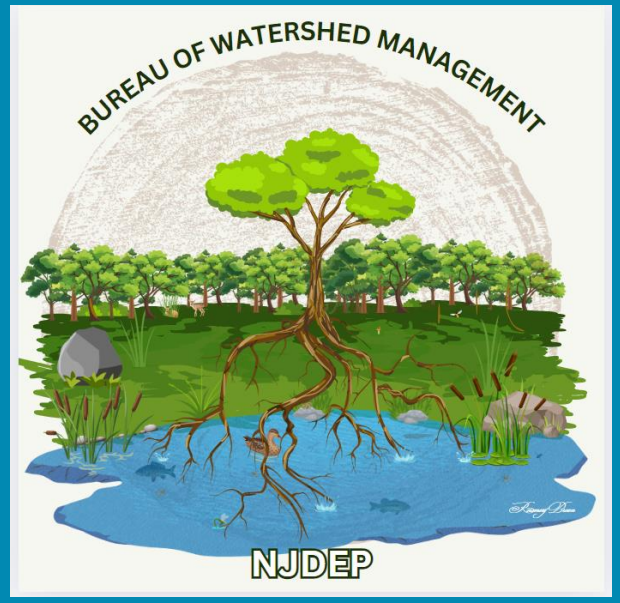
Watershed Restoration Application

April 30, 2025



Why do we map?

New Jersey faces significant water quality issues due to pollution, sedimentation, and habitat degradation.

The Watershed Restoration Application was created to:

- ✓ **Help streamline the identification of high-priority areas within watersheds for restoration work.**
- ✓ **Support data-driven decision-making by providing a centralized tool for assessing watershed health.**
- ✓ **Facilitate the effective use of State and federal funding by prioritizing projects with the greatest potential impact.**
- ✓ **Highlights completed watershed restoration projects within specific watersheds, allowing users to assess which regions have been successfully addressed and where additional projects are needed.**
- ✓ **Watershed boundaries provide a clear framework to assess the cumulative effectiveness of restoration projects within a watershed. Are multiple projects improving water quality? How are different projects working together to address NPS pollution across the watershed?**
- ✓ **Encourage partnerships between municipalities, non-profits, and other stakeholders. And much more!**

What type of projects do we map?

