Title 785. Oklahoma Water Resources Board
Chapter 46. Implementation of Oklahoma’s Water Quality Standards

Subchapter 15. Use Support Assessment Protocols

785:46-15-5. Assessment of Fish and Wildlife Propagation support [AMENDED]
(a) Scope. The provisions of this Section shall be used to determine whether the beneficial use of Fish and Wildlife Propagation or any subcategory thereof designated in OAC 785:45 for a waterbody is supported.
(b) Dissolved oxygen. For purposes of assessment, listing and reporting under sections 303(d) and 305(b) of the federal Clean Water Act as amended, the procedure for determining use support of the Fish and Wildlife Propagation beneficial use or any subcategory thereof with respect to dissolved oxygen shall be as follows:

(1) Support tests for HLAC streams.
   (A) The HLAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be fully supported with respect to the DO criterion if 10% or less of the samples from the stream are less than 4.0 mg/L from April 1 through June 15 and less than 3.0 mg/L during the remainder of the year across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds:
      (i) April 1 through June 15: 4.0 mg/L
      (ii) June 16 through March 31: 3.0 mg/L
   (B) The HLAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be not supported with respect to the DO criterion if more than 10% of the samples from the stream are less than 4.0 mg/L from April 1 through June 15 or less than 3.0 mg/L during the remainder of the year due to other than naturally occurring conditions across all seasons exhibit DO concentrations below the following season-specific thresholds due to other than naturally occurring conditions:
      (i) April 1 through June 15: 4.0 mg/L
      (ii) June 16 through March 31: 3.0 mg/L

(2) Support tests for WWAC streams.
   (A) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be fully supported with respect to the DO criterion if 10% or less of the samples from the stream are less than 6.0 mg/L from April 1 through June 15 and less than 5.0 mg/L during the remainder of the year across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds:
      (i) April 1 through June 15: 6.0 mg/L
      (ii) June 16 through March 31: 5.0 mg/L
   (B) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be undetermined with respect to the DO criterion if more than 10% of the samples from the stream are less than 6.0 mg/L and 10% or less of the samples are less than 5.0 mg/L from April 1 through June 15, or more than 10% of the samples are less than 5.0 mg/L and 10% or less of the samples are less than 4.0 mg/L from June 16 through October 15, across all life
stages and seasons exhibit DO concentrations below the upper DO threshold and 10% or less of the samples across all seasons exhibit DO concentrations below the lower DO threshold considering the following season-specific ranges:

(i) April 1 through June 15: 5.0 mg/L to 6.0 mg/L
(ii) June 16 through October 15: 4.0 mg/L to 5.0 mg/L

(C) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be not supported with respect to the DO criterion if more than 10% of the samples from the stream are less than 5.0 mg/L from April 1 through June 15, or less than 4.0 mg/L from June 16 through October 15, or less than 5.0 mg/L from October 16 through March 31, due to other than naturally occurring conditions across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds due to other than naturally occurring conditions:

(i) April 1 through June 15: 5.0 mg/L
(ii) June 16 through October 15: 4.0 mg/L
(iii) October 16 through March 31: 5.0 mg/L

(3) **Support tests for CWAC and Trout streams.**

(A) The CWAC or Trout subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be fully supported with respect to the DO criterion if 10% or less of the samples from the stream are less than 7.0 mg/L from March 1 through May 31 and less than 6.0 mg/L during the remainder of the year across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds:

(i) March 1 through May 31: 7.0 mg/L
(ii) June 1 through last day of February: 6.0 mg/L

(B) The CWAC or Trout subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be undetermined with respect to the DO criterion if more than 10% of the samples from the stream are less than 7.0 mg/L and 10% or less of the samples are less than 6.0 mg/L from March 1 through May 31, or more than 10% of the samples are less than 6.0 mg/L and 10% or less of the samples are less than 5.0 mg/L from June 1 through October 15 across all life stages and seasons exhibit DO concentrations below the upper DO threshold and 10% or less of the samples across all seasons exhibit DO concentrations below the lower DO threshold considering the following season-specific ranges:

(i) March 1 through May 31: 7.0 mg/L to 6.0 mg/L
(ii) June 1 through October 15: 6.0 mg/L to 5.0 mg/L

