These waters are assigned the criteria in: Column B1—pollutants 5a, 10* and 14

Water and use classification	Applicable criteria
	Column B2—pollutants 5a, 10* and 14 Column C1—pollutant 14 Column C2—pollutant 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42–44, 46, 48, 49, 54, 59, 66, 67, 68, 78–82, 85, 89, 90, 91, 93, 95, 96, 98
All inland waters of the United States or enclosed bays and estuaries that are waters of the United States that include an MUN use designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or its Water Quality Control Plan for Enclosed Bays and Estuaries of California, Tables 1 and 2, or has deferred applicability of those tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California or page 6 of its Water Quality Control Plan for Enclosed Bays and Estuaries of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column D1—all pollutants except #2
All inland waters of the United States that do not include an MUN use designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or has deferred applicability of these tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column D2—all pollutants except #2
All enclosed bays and estuaries that are waters of the United States that do not include an MUN designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or its Water Quality Control Plan for Enclosed Bays and Estuaries of California, Tables 1 and 2, or has deferred applicability of those tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California or page 6 of its Water Quality Control Plan for Enclosed Bays and Estuaries of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column C1—all pollutants Column C2—all pollutants Column D2—all pollutants except #2
*The fresh water selenium criteria are included for the San Francisco Bay estuary because high levels of bioaccumulation of selenium in the estuary indicate that the salt water criteria are underprotective for San Francisco Bay.	

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

(11) *Nevada, EPA Region 9.* (i) All waters assigned the use classifications in Chapter 445 of the Nevada Administrative Code (NAC), Nevada Water Pollution Control Regulations, which are referred to in paragraph (d)(11)(ii) of this section, are subject to the criteria in paragraph (d)(11)(ii) of this section, without exception. These criteria amend the existing State standards

contained in the Nevada Water Pollution Control Regulations. More particularly, these criteria amend or supplement the table of numeric standards in NAC 445.1339 for the toxic pollutants identified in paragraph (d)(11)(ii) of this section.

(ii) The following criteria from matrix in paragraph (b)(1) of this section apply to the waters defined in paragraph (d)(11)(i) of this section and identified below:

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Water and use classification	Applicable criteria
Waters that the State has included in NAC 445.1339 where Municipal or domestic supply is a designated use	These waters are assigned the criteria in: Column B1—pollutant #118 Column B2—pollutant #118 Column D1—pollutants #15, 16, 18, 19, 20, 21, 23, 26, 27, 29, 30, 34, 37, 38, 42, 43, 55, 58–62, 64, 66, 73, 74, 78, 82, 85, 87–89, 91, 92, 96, 98, 100, 103, 104, 105, 114, 116, 117, 118
Waters that the State has included in NAC 445.1339 where Municipal or domestic supply is not a designated use	These waters are assigned the criteria in: Column B1—pollutant #118 Column B2—pollutant #118 Column D2—all pollutants except #2.

(iii) The human health criteria shall be applied at the  $10^{-5}$  risk level, consistent with State policy. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

(12) *Alaska, EPA Region 10.*

(i) All waters assigned to the following use classifications in the Alaska Administrative Code (AAC), Chapter 18 (i.e., identified in 18 AAC 70.020) are subject to the criteria in paragraph (d)(12)(ii) of this section, without exception:

- 70.020.(1) (A) Fresh Water
- 70.020.(1) (A) Water Supply
  - (i) Drinking, culinary, and food processing,
  - (iii) Aquaculture;
- 70.020.(1) (B) Water Recreation
  - (i) Contact recreation,
  - (ii) Secondary recreation;
- 70.020.(1) (C) Growth and propagation of fish, shellfish, other aquatic life, and wildlife
- 70.020.(2) (A) Marine Water
- 70.020.(2) (A) Water Supply
  - (i) Aquaculture,
- 70.020.(2) (B) Water Recreation
  - (i) contact recreation,
  - (ii) secondary recreation;
- 70.020.(2) (C) Growth and propagation of fish, shellfish, other aquatic life, and wildlife;
- 70.020.(2) (D) Harvesting for consumption of raw mollusks or other raw aquatic life.

