

State Water Infrastructure Authority
Meeting Date: July 15, 2026
Agenda Item O: Potential Funding Framework for Nutrient Load Reduction Projects
Informational Item

Division of Water Infrastructure Staff Report

The Yadkin-Pee Dee River Basin Association and the Piedmont Triad Regional Council recently presented to Division staff a conceptual framework for using the Clean Water State Revolving Fund (CWSRF) to fund nutrient management strategies to improve water quality and meet potential new regulations. The framework could potentially be used in one watershed and expanded to include others over time. Because, under NC GS 159G-71, the Authority has duties to establish priorities for making loans under the CWSRF consistent with federal law, to assess and make recommendations on the role of the State in the development and funding of wastewater, drinking water, and stormwater infrastructure in the State, and to make recommendations on ways to maximize the use of current funding resources and to ensure that funds are used in a coordinated manner, the Division is seeking the Authority's guidance and recommendations in considering this potential funding framework. This agenda item is an informational item, and additional agenda items may be added to future Authority meetings.

The following text was written by the Yadkin-Pee Dee River Basin Association and the Piedmont Triad Regional Council.

Background

In conjunction with the Yadkin-Pee Dee River Basin Association, Piedmont Triad Regional Council, and the Division of Water Resources (DWR), the Division of Water Infrastructure is exploring a conceptual watershed funding framework for the High Rock Lake basin. DWR has listed High Rock Lake as impaired due to chlorophyll a, which necessitates the development of a nutrient management strategy. Sources of nutrient loading to High Rock Lake include point sources (public and industrial wastewater discharges) and nonpoint sources such as agriculture, runoff from development, and areas without established riparian buffers.

In other watersheds with nutrient management strategies, point source facilities (e.g., municipal wastewater treatment with NPDES permits) have achieved nutrient reduction goals. However, nonpoint source projects in the watershed that would reduce nutrients to High Rock Lake may need additional funding to fully achieve nutrient reduction goals.

One Water Perspective

A One Water approach integrates all elements of the water cycle to help communities address water quantity, quality, equity and resiliency in a holistic, unified way. With One Water, water is treated as a single, interconnected system rather than treating drinking water, wastewater, stormwater, and natural water bodies as separate systems. Some of the key aspects of One Water include collaboration, a holistic viewpoint, and integrated approaches.

Nutrient loading to High Rock Lake comes from a variety of sources as noted above. The strategy to address the nutrient impairment in High Rock Lake would benefit from some of the key aspects of a One Water approach. From a funding perspective, this type of approach would provide funding for both point source discharges and nonpoint sources on a watershed basis.

Clean Water State Revolving Fund Strategies

There are two key Clean Water State Revolving Fund (CWSRF) funding mechanisms that potentially could be used to assist in the High Rock Lake nutrient management strategy beyond the related priority system emphasis. The first is programmatic financing where an allocation of funding is dedicated to a recipient for a program of projects (i.e., not a single project) that may or may not be fully defined. The second mechanism is sponsorship. Sponsorship involves a project sponsor, which is a loan recipient who sponsors another project (e.g., nonpoint source project) by allowing a portion of the interest payment to be diverted to fund (e.g., a grant) the other project. Each state operates their respective CWSRF program in a unique manner under a broad federal framework. These two mechanisms have been used in other states to address their respective needs. However, programmatic financing and sponsorship have not been used collectively to address a new regulatory requirement on a watershed basis.

By combining the programmatic financing and sponsorship mechanisms, a framework could be developed that would more systematically assist the funding needs to implement the High Rock Lake nutrient management strategy. That is, if programmatic financing was established to (partly) support point source upgrades to meet the High Rock Lake nutrient management strategy, a portion of the interest on those loans could be used to support nonpoint source projects in the watershed (i.e., sponsorship).

Framework Development

The Division is working with the Yadkin-Pee Dee River Basin Association, Piedmont Triad Regional Council, and DWR to develop a potential framework that may require future action by the Authority. The framework will include

- Legal authority for establishing the program and basic concepts
- Estimated funding needs to implement the High Rock Lake nutrient management strategy
- Potential programmatic financing allocations and how those allocations would be integrated into the DWR nutrient management strategy rules
- Potential sponsorship levels based on the programmatic allocation
- Organizational considerations including loan agreements, grant conditions, structure of the fund, etc.
- Nonpoint source project prioritization criteria such as nutrient removal, loading reduction to High Rock Lake, the cost effectiveness of the project and other considerations

With this informational item, an overview of programmatic financing, sponsorship, and framework considerations will be provided to solicit initial feedback from the Authority.