Green Infrastructure

Ecosystem Restoration

Basin Retrofits

Living Shorelines

Lake Pond Restoration

Watershed Restoration Plans

Agricultural BMPs

Outreach

Watershed Restoration Projects by Region

Atlantic Coast

Lower Delaware

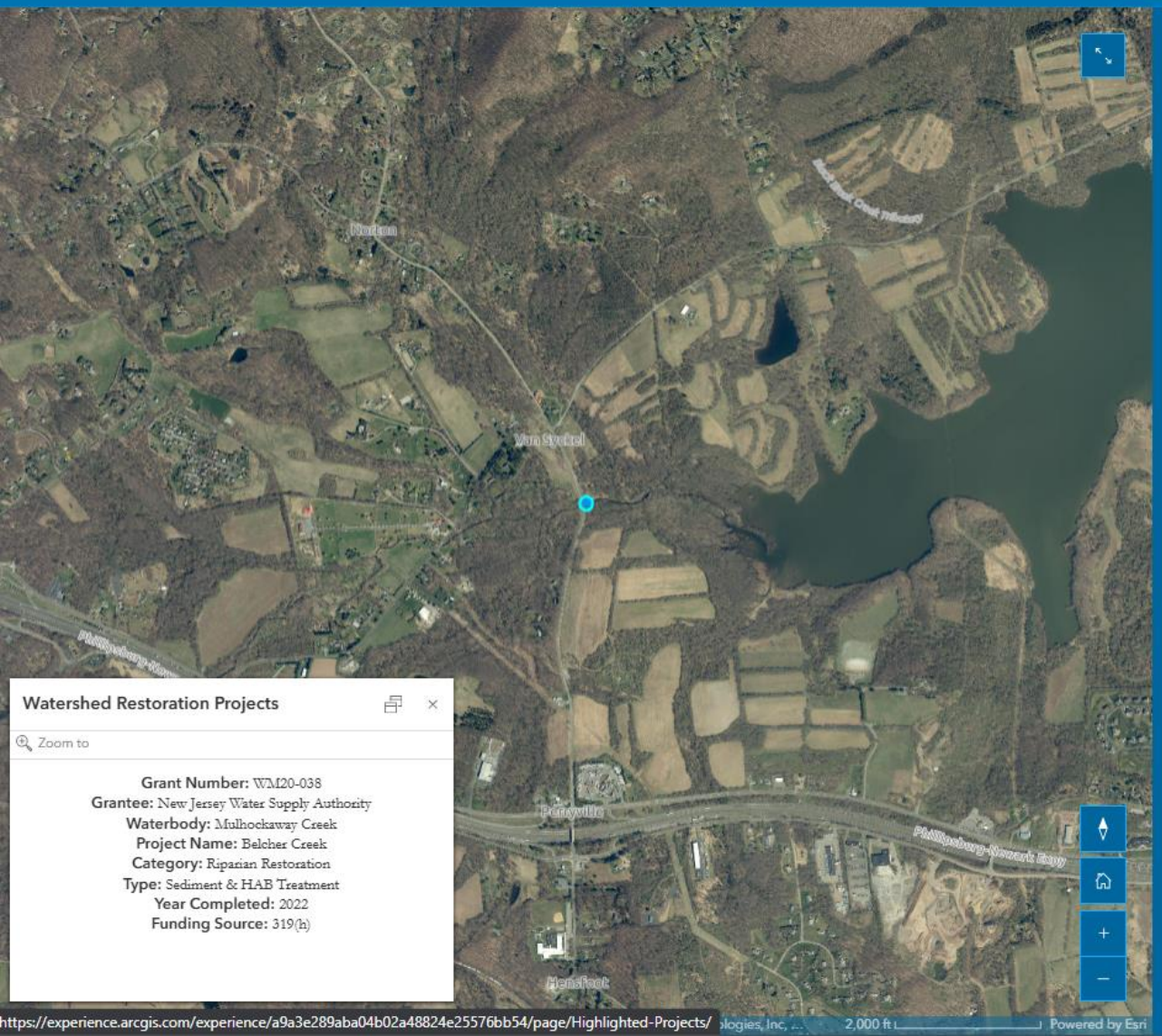
Northeast

Raritan

Upper Delaware

- DEP's Rotating Basin Approach assesses water quality annually in one of New Jersey's five regions, ensuring a statewide evaluation every 10 years. Priority regions, defined in the RFP, determine grant prioritization. This page helps Grantees identify the relevant priority region(s).
- Organizing projects by region enables users to quickly identify areas with high concentrations of restoration activities as well as regions that may have gaps in restoration efforts.
- Regional mapping helps highlight areas facing unique challenges, such as urbanized areas with high levels of stormwater runoff or rural areas impacted by agricultural pollution.
- Watershed restoration efforts can vary greatly by region, depending on the local environmental challenges and the specific ecosystems in each area. By categorizing projects regionally, stakeholders can assess the direct impacts of restoration in each region and adjust strategies accordingly.
- Different regions of New Jersey may have varying sources of nonpoint source (NPS) pollution or distinct water quality issues. For example, coastal regions may face challenges from erosion and sea-level rise, while inland areas may deal with nutrient runoff from agriculture. Regional project mapping allows for more tailored solutions that address these localized challenges.

