## **RESOLUTION FOR THE MINUTES**

A RESOLUTION authorizing and directing the Executive Director to require additional nutrient monitoring for point source discharges to the Delaware River Estuary and Bay (Water Quality Zones 2-6) for development and calibration of the Delaware Estuary Eutrophication Model.

WHEREAS, previous studies indicate that relative to other estuaries of the United States, point sources are significant contributors to the high nutrient concentrations observed in the Delaware River Estuary and Delaware Bay (also herein, "Estuary" and "Bay"); and

WHEREAS, the Commission's Water Quality Advisory Committee has identified the monitoring of point source discharges as an important component in managing nutrient levels in the Estuary; and

WHEREAS, Resolution No. 2010-5 authorized the Executive Director to require an initial round of nutrient monitoring for point source discharges to the Estuary and Bay; and

WHEREAS, the data from that two-year study have been used to rank the loadings of nutrients from the approximately 70 participating dischargers, and to develop specific monitoring requirements for subsets of these dischargers; and

WHEREAS, the Commission's Eutrophication Model Expert Panel has endorsed the collection of additional point source discharge data as both necessary and appropriate for development and calibration of the model; and

WHEREAS, in consultation with the Commission's modeling consultant LimnoTech, Commission staff who are engaged in developing the model have identified the specific additional point source discharge monitoring needed to reduce and characterize uncertainties associated with point discharge loads; and

WHEREAS, hydrologic and scheduling factors dictate that targeted nutrient monitoring for development and calibration of the eutrophication model be undertaken during the period from January 1, 2018 through December 31, 2019; and

WHEREAS, in cooperation with the U.S. Geological Survey, the City of Philadelphia Water Department (PWD) and others as appropriate, DRBC is concurrently undertaking enhanced ambient monitoring, to include: extension of the Estuary "Boat Run" water quality modeling program from a seasonal to a year-round effort from January 2017 through December 2019; twice-per-month monitoring of the Delaware River at Trenton (begun in January 2017) and the Schuylkill River at Philadelphia (beginning in January 2018) (largest freshwater inflows); expansion of the locations and frequency of tributary monitoring (performed quarterly for key tributaries in 2017); USGS deployment of spectral analyzers for continuous rate nitrate monitoring in the Delaware at Trenton and Chester beginning in 2018; through PWD, collection of sediment oxygen demand and sediment flux data as well as continuous monitoring data for dissolved oxygen and chlorphyll-a; and additional primary productivity monitoring during the summer of 2018; and

WHEREAS, the Commission's Water Quality Regulations at Section 4.30.8 authorize the Commission to require sampling by point source dischargers; now therefore,

BE IT RESOLVED by the Delaware River Basin Commission:

- The Executive Director is hereby directed to contact selected dischargers to the Delaware River Estuary (Water Quality Zones 2 – 6) to inform them of the need for additional data to characterize their point source loadings of nutrients and related parameters during the model development and calibration period running from January 1, 2018 through December 31, 2019, and to request the dischargers' cooperation and assistance in gathering such data.
- 2. Following the outreach described above, the Executive Director is authorized to require the dischargers during the specified period to collect at their own cost and expense such effluent data as are needed in the Commission's view for purposes of development and calibration of the model, and to submit these data to the Commission.
- 3. The Commission acknowledges and values the cooperation and service of the Estuary point source dischargers, many of whom have recognized the need for nutrient monitoring and have participated and continue to participate in the work of the Commission's Water Quality Advisory Committee to systematically characterize and manage nutrient loads to the Estuary.
- 4. This Resolution shall take effect immediately.

ADOPTED: September 13, 2017