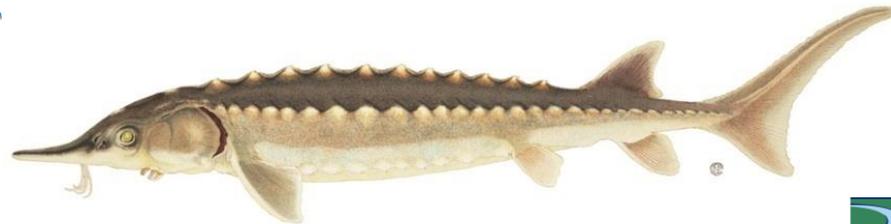


Delaware River Basin Commission

DRBC to Review Aquatic Life Uses in Delaware River Estuary in Recognition of Improved Water Quality

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Quality Management

Public Hearing
April 6, 2017



Presented to an advisory committee of the DRBC on May 11, 2017.
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Mean Monthly D.O. - 1963

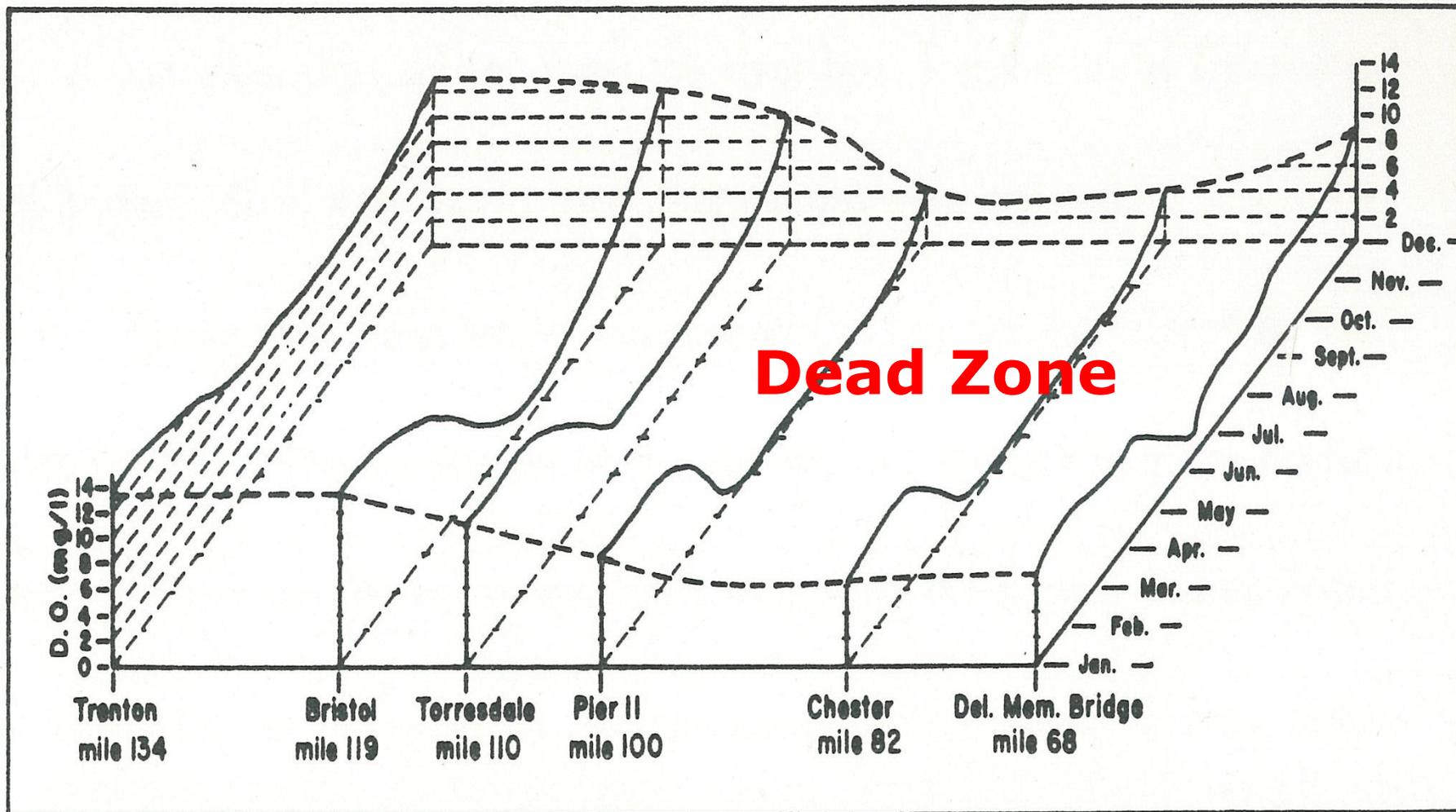
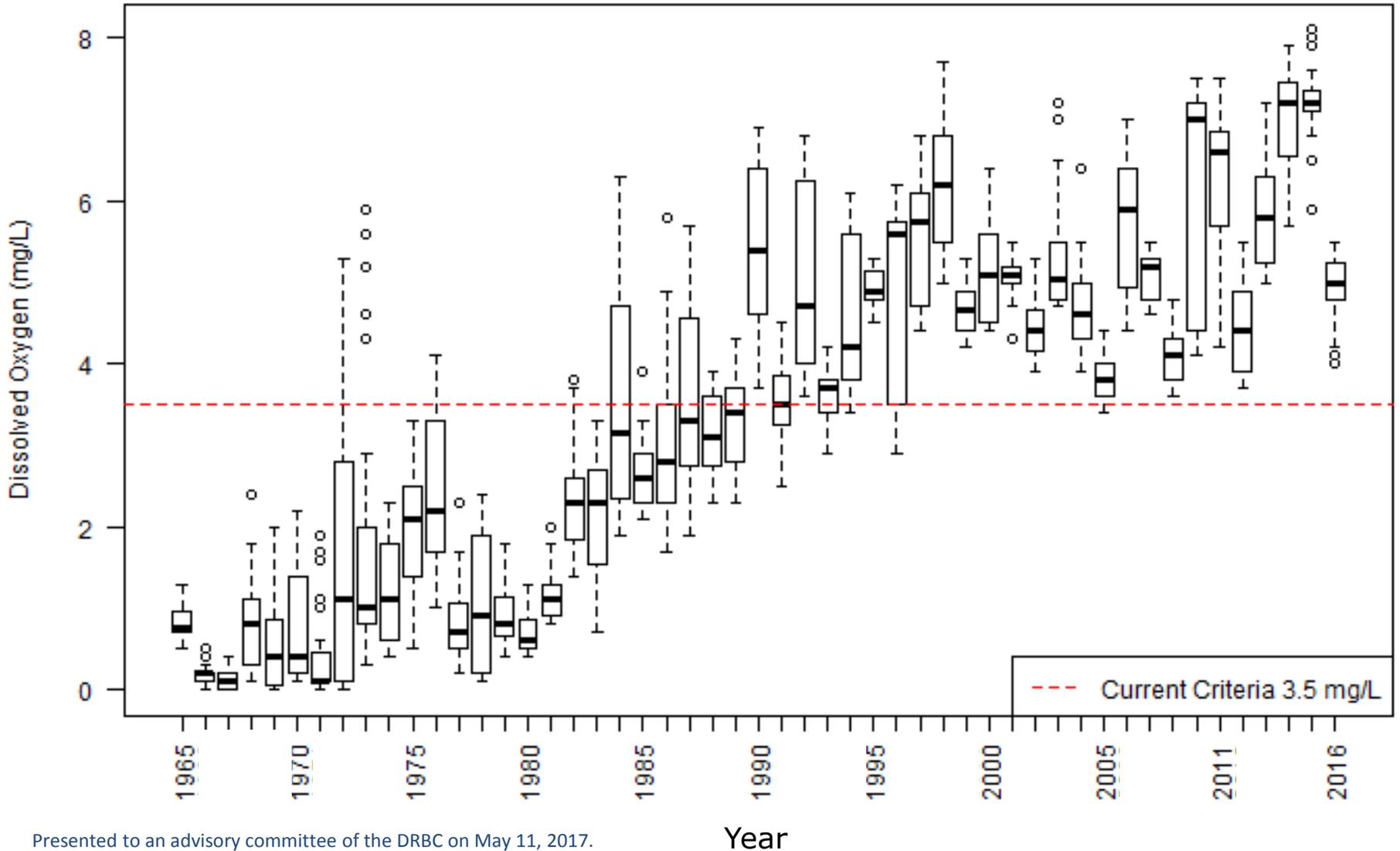


