

NONPOINT SOURCE PLANNING GRANT



Department of
Environmental
Conservation

Wetland Creation/Restoration Feasibility Study Report Outline

Feasibility study for projects to address wetland creation/restoration must include the required elements listed below. Wetland creation/restoration projects include but are not limited to the following: (1) creation of a wetland where one does not currently exist; (2) restoration or re-establishment of a former naturally occurring wetland through various ecological restoration techniques (e.g., re-establishment of hydrology through removal of under-ground drain tiles, plugging open ditches or excavation of hydric soils to create depressions, re-establishment of native wetland vegetation, etc.); and (3) rehabilitation of a degraded wetland. The engineering design report must include a detailed and accurate description of the existing conditions and the proposed work, which may include a combination of ecological restoration techniques.

Required Elements

- I. **Cover Page** (project title, owner, prepared by, professional's stamp, and date)
- II. **Executive Summary:** Provide an overview of the project's purpose (i.e., what will be accomplished by implementing this proposed project?)
- III. **Projective Objectives:** Describe goals and objectives for the proposed wetland creation/restoration project. Please include the overall anticipated benefit(s) that this proposed project will have on the community and how it will be effective at making the community more resilient to further extreme weather events brought about by climate change. Indicate if this is a stand-alone flood mitigation project or if it is part of larger flood mitigation initiative.
- IV. **Existing Conditions:** Include a detailed description of the current site conditions where the proposed project site is located. Please include the following: (1) a project background description, and flood history of the site, along with flooding extent in the immediate and surrounding area; (2) a summary of the number and types of structures impacted by flooding; and (4) a summary of flood damages within the immediate and surrounding area.
- V. **Existing Conditions Graphic:** A site 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 (1 " = 10', 20', 30', 40', 50', 60' or 100')
 - d. Natural features located on site including wetlands, streams, steep slopes, and floodplains
 - e. Site features including streets, buildings, and /or other infrastructure
 - f. Site topography
 - g. Project location map / address (including nearest cross street)
 - h. Stormwater flowpath (also consider adjacent sites)

- i. Nearest receiving waterbody
- j. Location relative to the 100-year floodplain
- k. Other site considerations (hotspots, brownfield remediation or other potential design issues at the site)
- l. 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 streambank stabilization practices and why they were selected.

VII. Alternatives Analysis with cost estimates

VIII. Anticipated Regulatory Approval and Permits (*list all that will apply, e.g. NYSDEC, NYSDOT, etc.*)

IX. Conceptual Site Plan: A site 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. Natural and site features (wetlands, nearest waterbody, floodplains, steep slopes, streets, buildings, other infrastructure etc.)
- f. Proposed wetland creation/restoration project location
- h. Site grading (proposed conditions)
- i. Other design considerations

X. Floodway Encroachment Analysis: Projects within a regulatory floodway require a hydrological & hydraulic (H&H) analysis conducted by a professional engineer to show no-rise (0.00 feet) in the base flood elevation, as required under the National Flood Insurance Program. Guidance can be found at <https://www.dec.ny.gov/lands/24281.html>

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