

455B.176A Water quality standards.

1. For purposes of this section, unless the context otherwise requires:

a. "Base flow conditions" means the flow of a stream segment, as measured during the time period between July 1 and September 30, that occurs during a period of time when the watershed in which the stream segment is located receives no twenty-four-hour rainfall in excess of one-quarter inch total rainfall and not more than one-half inch total rainfall for the watershed in the preceding two weeks.

b. "Credible data" means the same as defined in section 455B.171 and is subject to the same requirements as provided in section 455B.193 and may include, but not rely solely on, data that is older than five years and that is obtained pursuant to the best professional judgment of a professional designee or a state or federal agency.

c. "Ephemeral stream" means a stream that flows only in response to precipitation and whose channel is primarily above the water table.

d. "Professional designee" means the same as defined in section 455B.193.

e. "Use attainability analysis" means a structured scientific assessment that includes physical, chemical, biological, and economic factors.

2. A water of the state shall be a designated stream segment when any one of the following is met:

a. The most recent ten-year median flow is equal to or in excess of one cubic foot per second based on data collected and evaluated by the United States geological survey between July 1 and September 30 of each year or in the absence of stream segment flow data calculations of flow conducted by extrapolation methods provided by the United States geological survey or based upon a calculation method adopted by rule.

b. The water is a critical habitat of a threatened or endangered aquatic specie as determined by the department or the United States fish and wildlife service.

c. Credible data developed in accordance with section 455B.193 shows that water flows that are less than set out in paragraph "*a*" provide a refuge for aquatic life that permits biological recolonization of intermittently flowing segments.

3. All waters of the state not designated as a stream segment shall be identified as a general stream segment and shall be subject to narrative water quality standards.

4. *a.* The commission shall adopt rules to define designated uses of stream segments in accordance with the following categories:

(1) Agricultural water supply use.

(2) Aquatic life support.

(3) Domestic water supply.

(4) Food procurement use.

(5) Industrial water supply use.

(6) Recreational use, including primary, secondary, and children's recreational use.

(7) Seasonal use. The department may allow for a seasonal use designation for streams that would otherwise be categorized under an aquatic or recreational designation if a varying degree of protection would be sufficient to protect the stream during a seasonal time period.

b. The commission shall include subcategories of designated uses of the categories listed in paragraph "a", as deemed appropriate by the commission.

c. When reviewing whether a designated use is attainable, the department shall consider at a minimum the following:

(1) Whether the natural, ephemeral, intermittent, or low flow conditions or water levels could inhibit recreational activities.

(2) If opposite sides of a stream segment would have different designated recreational uses due to differences in public access, the designated use of the entire stream segment may be the higher attainable use.

(3) The time period for determining primary contact recreation shall be March 15 through November 15.

(4) The degree to which the public has access to the stream segment.

(5) The minimum depth of the deepest pool.

(6) Stream segments shall be protected for all existing uses as defined by the federal Water Pollution Control Act.

5. The commission shall adopt rules designating water quality standards which shall be specific to each designated use adopted pursuant to subsection 4. The standards shall take into account the different characteristics of each designated use and shall provide for only the appropriate level of protection based upon that particular use. The standards shall not be identical for each designated use unless required for the appropriate level of protection. The appropriate level of protection and standards shall be determined on a scientific basis. In the development process for the water quality standards, input shall be received from a water quality standards advisory committee convened by the department. The water quality standards advisory committee shall be comprised of experts in the scientific fields relating to water quality, such as environmental engineering, aquatic toxicology, fisheries biology, and other life sciences and experts in the development of the appropriate levels of aquatic life protection and standards. The water quality standards shall be reviewed and revised by the department as new scientific data becomes available to support revision.

6. Prior to any changes in a national pollutant discharge elimination system permit effluent limitation based upon a new use designation, the department or a designee of the department shall conduct a use attainability analysis. The commission shall adopt rules that establish procedures and criteria to be used in the development of a use attainability analysis. The rules shall, at a minimum, provide all of the following:

a. A designated use, which is not an existing use as defined by the federal Water Pollution Control Act, may be removed due to any of the following:

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

(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.

(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.

(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.

(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.

(6) Controls more stringent than those required by sections 1311(b) and 1316 of the federal Water Pollution Control Act would result in substantial and widespread economic and social impact.

b. A designated use shall not be removed if any of the following occur:

(1) The designated use is an existing use, as defined by the federal Water Pollution Control Act, unless a use requiring more stringent criteria is added.