(C) The CWAC or Trout subcategory of the Fish and Wildlife Propagation beneficial use designated for a stream shall be deemed to be not supported with respect to the DO criterion if more than 10% of the samples from the stream are less than 6.0 mg/L from March 1 through May 31, or less than 5.0 mg/L from June 1 through October 15, or less than 6.0 mg/L from October 16 through March 31, due to other than naturally occurring conditions across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds due to other than naturally occurring conditions:

(i) March 1 through May 31: 6.0 mg/L
(ii) June 1 through October 15: 5.0 mg/L
(iii) October 16 through the last day of February: 6.0 mg/L

(4) **Support tests for WWAC lakes.** The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be fully supported with respect to the DO criterion if both the Surface and Water Column criteria prescribed in (5)(A) and (6)(A) of this subparagraph (b) are satisfied. If either of the Surface or Water Column criteria prescribed in (5)(B) or (6)(B) produce a result of undetermined, then the WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be undetermined with respect to the DO criterion; provided, if either of the Surface or Water Column criteria prescribed in (5)(C) or (6)(C) produce a result of not supported, then the WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be not supported with respect to the DO criterion.

(5) **Surface criteria for WWAC lakes.**

(A) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be fully supported with respect to the DO criterion if 10% or less of the samples from the epilimnion during periods of thermal stratification, or the entire water column when no stratification is present, are less than 6.0 mg/L from April 1 through June 15 and less than 5.0 mg/L during the remainder of the year. Surface samples across life stages and all seasons exhibit DO concentrations below the following season-specific thresholds:

- (i) April 1 through June 15: 6.0 mg/L
- (ii) June 16 through March 31: 5.0 mg/L

(B) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be undetermined with respect to the DO criterion if more than 10% of the samples from the epilimnion during periods of thermal stratification, or the entire water column when no stratification is present, are less than 5.0 mg/L and 10% or less of the samples are less than 4 mg/L from June 16 through October 15, or more than 10% of the samples from the surface are less than 6.0 mg/L and 10% or less of the samples are less than 5.0 mg/L from April 1 through June 15. Surface samples across all life stages and seasons exhibit DO concentrations below the upper DO threshold and 10% or less of the surface samples across all seasons exhibit DO concentrations below the lower DO threshold considering the following season-specific ranges:

- (i) April 1 through June 15: 5.0 mg/L to 6.0 mg/L
- (ii) June 16 through October 15: 4.0 mg/L to 5.0 mg/L

(C) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be not supported with respect to the DO criterion if more than 10% of the samples from the epilimnion during periods of thermal stratification, or the entire water column when no stratification is present, are less than 5.0 mg/L from April 1 through June 15 or less than 4.0 mg/L from June 16 through October 15, or less than 5.0 mg/L from October 16 through March 31, due to other than naturally occurring conditions. Surface samples across all life stages and seasons exhibit DO concentrations below the following season-specific thresholds due to other than naturally occurring conditions:

- (i) April 1 through June 15: 5.0 mg/L
(ii) June 16 through October 15: 4.0 mg/L  
(iii) October 16 through March 31: 5.0 mg/L

(D) “Surface,” when used in this Section, means surface waters or the mixed surface layer, typically represented by a sample taken at least 0.5 m below the surface.

(6) **Water Column criteria for WWAC lakes.**

(A) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be fully supported during periods of thermal stratification with respect to the DO criterion if less than 50% of the volume (if volumetric data is available) or 50% or less of the water column (if no volumetric data is available) of all sample sites in the lake are less than 2.0 mg/L.

(B) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be undetermined during periods of thermal stratification with respect to the DO criterion (if no volumetric data is available) if 50% or more, but not greater than 70%, of the water column at any given sample site in the lake is less than 2.0 mg/L due to other than naturally occurring conditions.

(C) The WWAC subcategory of the Fish and Wildlife Propagation beneficial use designated for a lake shall be deemed to be not supported during periods of thermal stratification with respect to the DO criterion if 50% or more of the water volume (if volumetric data is available) or more than 70% of the water column (if no volumetric data is available) at any given sample site is less than 2.0 mg/L.

(D) If a lake specific study including historical analysis produces a support status which is contrary to an assessment obtained from the application of (A), (B) or (C) of (b)(6) of this section, then that lake specific result will control.

(7) **Additional application/exercise when support undetermined.** In instances where application of the tests in this subsection (b) initially produce a result that the pertinent subcategory is undetermined with respect to the DO criterion, such shall be subject to additional investigation that considers diurnal data for further application of such tests in order to resolve the determination of use support.