

A RESOLUTION to recognize that evidence supports further study on the inclusion of propagation as a designated use in Zones 3 and 4 and the upper portion of Zone 5 of the Delaware River Estuary; to provide for such studies to be undertaken in consultation with co-regulators and dischargers; and to direct the Executive Director to initiate DRBC rulemaking to revise the designated aquatic life uses consistent with the results of the identified studies and the objectives and goals of the federal Clean Water Act.

WHEREAS, when the DRBC was created in 1961, little or no dissolved oxygen (“DO”) was present in a 30-mile reach of the Delaware River Estuary from Wilmington to Philadelphia for periods of up to six months each year, preventing the survival of resident fish and the passage of anadromous fish through these waters; and

WHEREAS, steady improvement in Estuary DO levels occurred throughout the 1970’s and 1980’s due to: DRBC regulations, science and leadership; passage of the federal Clean Water Act (“CWA”) and state statutes to regulate pollution; creation of the United States Environmental Protection Agency (EPA) and state agencies to administer these statutes; and public and private investment in wastewater treatment plant upgrades to meet CBOD wasteload allocations; and

WHEREAS, in order to fulfill their obligation under the CWA to designate uses for surface waters, the States of Delaware and New Jersey and the Commonwealth of Pennsylvania either defer to DRBC water quality standards that they have jointly established or provide for application of the more stringent of state and DRBC standards within the basin; and

WHEREAS, at the direction of the Commission and consistent with a unanimous recommendation by the DRBC’s Water Quality Advisory Committee in October of 2013, staff undertook a study of the existing uses in Zones 3 and 4 and the upper portion of Zone 5 with respect to resident and anadromous fish species; and

WHEREAS, the Commissioners have considered: staff’s final report¹; various recommendations from the Water Quality Advisory Committee and committee members; and the counsel of their respective technical agencies; and

WHEREAS, the DRBC recognizes the vital importance of determining the appropriate designated aquatic life uses of the Delaware River Estuary and the water quality criteria necessary to protect these uses; and it appreciates the importance of reaching these determinations through a collaborative process informed by technical studies and specialized scientific and engineering expertise; now therefore,

BE IT RESOLVED by the Delaware River Basin Commission:

¹ *Existing Use Evaluation for Zones 3, 4 & 5 of the Delaware Estuary Based on Spawning and Rearing of Resident and Anadromous Fishes* (DRBC, September 2015).

1. Significant historical improvement. Based upon the study prepared by DRBC staff, the Commission recognizes that the water quality and aquatic life uses of Zones 3 and 4 and upper Zone 5 of the Delaware River Estuary have substantially and significantly improved since DRBC adopted designated uses and water quality criteria for these reaches in 1967.
2. Shared achievement. The Commission recognizes that the shared achievement of water quality improvements should be duly recognized as the result of: four decades of effective water management by DRBC, EPA, the State of Delaware, the State of New Jersey, the State of New York, and the Commonwealth of Pennsylvania; significant effort by public entities and private industry to construct and effectively operate wastewater treatment works; the adoption and implementation of regulatory programs under the Delaware River Basin Compact, the Clean Water Act, and state laws; and sustained public and private capital investment, including the federal CWA grant program.
3. Shared goals. The Commission shares the following goals for the Delaware River Estuary with the co-regulator states and the USEPA:
 - The improved conditions and uses we collectively have achieved should be protected.
 - The path of continuous water quality improvement in these shared waters must continue.
 - Water quality standards, including designated uses and water quality criteria, should be updated consistent with Clean Water Act goals as quickly as possible and practicable.
 - Early actions based on optimizing the use of our existing infrastructure should be promoted and implemented pending final actions on water quality standards and revised permits or dockets.
 - Stakeholders, including the regulated community, should be consulted in the DRBC rulemaking process and in the concurrent development of strategies for implementing the proposed water quality standards.
4. Aquatic Life Designated Use. Evidence supports further study on the inclusion of propagation as a designated use in Zones 3 and 4 and the upper portion of Zone 5.
5. Rulemaking. We hereby direct the Executive Director to initiate a rulemaking process with the understanding that before new rules are proposed or finalized, additional study is needed, as described below, to establish the designated uses and determine the criteria required to support these uses in Zones 3, 4 and the upper portion of Zone 5.

6. Actions required before rulemaking:

- In close collaboration with member states, EPA Regions 2 and 3, and municipal and industrial dischargers both public and private, DRBC will conduct a study to determine the attainability of potential dissolved oxygen criteria in Water Quality Zones 3 and 4 and the upper portion of Zone 5 (an “analysis of attainability”) to include:
 - (a) input from expert panels on modeling the water quality impacts of nutrient loadings and the dissolved oxygen requirements of aquatic species;
 - (b) additional field studies of the occurrence, spatial and temporal distribution of the life stages of Delaware River Estuary fish species;
 - (c) input from consultations pursuant to the Endangered Species Act (“ESA”) concerning the dissolved oxygen and other water quality criteria required to support the Atlantic sturgeon;
 - (d) development and calibration of a eutrophication model for the Delaware River Estuary and Bay;
 - (e) determination of the nutrient loadings from point and non-point sources that can be discharged while maintaining the levels of dissolved oxygen identified by the expert panel as those necessary to support key aquatic species;
 - (f) identification and evaluation of the capital and operating costs of optimizing the best available technology or applying innovative technologies capable of achieving higher levels of dissolved oxygen;
 - (g) evaluation of the physical, chemical, biological, social and economic factors affecting the attainment of uses, as described in EPA's water quality standards regulations at 40 CFR 131.10(g)(1)-(6); and
 - (h) preparation of a draft report and after soliciting input from the WQAC and other stakeholders, issuance of a final report containing findings and conclusions.
- Staff should coordinate with USEPA and NMFS on any required consultation with NMFS under the Endangered Species Act.

7. Schedule for attainability analysis. The Commission wishes to see the rulemaking process completed as expeditiously as possible. We therefore direct the Executive Director to prepare a schedule for completing a full draft analysis of attainability within 3.5 years from the effective date of this Resolution.

It is recognized that if the schedules in this Resolution are not achieved, that alternative approaches will be considered by the Commission, the states, and the USEPA within their respective jurisdictions and authorities.

8. Early actions to reduce oxygen depleting discharges. The Commission further directs the Executive Director to convene a workgroup consisting of state and federal coregulators to identify and encourage the implementation of practicable early actions that can be implemented by NPDES permittees in the near term to reduce the loading of ammonia and other oxygen depleting pollutants to the Estuary. The Commission recommends that the early action initiatives be led, coordinated, and managed by the appropriate state agencies and be supported through technical assistance provided by EPA and that this initiative commence without delay.
9. PWD's D.O. Partnership. The Commission recognizes the Philadelphia Water Department for its leadership in proposing the Delaware Estuary DO Improvement Partnership. The Commission pledges to participate actively in this partnership.
10. Recognition of the WQAC. The Commission also recognizes the hard work, valuable contributions and thoughtful recommendations of the WQAC. The Commission appreciates the technical expertise of the DRBC staff and committee members, and as the analysis of attainability proceeds, will continue to seek advice from the WQAC as appropriate.
11. Rulemaking schedule. The Commission seeks to issue a final rule and an implementation strategy within 6 years of the adoption of this resolution.

/s/ Jennifer Orr

Jennifer Orr, Chairwoman *pro tem*

/s/ Pamela M. Bush

Pamela M. Bush, J.D., Commission Secretary

ADOPTED: September 13, 2017

Delaware River Main Stem Interstate Zones