(2) Such uses will be attained by implementing effluent limits required under sections 1311(b) and 1316 of the federal Water Pollution Control Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

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

7. The department shall consider the substantial and widespread economic and social impact that may occur as a result of a designation. To make this determination, the department shall review circumstances that are unique to each regulated entity to determine whether substantial and widespread economic and social impact would occur. The analysis shall demonstrate whether the regulated entity would face substantial financial impacts due to the costs of compliance and that the affected community would bear significant adverse impacts. The department shall work with the regulated entity to gather necessary information to make this determination.

a. The commission shall adopt rules to determine when a regulated entity and the affected community would suffer substantial and widespread economic and social impact due to the costs of complying with a water quality standard. To make this determination, the department shall review the circumstances that are unique to each regulated entity and the affected community. The rules shall include but not be limited to all of the following elements:

(1) A financial analysis of the discharger to determine if the capital, operating, and maintenance costs of pollution control will have a substantial impact.

(2) The financial impact on households resulting from compliance.

(3) The ability of the person releasing a pollutant into a water of the state to obtain pollution control financing and the general economic health of that person.

(4) The change in socioeconomic conditions that would occur as a result of compliance. Factors to consider should include but not be limited to median household income, unemployment, and overall net debt as a percent of full market value of taxable property.

(5) The benefits of improved water quality, such as the expansion of consumptive markets, enhanced recreational use, and increased property values in the community.

b. The department may grant a regulated entity a variance from meeting a water quality standard pursuant to section 455B.181 if it is determined that the regulated entity or the affected community would suffer substantial and widespread economic and social impact. The department shall ensure the conditions of any discharge permit variance represent reasonable progress toward complying with water quality standards but do not result in substantial and widespread economic and social impact.

8. A regulated entity may use an alternative technology system to meet water quality standards for either technology-based or water quality-based effluent limits. The department shall convene a technical advisory committee to assist in the development of rules to allow for the use of appropriate alternative technologies that include but are not limited to all of the following:

a. Performance-based standards for alternative technology systems.

b. Effluent reuse standards.

c. Criteria for large subsurface, midsize treatment, and small cluster wastewater systems.

d. Setback requirements appropriate to the alternative treatment technology.

e. Monitoring requirements appropriate to the alternative technology and size of the treatment system.

f. Sizing factors based on soil morphology.

g. Design standards for alternative technology system types.

9. The commission shall adopt rules for a review and approval process for standardized treatment systems, and expedited technical reviews for projects that meet the design standards adopted pursuant to subsection 8, paragraph "g", including standardized review checklists for the systems.

10. *a.* The commission shall adopt rules pursuant to chapter 17A to administer this section. All new or revised stream segment use designations shall be adopted by rule. Any rule that establishes, modifies, or repeals existing water quality standards in this state shall be adopted in conformance with this section.

b. (1) By December 31, 2006, the department shall publish a list of all designated stream segments that receive a permitted discharge for which a use attainability analysis for recreational use and aquatic life has not been completed and a list of all designated stream segments that receive a permitted discharge for which a use attainability analysis for recreational use and aquatic life has been completed and whether a recreational or aquatic use has been determined to be or not to be attainable. By December 31, 2007, a use attainability analysis shall be completed for all newly designated stream segments that receive a permitted discharge.

(2) A use attainability analysis for a designated stream segment receiving a permitted discharge shall be conducted by either the department or a professional designee.

(3) The department shall make public a written determination of whether a new or revised use designation is appropriate for the designated stream segment prior to adoption by rule of the proposed changes.

c. The department shall complete, upon request, a use attainability analysis for recreational and aquatic uses on any designated stream segment not receiving a permitted discharge or on any previously designated stream segment in accordance with the following provisions:

(1) The department shall make public a written determination of whether a new or revised designated use is appropriate for the designated stream segment within ninety days of completion of the use attainability analysis prior to adoption by rule of the proposed changes.

(2) The department shall accept a use attainability analysis submitted by someone other than a professional designee.

(a) Within thirty days after receipt of submission of a use attainability analysis, the department shall review and provide a written determination of whether the documentation submitted is complete.

(b) Within ninety days after receipt of submission of a completed use attainability analysis, the department shall review and make available to the public a written determination of whether a new or revised use designation is appropriate for the designated stream segment.

d. Any regulated entity or property owner adjacent to the accessed stream segment aggrieved by such a determination may make a written request, within thirty days from the date the written determination of the appropriate use designation is made available to the public, for a meeting with the director or the director's designee. A regulated entity or property owner adjacent to the accessed stream segment shall be allowed to provide evidence that the designation is not appropriate under the criteria as established in this subsection.

11. An operation permit issued pursuant to section 455B.173 that expires before a use attainability analysis is performed shall remain in effect and the department shall not renew the permit until a use attainability analysis is completed. If a use attainability analysis demonstrates that a change in the use designation is warranted, the permit shall remain in effect and the department shall not renew the permit until the stream use designation is changed. In order for an expired permit to remain in effect, the permit holder must meet the requirements for a permit renewal. This subsection does not apply if the permit applicant and the department agree that the performance of a use attainability analysis presents no reasonable likelihood of resulting in a change to the existing stream use designations.

2006 Acts, ch 1145, §3

Watershed quality planning task force; report to general assembly by June 30, 2008, regarding recommendations for a voluntary statewide water quality program; 2006 Acts, ch 1145, §4