

NONPOINT SOURCE PLANNING GRANT



Department of
Environmental
Conservation

Great Lakes Nature-Based Shoreline Project Plan/Conceptual Design Report Outline

Project plan/conceptual design reports for qualifying nature-based or “soft engineering” shoreline stabilization projects must follow the outline below. Projects must be located along the open shorelines and embayments of Lake Erie, Lake Ontario, the St. Lawrence River, Niagara River and the Finger Lakes for the purpose of reducing erosion, enhancing coastal resilience and improving water quality and coastal habitat. Nature-based shoreline projects must incorporate natural features and materials alone or in combination with a minimal use of structural components to manage erosion and stabilize shorelines, while enhancing aquatic habitat, natural coastal processes and access to the extent practicable or desired. Nature-based shoreline stabilization projects may include, but are not limited to, natural buffer zones, constructed or restored wetlands, “living” sills or breakwaters, beach and dune restoration and/or nourishment, nature-based stabilization techniques such as tree/rootwad revetments, live crib walls, and vegetated geogrids.

Required Elements

- I. **Cover Page** (project title, owner, prepared by, professional’s stamp, and date)
- II. **Executive Summary:** Overview of the project’s purpose
- III. **Projective Objectives:** Describe goals for the project site and nature-based shoreline elements. Indicate whether the elements are a portion of a larger project. Include project background description and history/problem statement.
- IV. **Existing Conditions:** Include an analysis of the proposed project site, including historic/current erosion rates, current shoreline condition, and description of critical infrastructure.
- V. **Existing Conditions Graphic:** A plan or diagram of the existing project site is required. It must include:
 - a. Engineer / Landscape Architect name; date and project title
 - b. North arrow / legend
 - c. Graphical scale
 - d. Site features (length of shoreline, critical infrastructure, etc.)
 - e. Location map
 - f. Site topography/areas of erosion
 - g. Project location / address (including nearest cross street)
 - h. Nearest receiving waterbody
 - i. Other site considerations (hotspots, brownfield remediation or other potential design issues at the site)
 - j. Location of any available boring logs, infiltration tests, or other subsurface investigations.
- VI. **Project Description:** Provide a narrative that explains the proposed project and provides justification for the recommended nature-based shoreline practices and why they were selected.
- VII. **Alternatives Analysis with cost estimates:** An alternatives analysis must be included that fully considers the no-action, non-structural, and nature-based alternatives for the project.
- VIII. **Anticipated Regulatory Approval and Permits:** Conceptual designs must meet NY’s Coastal Consistency requirements and all necessary State and Federal permit requirements. Permits may be required from your local municipality, the New York State Department of State (DOS) (<https://www.dos.ny.gov/opd/programs/consistency/>), the United States Army Corps of Engineers (USACE) (<https://www.lrb.usace.army.mil/Missions/Regulatory/New-York-Permit-Information/>), or other agencies depending on your project’s location and planned activities. Information on required permits can be obtained from the DEC Regional Permit Administrator (RPA)

(<https://www.dec.ny.gov/about/39381.html>). All anticipated approvals and permits must be listed in this section.

IX. Conceptual Site Plan: A plan or diagram of the project's conceptual design is required. It must include:

- a. Engineer / Landscape Architect name; date and project title
- b. North arrow / legend
- c. Graphical scale (1 " = 10', 20', 30', 40', 50', 60' or 100')
- d. Location map
- e. Site features (wetlands, nearest waterbody, streets, critical infrastructure, etc.)
- f. Proposed Nature-Based shoreline practice location
- g. Site grading (proposed conditions)
- i. Other design considerations

X. Site Photographs: Photographs that are representative of existing site conditions.