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(12)(i) of this section:

Use classification	Applicable criteria
(1)(A) i	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D1

Use classification	Applicable criteria
	#'s 16, 18–21, 23, 26, 27, 29, 30, 32, 37, 38, 42–44, 53, 55, 59–62, 64, 66, 68, 73, 74, 78, 82, 85, 88, 89, 91–93, 96, 98, 102–105, 107–111, 117–126
(1)(A) iii	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D2 #'s 14, 16, 18–21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42–44, 46, 53, 54, 55, 59–62, 64, 66, 68, 73, 74, 78, 82, 85, 88–93, 95, 96, 98, 102–105, 107–111, 115–126
(1)(B) i, (1)(B) ii, (1)(C)	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D2 #'s 14, 16, 18–21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42–44, 46, 53, 54, 55, 59–62, 64, 66, 68, 73, 74, 78, 82, 85, 88–93, 95, 96, 98, 102–105, 107–111, 115–126
(2)(A) i, (2)(B) i, and (2)(B) ii, (2)(C), (2)(D)	Column C1—#9, 10, 13, and 53 Column C2—#10 Column D2 #'s 14, 16, 18–21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42–44, 46, 53, 54, 55, 59–62, 64, 66, 68, 73, 74, 78, 82, 85, 88–93, 95, 96, 98, 102–105, 107–111, 115–126

(iii) The human health criteria shall be applied at the State-proposed risk level of  $10^{-5}$ . To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

(13) *Idaho, EPA Region 10.*

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(i) All waters assigned to the following use classifications in the Idaho Administrative Procedures Act (IDAPA), Chapter 16 (i.e., identified in IDAPA 16.01.2100.02–16.01.2100.07) are subject to the criteria in paragraph (d)(13)(ii) of this section, without exception:

16.01.2100.02.a. Cold Water Biota  
16.01.2100.02.b. Warm Water Biota  
16.01.2100.02cc. Salmonid Spawning

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(13)(i) of this section:

Use classification	Applicable criteria
02.a 02.b 02cc	These classifications are assigned the criteria in:  Column B1—all Column B2—all

(14) *Washington, EPA Region 10.*

(i) All waters assigned to the following use classifications in the Washington Administrative Code (WAC), Chapter 173–201 (i.e., identified in WAC 173–201–045) are subject to the criteria in paragraph (d)(14)(ii) of this section, without exception:

173–201–045

Fish and Shellfish  
Fish  
Water Supply (domestic)  
Recreation

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(14)(i) of this section:

Use classification	Applicable criteria
Fish and Shellfish; Fish	These classifications are assigned the criteria in: Column C2—6, 14 Column D2—all
Water Supply (domestic)	These classifications are assigned the criteria in: Column D1—all
Recreation	This classification is assigned the criteria in:

Use classification	Applicable criteria
	Column D2—Marine waters and freshwaters not protected for domestic water supply

(iii) The human health criteria shall be applied at the State proposed risk level of  $10^{-6}$ .

[57 FR 60910, Dec. 22, 1992; 58 FR 31177, June 1, 1993, as amended at 58 FR 34499, June 25, 1993; 58 FR 36142, July 6, 1993; 60 FR 22229, 22235, May 4, 1995; 60 FR 44120, Aug. 24, 1995; 61 FR 60617, Nov. 29, 1996; 62 FR 52927, Oct. 9, 1997; 62 FR 53214, Oct. 10, 1997; 63 FR 10144, Mar. 2, 1998]

§ 131.37 **California.**

(a) *Additional criteria.* The following criteria are applicable to waters specified in the Water Quality Control Plan for Salinity for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, adopted by the California State Water Resources Control Board in State Board Resolution No. 91–34 on May 1, 1991:

(1) *Estuarine habitat criteria.* (i) *General rule.* (A) Salinity (measured at the surface) shall not exceed 2640 micromhos/centimeter specific conductance at 25 °C (measured as a 14-day moving average) at the Confluence of the Sacramento and San Joaquin Rivers throughout the period each year from February 1 through June 30, and shall not exceed 2640 micromhos/centimeter specific conductance at 25 °C (measured as a 14-day moving average) at the specific locations noted in Table 1 near Roe Island and Chipps Island for the number of days each month in the February 1 to June 30 period computed by reference to the following formula:

Number of days required in Month X =  
Total number of days in Month X \*  
 $(1 - 1/(1 + e^K))$

where  $K = A + (B * \text{natural logarithm of the previous month's 8-River Index})$ ;

A and B are determined by reference to Table 1 for the Roe Island and Chipps Island locations;

x is the calendar month in the February 1 to June 30 period;

and e is the base of the natural (or Napierian) logarithm.

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Where the number of days computed in this equation in paragraph (a)(1)(i)(A) of this section shall be rounded to the nearest whole number of days. When

the previous month's 8-River Index is less than 500,000 acre-feet, the number of days required for the current month shall be zero.