Highlighted Projects



Spruce Run Reservoir Innovative Biochar Installation to Mitigate HABs

Grant #: WM20-038

Grantee: New Jersey Water Supply Authority

Funding Amount: $115,600

Grant Status: This grant has been successfully completed

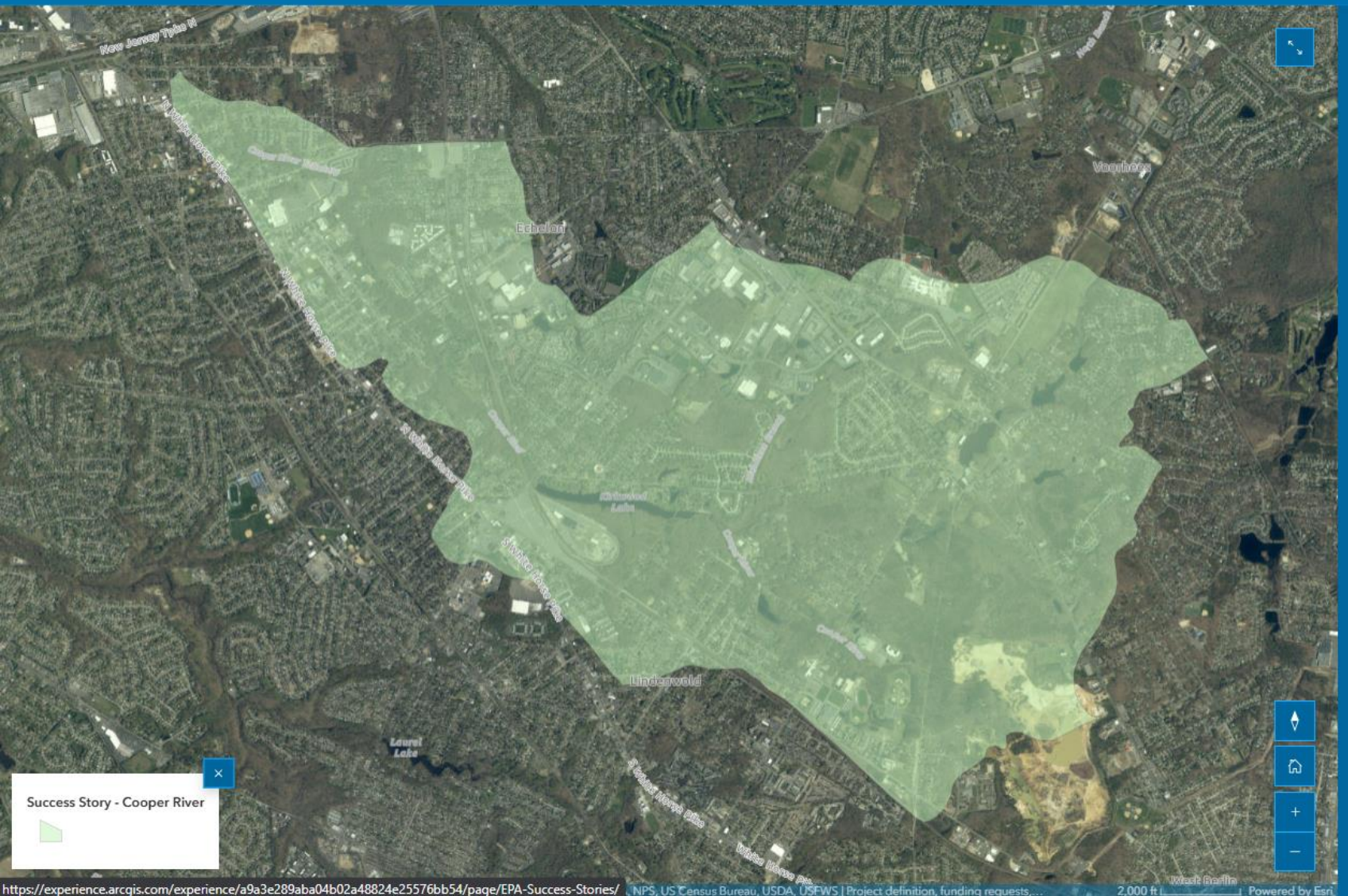
Spruce Run Reservoir, located in Clinton and Union Townships, Hunterdon County, New Jersey, is managed by the New Jersey Water Supply Authority (NJWSA) and is part of the Raritan Basin Water Supply Complex, serving over 1.5 million residents. Covering 1,290 acres with 15 miles of shoreline, it is the state's third largest reservoir, holding 11 billion gallons of water with a maximum depth of 70 feet. It is fed by Mulhockaway Creek and Spruce Run Creek.

The surrounding land is managed by NJWSA, the NJ State Park Service (Spruce Run Recreation Area), and the NJ Division of Fish and Wildlife (Clinton Wildlife Management Area), which offers recreational activities such as swimming, fishing, and camping.

The reservoir has experienced recurring cyanobacteria blooms, notably in 2018 and extensively from June to December 2019, with persistent blooms continuing since 2019. Tributaries such as Manny's Pond and Crystal Springs Preserve have also had blooms. These issues suggest a consistent nutrient source, both internal and external.

