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Kathy Cooper

From: ecomment@pa.gov
Sent: Wednesday, January 03, 2018 10:59 AM
To: Environment-Committee@pasenate.com; IRRC; eregop@pahousegop.com; environmentalcommittee@pahouse.net; regcomments@pa.gov; apankake@pasen.gov
Cc: c-jflanaga@pa.gov
Subject: Comment received - Proposed Rulemaking: Triennial Review of Water Quality Standards



Re: eComment System

The Department of Environmental Protection has received the following comments on Proposed Rulemaking: Triennial Review of Water Quality Standards.

Commenter Information:

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Protected Resources Division NOAA Fisheries, Greater Atlantic Region
Gloucester, MA US

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IRRC

Comments entered:

The Protected Resources Division of the Greater Atlantic Regional Office National Marine Fisheries Service (PRD)(NMFS) would like to offer the following comments as technical assistance pertaining to the triennial review of your state Water Quality Standards (WQS) with the Environmental Protection Agency (EPA). As you know, the Atlantic and shortnose sturgeons, both listed by us under the Endangered Species Act (ESA), use freshwater reaches of the Delaware River within your jurisdiction, for spawning and juvenile rearing habitat. As such, sensitive early life stages (ELS) and spawning adults may be present at certain times of the year. Adults, sub-adults, and juveniles of both species may also forage, rest, and migrate in the Delaware River system within Pennsylvania waters. As such, it is important to set water quality standards to minimize the potential for adverse effects to their growth, survival, and recovery, to levels that are undetectable, or to the point that any effects are extremely unlikely to occur.

Additionally, critical habitat for Atlantic sturgeon was designated on August 17, 2017. Four physical and biological factors (PBFs) are included in the critical habitat designation and the water quality of effluent discharged into PA waters has the potential to affect PBF 3 and PBF 4. These PBFs are as follows:

PBF 3:

Water of appropriate depth and absent physical barriers to passage (e.g., locks, dams, thermal plumes, turbidity, sound, reservoirs, gear, etc.) between the river mouth and spawning sites necessary to support: (1) unimpeded movements of adults to and from spawning sites; (2) seasonal and physiologically dependent movement of juvenile Atlantic sturgeon to appropriate salinity zones within the river estuary, and; (3) staging, resting, or holding of subadults or spawning condition adults. Water depths in main river channels must also be deep enough (e.g., at least 1.2 m) to ensure continuous flow in the main channel at all times when any sturgeon life

stage would be in the river.

PBF 4:

Water, between the river mouth and spawning sites, especially in the bottom meter of the water column, with the temperature, salinity, and oxygen values that, combined, support: (1) spawning; (2) annual and interannual adult, subadult, larval, and juvenile survival; and (3) larval, juvenile, and subadult growth, development, and recruitment (e.g., 13° C to 26° C for spawning habitat and no more than 30° C for juvenile rearing habitat, and 6 mg/L or greater dissolved oxygen for juvenile rearing habitat).

Because adverse effects to Atlantic sturgeon critical habitat PBF's and to Atlantic sturgeon and shortnose sturgeon, themselves, are prohibited under the ESA, it is important that your WQS support the necessary life functions of these species and the PBFs related to critical habitat. In regard to critical habitat specifically, the WQS should prevent the possibility of effluent plumes restricting passage within the Delaware River and its tributaries (PBF 3), and allow for appropriate dissolved oxygen, salinity, and temperature in areas where sturgeon may spawn, rear, migrate, rest, and forage within your jurisdiction (PBF 4). We recommend including language in your regulations, if not already included, that expressly prohibits effluent plumes from occupying more than half the waterway in order to allow listed species passage. Additionally, temperature guidelines and dissolved oxygen levels to support spawning and rearing habitat (13° C to 26° C for spawning habitat and no more than 30° C for juvenile rearing habitat, and at least 6 mg/L or greater for spawning and rearing habitat) should be reflected in your standards.

We also recommend ensuring that all WQS for toxic substances, metals, and all other pollutants offer the highest level of protection for NMFS-listed sturgeon species, and that all standards are at least as protective as the national standards promulgated by EPA. Setting appropriate thresholds for pollutants is necessary to minimize the potential for adverse effects, and we encourage you to use the best available science to justify your thresholds and to help facilitate EPA's triennial review and their subsequent ESA section 7 consultation with us.

For more information about designated critical habitat for Atlantic sturgeon, please see the following websites. For general information: <https://www.greateratlantic.fisheries.noaa.gov/protected/atlsturgeon/index.html>. For GIS data: https://www.greateratlantic.fisheries.noaa.gov/educational_resources/gis/data/index.html. And for general species biology: <https://www.greateratlantic.fisheries.noaa.gov/protected/section7/listing/index.html>.

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No attachments were included as part of this comment.

Please contact me if you have any questions.