TABLE 1. CONSTANTS APPLICABLE TO EACH OF THE MONTHLY EQUATIONS TO DETERMINE MONTHLY REQUIREMENTS DESCRIBED.

Month X	Chipps Island		Roe Island (if triggered)	
	A	B	A	B
Feb .....	— <sup>1</sup>	— <sup>1</sup>	—14.36	+2.068
Mar .....	—105.16	+15.943	—20.79	+2.741
Apr .....	—47.17	+6.441	—28.73	+3.783
May .....	—94.93	+13.662	—54.22	+6.571
June .....	—81.00	+9.961	—92.584	+10.699

<sup>1</sup> Coefficients for A and B are not provided at Chipps Island for February, because the 2640 micromhos/cm specific conductance criteria must be maintained at Chipps Island throughout February under all historical 8-River Index values for January.

(B) The Roe Island criteria apply at the salinity measuring station maintained by the U.S. Bureau of Reclamation at Port Chicago (km 64). The Chipps Island criteria apply at the Mallard Slough Monitoring Site, Station D-10 (RKI RSAC-075) maintained by the California Department of Water Resources. The Confluence criteria apply at the Collinsville Continuous Monitoring Station C-2 (RKI RSAC-081) maintained by the California Department of Water Resources.

(ii) *Exception.* The criteria at Roe Island shall be required for any given month only if the 14-day moving average salinity at Roe Island falls below 2640 micromhos/centimeter specific conductance on any of the last 14 days of the previous month.

(2) *Fish migration criteria.* (i) *General rule.*

(A) *Sacramento River.* Measured Fish Migration criteria values for the Sacramento River shall be at least the following:

At temperatures less than below 61 °F: SRFMC = 1.35

At temperatures between 61 °F and 72 °F: SRFMC = 6.96-.092 \* Fahrenheit temperature

At temperatures greater than 72 °F: SRFMC = 0.34

where SRFMC is the Sacramento River Fish Migration criteria value. Temperature shall be the water temperature at release of tagged salmon smolts into the Sacramento River at Miller Park.

(B) *San Joaquin River.* Measured Fish Migration criteria values on the San

Joaquin River shall be at least the following:

For years in which the SJVIndex is > 2.5:  $SJFMC = (-0.012) + 0.184 \cdot SJVIndex$

In other years:  $SJFMC = 0.205 + 0.0975 \cdot SJVIndex$

where SJFMC is the San Joaquin River Fish Migration criteria value, and SJVIndex is the San Joaquin Valley Index in million acre feet (MAF)

(ii) *Computing fish migration criteria values for Sacramento River.* In order to assess fish migration criteria values for the Sacramento River, tagged fall-run salmon smolts will be released into the Sacramento River at Miller Park and captured at Chipps Island, or alternatively released at Miller Park and Port Chicago and recovered from the ocean fishery, using the methodology described in this paragraph (a)(2)(ii). An alternative methodology for computing fish migration criteria values can be used so long as the revised methodology is calibrated with the methodology described in this paragraph (a)(2)(ii) so as to maintain the validity of the relative index values. Sufficient releases shall be made each year to provide a statistically reliable verification of compliance with the criteria. These criteria will be considered attained when the sum of the differences between the measured experimental value and the stated criteria value (i.e., measured value minus stated value) for each experimental release conducted over a three year period (the current year and the previous two years) shall be greater than or equal to

zero. Fish for release are to be tagged at the hatchery with coded-wire tags, and fin clipped. Approximately 50,000 to 100,000 fish of smolt size (size greater than 75 mm) are released for each survival index estimate, depending on expected mortality. As a control for the ocean recovery survival index, one or two groups per season are released at Benicia or Pt. Chicago. From each upstream release of tagged fish, fish are to be caught over a period of one to two weeks at Chipps Island. Daylight sampling at Chipps Island with a 9.1 by 7.9 m, 3.2 mm cod end, midwater trawl is begun 2 to 3 days after release. When the first fish is caught, full-time trawling 7 days a week should begin. Each day's trawling consists of ten 20 minute tows generally made against the current, and distributed equally across the channel.

(A) The Chipps Island smolt survival index is calculated as:

$$SSI=R+MT(0.007692)$$

where R=number of recaptures of tagged fish

M=number of marked (tagged) fish released

T=proportion of time sampled vs total time tagged fish were passing the site (i.e. time between first and last tagged fish recovery)

Where the value 0.007692 is the proportion of the channel width fished by the trawl, and is calculated as trawl width/channel width.