This project installed temporary biochar filters on Mulhockaway Creek, upstream of Spruce Run Reservoir, to address phosphorus loads. Biochar captures nutrients as water flows through it. The initiative aimed to evaluate the potential of biochar for reducing nutrient and metal pollution

EPA Success Story



Cooper River

Green Infrastructure and Restoration Projects Improve Water Quality in the Cooper River

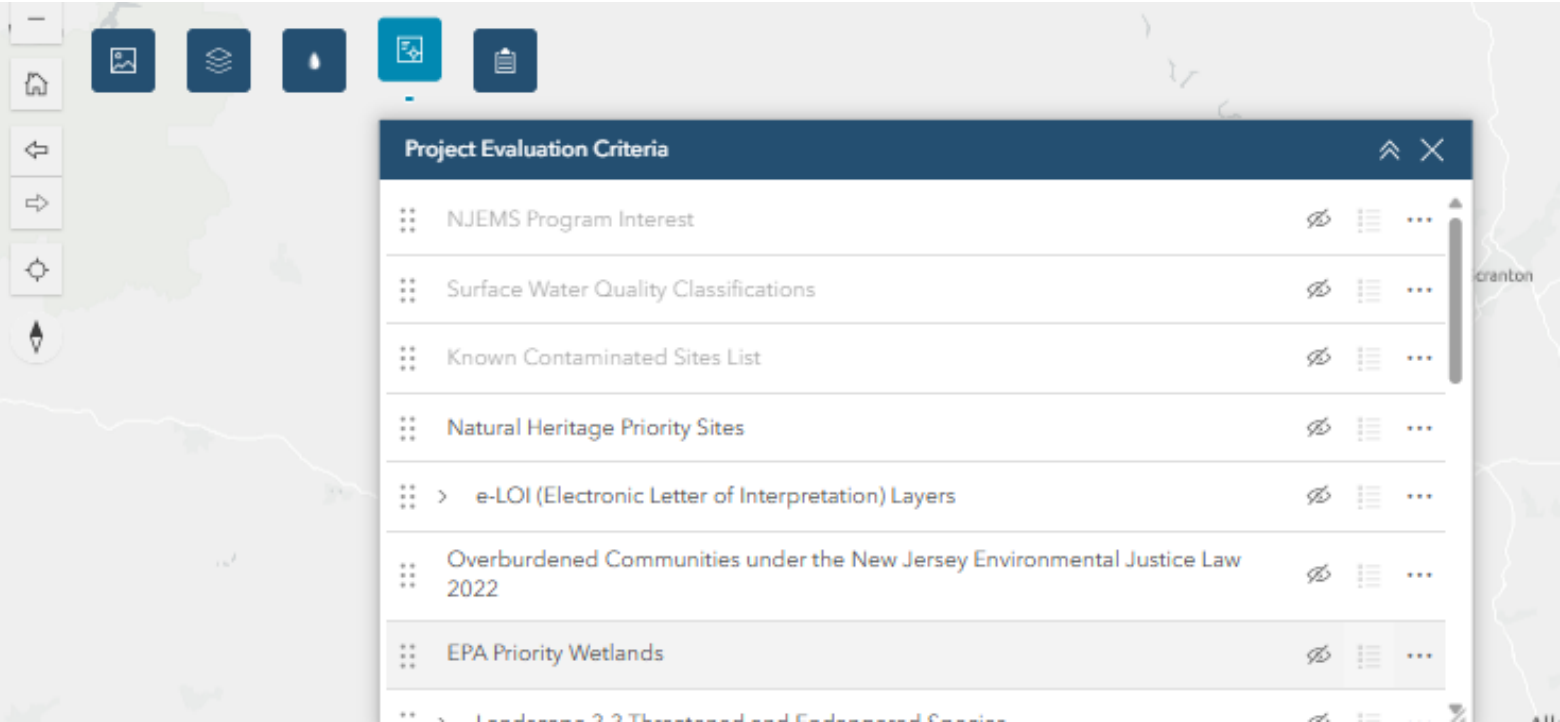
Extensive urbanization resulting in a severely degraded stream corridor led to the 2006 impairment of the upper south branch of the Cooper River for turbidity. The Camden County Soil Conservation District (CCSCD), project partners, and volunteers implemented extensive green infrastructure, restoration, and education projects throughout the Cooper River watershed. NJDEP awarded Camden County Soil Conservation District (CCSCD) approximately $1.1 million in CWA section 319(h) grant funds in 2007–2011 for these projects. In-kind matching funds (approximately $76,000) and extensive volunteer effort from project partners also played an important role in the implementation of BMPs. Below is a completed rain garden at Subaru of America in Cherry Hill, New Jersey. These projects significantly reduced untreated stormwater runoff from impervious surfaces through infiltration. Water quality improved as a result of these activities, prompting the NJDEP to remove the Cooper River above Evesham Road (hydrologic unit code [HUC] 02040202110030) assessment unit (AU) from the 2014 Clean Water Act (CWA) section 303(d) list for turbidity.