FIGURE II-2 - Mean monthly dissolved oxygen concentration - Tidal Delaware River, 1963



July Dissolved Oxygen Daily Mean Values USGS 01467200 Delaware R at Ben Franklin Bridge at Philadelphia



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Evaluation of Aquatic Life Use

2007:

Water Quality Advisory Committee (WQAC) begins deliberations on this issue as part of a broader evaluation of nutrient and dissolved oxygen conditions in the Delaware Estuary.

Evaluation of Aquatic Life Use

- **2008 to 2013: DRBC staff develops Nutrient Criteria Plan in response to EPA initiative on nutrients.**
 - Plan recommends focus on oxygen demand (NBOD) of nutrients in view of lack of evidence of traditional impacts of high nutrient loads (e.g., algal blooms).
- **Fall 2013 - Water Quality Advisory Committee (WQAC) recommends staff evaluate the use of Zones 3, 4 and upper Zone 5 for propagation of resident and anadromous fish species.**

DRBC 2015 Report

Existing Use Evaluation for Zones 3, 4, & 5 of the Delaware Estuary Based on Spawning and Rearing of Resident and Anadromous Fishes

September 30, 2015



"Full attainment of a 'maintenance and propagation' use has not been demonstrated at this time based on the data available and examined for this existing use evaluation."

2015 DRBC Evaluation of Existing Use

Summary:

1. The goals established in 1967 through DRBC's designated uses have been exceeded, at least in part, by the successful restoration of dissolved oxygen to 3.5 mg/L as a daily average concentration.
2. Data collected in Zones 3, 4 and upper Zone 5 indicate at least some degree of propagation has been observed.
3. Full attainment of propagation has not been demonstrated at this time based on the data available and examined for this evaluation.

Why more study?

2015 DRBC Study Key Questions:

1. Based upon existing, available and reliable data, is there evidence that existing uses in the Estuary exceed the current designated use? Is there evidence of propagation?
2. If evidence of successful reproduction exists, for which species? In which estuary zone(s)? And what is the degree to which successful reproduction had been restored for that species?

Proposed Resolution

- Recognizes that evidence supports further study on the inclusion of propagation as a designated use in Zones 3, 4 and the upper portion of Zone 5 of the Delaware River Estuary.
- Provides for:
 - scientific and technical studies to be performed
 - early action by dischargers
- Directs initiation of rulemaking to revise the designated aquatic life uses consistent with the results of the studies and the CWA.

Proposed Resolution

Shared goals of the DRBC, EPA and co-regulator states are:

1. Protecting the conditions and uses achieved to date
2. Continuing progress to improve water quality conditions
3. Updating water quality standards consistent with the Clean Water Act as quickly as possible and practicable
4. Identifying and implementing early actions to optimize existing infrastructure pending final regulatory actions
5. Consulting with stakeholders, including the regulated community, in the rulemaking process and development of implementation strategies

Proposed Resolution

The study will include:

- Input from expert panels on eutrophication modeling and the DO requirements of aquatic species
- Development and calibration of a eutrophication model for the Delaware Estuary and Bay

Schedule:

- Directs the Executive Director to prepare a schedule to complete the draft attainability assessment within 3.5 years
- Commission seeks to issue a final rule and an implementation strategy within 6 years
- Both dates effective upon adoption of the resolution

Identification of Early Action Strategies:

- Directs the Executive Director to convene a workgroup of co-regulators to identify and encourage the implementation of such strategies by NPDES permittees in the near term

Acknowledges:

- The work of the **WQAC**
- The proposal by the **PWD** for a Delaware Estuary DO Partnership

Public Comment Period

- Notice of a Public Hearing and Comment Period was issued on February 23, 2017.
- Due to inclement weather, the public hearing date was changed to April 6, 2017.
- ***The public comment period closed at 5:00 PM on Thursday April 13.*** See <http://www.state.nj.us/drbc/meetings/special-hearing.html> for details.