PHILADELPHIA WATER DEPARTMENT

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Philadelphia Water Department

1101 Market Street
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PWD Position Statement on Proposed Changes to Water Quality Standards in the Delaware River

As the largest single source of treated wastewater in the Delaware Estuary, the Philadelphia Water Department (PWD) is proud of the outstanding improvements in water quality that have occurred since the signing of the Delaware River Basin Compact in 1961 (establishing the DRBC) and the federal Clean Water Act (CWA) of 1972.

Funded in part with financial assistance from the federal government, expansion and improvement projects at PWD's three Water Pollution Control Plants are partially responsible for this transformation. Today, iconic native species such as striped bass, American shad, and Atlantic sturgeon are now spawning in urban areas of the Delaware River once too deficient in dissolved oxygen (DO) to support propagation of fish.

PWD agrees that the available evidence clearly supports fish propagation as an existing use in the estuary that must be protected. PWD is concerned, however, that in proposing new federal DO criteria to support propagation, EPA has relied on inappropriate laboratory and modeling studies while failing to evaluate and fully consider the most up-to-date scientific data on actual fish spawning and juvenile growth in the Delaware River.

Simply setting DO criteria to the highest levels possibly attainable will impose burdensome costs on ratepayers with highly uncertain additional benefits to fish populations.

PWD's preliminary analysis of more than 5,000 fish collected and measured in the Delaware River showed that sturgeon are already spawning and growing in Zones 3, 4 and 5 at current DO levels. These zones include the portion of the river in Philadelphia. Based on actual fish measurements, years with higher or lower DO levels showed no statistically significant difference in sturgeon growth or condition.

The Delaware River sturgeon also appear to be growing as well as similar size fish in the Hudson River, where DO levels are typically higher.

In PWD's view, the new DO criteria proposed by EPA for the Delaware appear to reflect a preference toward overly conservative DO levels that are higher than needed to support fish propagation. The criteria are much more stringent than EPA approved criteria for other rivers in which sturgeon spawn, including many southern U.S. rivers with naturally warmer water and lower DO.

EPA's proposed Delaware criteria were determined based on a draft modeling study by DRBC on which PWD expressed many concerns regarding modeling inputs and assumptions. Also, in developing the proposed criteria, EPA appears not to have taken into account the fact that existing DO levels currently support spawning and growth of juvenile sturgeon and other fish species.

For more detail, **read an in-depth look at the science** informing our understanding Delaware River sturgeon in a report **published by Philadelphia Water Department experts in January 2024**.

Decision makers must consider and balance the possible benefits of even higher DO with the costs of building and indefinitely operating new processes to remove ammonia at wastewater treatment plants.

Proposed new wastewater processes needed to comply with strict ammonia limits would have a significant financial impact on water rates as well as adverse environmental impacts in the form of increased energy usage and greenhouse gas emissions. In PWD's view, the costs and unintended environmental harms of the proposed changes may greatly outweigh the potential benefits to sturgeon and other forms of aquatic life.

PWD supports recognition of the existing propagation use in the Delaware River but does not support raising DO criteria to the highest possible levels without more careful consideration of the benefits and costs of further increases in DO for sturgeon and other fish in the Delaware River.

PWD anticipates completing construction of a $74 million sidestream treatment facility at the PWD Southwest Water Pollution Control Plant by 2027. This facility will treat approximately 10% of the existing urban estuary ammonia load for a reasonable cost. PWD hopes that the effects of the sidestream project will be discernable in estuary ammonia loading and DO levels, which, along with continued monitoring for juvenile growth, may be able to provide additional scientific information about whether additional wastewater ammonia removal projects are needed or justifiable in the context of cost and other clean water and safe drinking water needs. PWD and our ratepayers are facing unprecedented costs for Combined Sewer Overflow mitigation, flooding, lead service line replacement, and treatment of PFAS "forever chemicals."

Many of these other pressing needs directly affect our customers' daily lives or have public health implications.

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