Interactive Map Widgets

1. Imagery
2. Base Layers
3. Watershed Restoration Projects
4. Project Evaluation Criteria
5. Permit Applicability

Who uses our widgets?

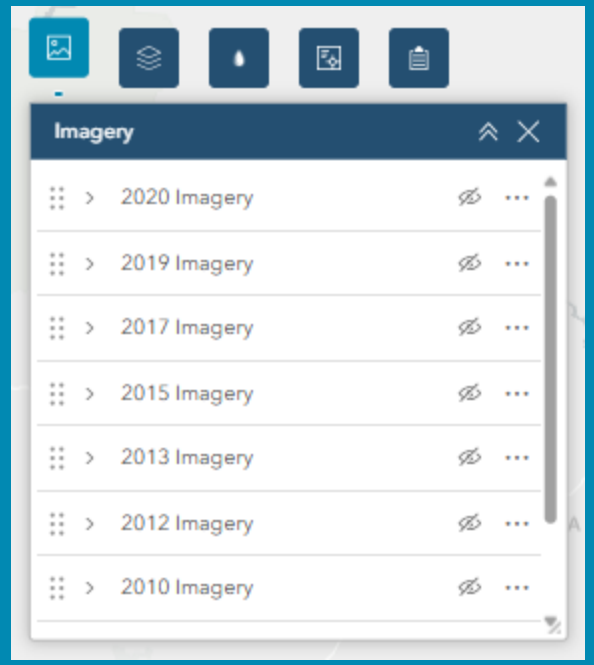
Internal and external reviewers – let's take a closer look at the widgets



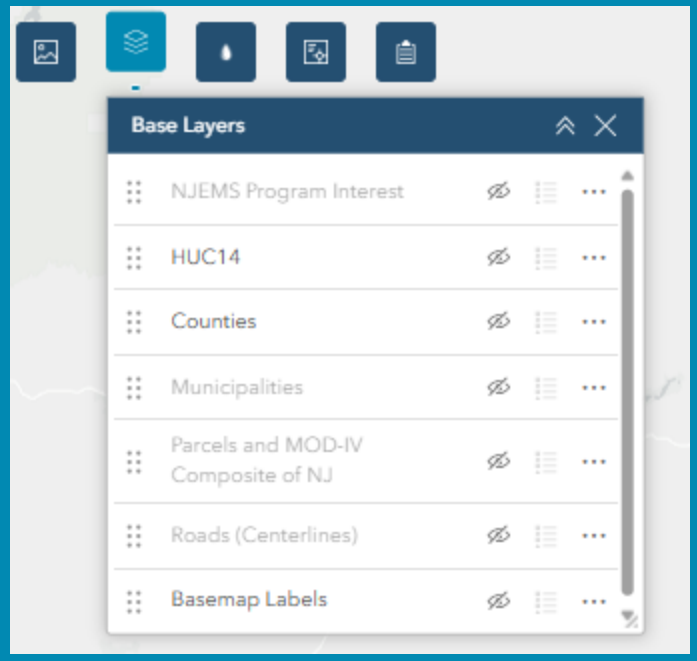
Widgets 1, 2 & 3

Below are three basic widgets that can be used for all project searches. These widgets can be used to identify completed grant projects and evaluate potential locations for future grant projects.