(B) Recoveries of tagged fish from the ocean salmon fishery two to four years after release are also used to calculate a survival index for each release. Smolt survival indices from ocean recoveries are calculated as:

$$OSI=R_1/M_1+R_2/M_2$$

where R<sub>1</sub>=number of tagged adults recovered from the upstream release

M<sub>1</sub>=number released upstream

R<sub>2</sub>=number of tagged adults recovered from the Port Chicago release

M<sub>2</sub>=number released at Port Chicago

(I) The number of tagged adults recovered from the ocean fishery is provided by the Pacific States Marine Fisheries Commission, which maintains a port sampling program.

(2) [Reserved]

(iii) *Computing fish migration criteria values for San Joaquin River.* In order to

assess annual fish migration criteria values for the San Joaquin River, tagged salmon smolts will be released into the San Joaquin River at Mossdale and captured at Chipps Island, or alternatively released at Mossdale and Port Chicago and recovered from the ocean fishery, using the methodology described in paragraph (a)(2)(iii). An alternative methodology for computing fish migration criteria values can be used so long as the revised methodology is calibrated with the methodology described below so as to maintain the validity of the relative index values. Sufficient releases shall be made each year to provide a statistically reliable estimate of the SJFMC for the year. These criteria will be considered attained when the sum of the differences between the measured experimental value and the stated criteria value (i.e., measured value minus stated value) for each experimental release conducted over a three year period (the current year and the previous two years) shall be greater than or equal to zero.

(A) Fish for release are to be tagged at the hatchery with coded-wire tags, and fin clipped. Approximately 50,000 to 100,000 fish of smolt size (size greater than 75 mm) are released for each survival index estimate, depending on expected mortality. As a control for the ocean recovery survival index, one or two groups per season are released at Benicia or Pt. Chicago. From each upstream release of tagged fish, fish are to be caught over a period of one to two weeks at Chipps Island. Daylight sampling at Chipps Island with a 9.1 by 7.9 m, 3.2 mm cod end, midwater trawl is begun 2 to 3 days after release. When the first fish is caught, full-time trawling 7 days a week should begin. Each day's trawling consists of ten 20 minute tows generally made against the current, and distributed equally across the channel.

(B) The Chipps Island smolt survival index is calculated as:

$$SSI=R+MT(0.007692)$$

where R=number of recaptures of tagged fish

M=number of marked (tagged) fish released

T=proportion of time sampled vs total time tagged fish were passing the

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site (i.e. time between first and last tagged fish recovery)

Where the value 0.007692 is the proportion of the channel width fished by the trawl, and is calculated as trawl width/channel width.

(C) Recoveries of tagged fish from the ocean salmon fishery two to four years after release are also used to calculate a survival index for each release. Smolt survival indices from ocean recoveries are calculated as:

$$OSI = R_1/M_1 + R_2/M_2$$

where  $R_1$ =number of tagged adults recovered from the upstream release

$M_1$ =number released upstream

$R_2$ =number of tagged adults recovered from the Port Chicago release

$M_2$ =number released at Port Chicago

(1) The number of tagged adults recovered from the ocean fishery is provided by the Pacific States Marine Fisheries Commission, which maintains a port sampling program.

(2) [Reserved]

(3) *Suisun marsh criteria.* (i) Water quality conditions sufficient to support a natural gradient in species composi-

tion and wildlife habitat characteristic of a brackish marsh throughout all elevations of the tidal marshes bordering Suisun Bay shall be maintained. Water quality conditions shall be maintained so that none of the following occurs: Loss of diversity; conversion of brackish marsh to salt marsh; for animals, decreased population abundance of those species vulnerable to increased mortality and loss of habitat from increased water salinity; or for plants, significant reduction in stature or percent cover from increased water or soil salinity or other water quality parameters.

(ii) [Reserved]

(b) *Revised criteria.* The following criteria are applicable to state waters specified in Table 1-1, at Section (C)(3) ("Striped Bass—Salinity : 3. Prisoners Point—Spawning) of the Water Quality Control Plan for Salinity for the San Francisco Bay—Sacramento/San Joaquin Delta Estuary, adopted by the California State Water Resources Control Board in State Board Resolution No. 91-34 on May 1, 1991:

Location	Sampling site Nos (I—A/RKI)	Parameter	Description	Index type	San Joaquin Valley Index	Dates	Values
San Joaquin River at Jersey Point, San Andreas Landing, Prisoners Point, Buckley Cove, Rough and Ready Island, Brandt Bridge, Mossdale, and Vernalis.	D15/RSAN018, C4/RSAN032, D29/RSAN038, P8/RSAN056, -/RSAN062, C6/RSAN073, C7/RSAN087, C10/RSAN112	Specific ..... Conductance. @ 25 °C ...	14-day running average of mean daily for the period not more than value shown, in mmhos.	Not Applicable.	>2.5 MAF	April 1 to May 31.	0.44 micro-mhos.
San Joaquin River at Jersey Point, San Andreas Landing and Prisoners Point.	D15/RSAN018, C4/RSAN032, D29/RSAN038	Specific Conductance.	14-day running average of mean daily for the period not more than value shown, in mmhos.	Not Applicable.	≤2.5 MAF	April 1 to May 31.	0.44 micro-mhos.



(c) *Definitions.* Terms used in paragraphs (a) and (b) of this section, shall be defined as follows:

(1) *Water year.* A water year is the twelve calendar months beginning October 1.

(2) *8-River Index.* The flow determinations are made and are published by the California Department of Water Resources in Bulletin 120. The 8-River Index shall be computed as the sum of flows at the following stations:

(i) Sacramento River at Band Bridge, near Red Bluff;

(ii) Feather River, total inflow to Oroville Reservoir;

(iii) Yuba River at Smartville;

(iv) American River, total inflow to Folsom Reservoir;

(v) Stanislaus River, total inflow to New Melones Reservoir;

(vi) Tuolumne River, total inflow to Don Pedro Reservoir;

(vii) Merced River, total inflow to Exchequer Reservoir; and

(viii) San Joaquin River, total inflow to Millerton Lake.

(3) *San Joaquin Valley Index.* (i) The San Joaquin Valley Index is computed according to the following formula:

$$I_{SJ}=0.6X+0.2Y \text{ and } 0.2Z$$

where  $I_{SJ}$ =San Joaquin Valley Index

X=Current year's April–July San Joaquin Valley unimpaired runoff

Y=Current year's October–March San Joaquin Valley unimpaired runoff

Z=Previous year's index in MAF, not to exceed 0.9 MAF

(ii) *Measuring San Joaquin Valley unimpaired runoff.* San Joaquin Valley unimpaired runoff for the current water year is a forecast of the sum of the following locations: Stanislaus River, total flow to New Melones Reservoir; Tuolumne River, total inflow to Don Pedro Reservoir; Merced River, total flow to Exchequer Reservoir; San Joaquin River, total inflow to Millerton Lake.

(4) *Salinity.* Salinity is the total concentration of dissolved ions in water. It shall be measured by specific conductance in accordance with the procedures set forth in 40 CFR 136.3, Table 1B, Parameter 64.

[60 FR 4707, Jan. 24, 1995]

## PART 132—WATER QUALITY GUIDANCE FOR THE GREAT LAKES SYSTEM

### Sec.

132.1 Scope, purpose, and availability of documents.

132.2 Definitions.

132.3 Adoption of criteria.

132.4 State adoption and application of methodologies, policies and procedures.

132.5 Procedures for adoption and EPA review.

132.6 Application of part 132 requirements in Great Lakes States and Tribes. [Reserved]

### TABLES TO PART 132

APPENDIX A TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE METHODOLOGIES FOR DEVELOPMENT OF AQUATIC LIFE CRITERIA AND VALUES

APPENDIX B TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE

APPENDIX C TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE METHODOLOGY FOR DEVELOPMENT OF HUMAN HEALTH CRITERIA AND VALUES

APPENDIX D TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE METHODOLOGY FOR THE DEVELOPMENT OF WILDLIFE CRITERIA

APPENDIX E TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE ANTIDEGRADATION POLICY

APPENDIX F TO PART 132—GREAT LAKES WATER QUALITY INITIATIVE IMPLEMENTATION PROCEDURES

AUTHORITY: 33 U.S.C. 1251 *et seq.*

SOURCE: 60 FR 15387, Mar. 23, 1995, unless otherwise noted.

### § 132.1 Scope, purpose, and availability of documents.

(a) This part constitutes the Water Quality Guidance for the Great Lakes System (Guidance) required by section 118(c)(2) of the Clean Water Act (33 U.S.C. 1251 *et seq.*) as amended by the Great Lakes Critical Programs Act of 1990 (Pub. L. 101-596, 104 Stat. 3000 *et seq.*). The Guidance in this part identifies minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes System to protect human health, aquatic life, and wildlife.

(b) The U.S. Environmental Protection Agency, Great Lakes States, and