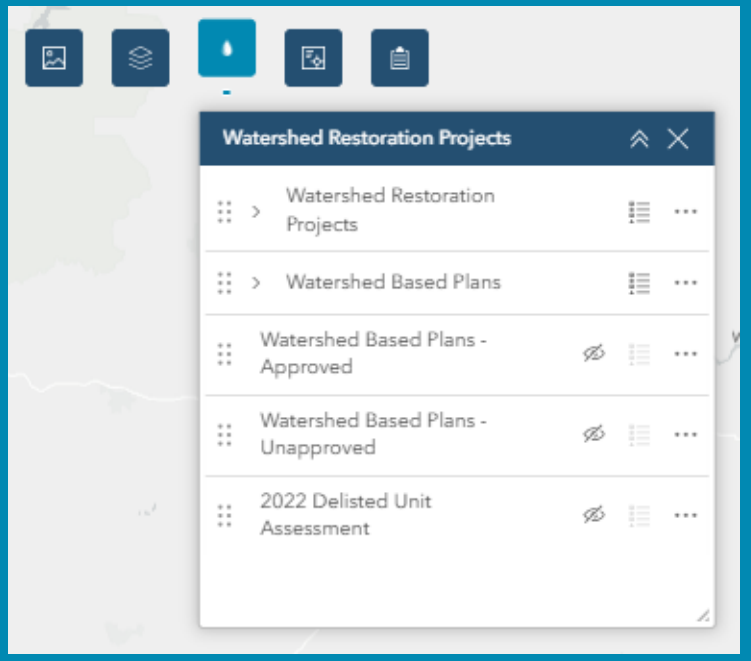
Imagery



Base Layers



Watershed Restoration Projects

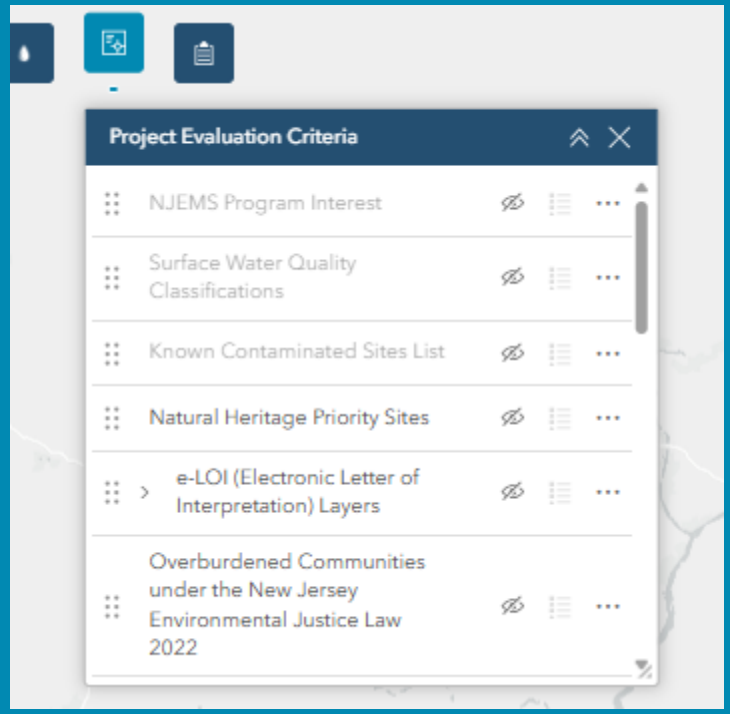


Widgets 4 & 5

We created these two widgets to be used for specific project review purposes. These widgets can be used for internal and external reviews.

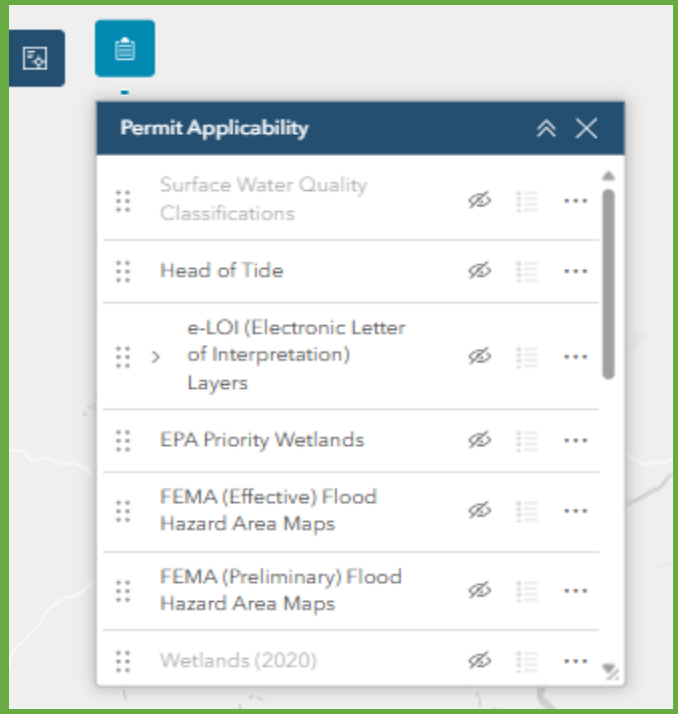
Project Evaluation Criteria

Assessing the eligibility and potential effectiveness of proposed watershed restoration projects



Permit Applicability

Determining whether a specific site or project requires a permit



Contact

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Interactive Map | New Jersey Watershed Restoration Application

Thank you!

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