

# NONPOINT SOURCE PLANNING GRANT



Department of  
Environmental  
Conservation

## Comprehensive Stream Corridor Assessment Study Outline

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The following report outline must be used for comprehensive stream corridor assessment studies. The studies must identify areas of erosion across a watershed area. The comprehensive stream corridor study must be completed for a minimum of a HUC 12 size watershed area and must identify and/or prioritize opportunities for streambank stabilization, riparian buffer restoration, floodplain reconnection and/or culvert replacement and repair. Flood risk assessment and modeling may be included as part of the comprehensive study but are not required. Studies should follow the [Stream Corridor Assessment Guide](#). For flood risk assessment and modeling, studies should follow the same outline as studies completed under the [Resilient NY Program](#).

### Required Elements

- I. **Cover Page** (project title, owner, prepared by, and date)
- II. **Executive Summary:** Overview of the assessments purpose, the assessment location, HUC 12 name, and the receiving body of water
- III. **Projective Objectives:** Describe goals for stream corridor assessment. Indicate whether the elements are a portion of a larger project. Include a project background description and history/problem statement.
- IV. **Existing Conditions:** Include an inventory of the stream corridor. Information collected must include but is not limited to:
  - 1) **Geospatial Information**
    - a. Assessment location
    - b. HUC 12 name
    - c. Nearby gage stations (if applicable)
    - d. Receiving body of water
  - 2) **Stream Channel Data**
    - a. Bankfull width
    - b. Bankfull depth
    - c. Floodplain Width
    - d. Any stream channel obstructions (e.g. culverts, bridges, crossings, gravel, woody debris)
    - e. Channel slope
    - f. Channel pattern
    - g. Stream channel avulsions
    - h. Stream channel habitat
  - 3) **Streambank Data**
    - a. Streambank height
    - b. Streambank angle
    - c. Streambank root density
    - d. Streambank soil stratification
  - 4) **Floodplain Data**
    - a. Floodplain elevation
    - b. Floodplain width
    - c. Floodplain land cover/land use
    - d. Floodplain obstructions
    - e. Invasive species in floodplain

## 5) Riparian Area Data

- a. Width of riparian area
- b. Type of riparian cover
- c. Quality of riparian habitat
- d. Slope of riparian area

## 6) Upland Area Data

- a. Upland land cover/land use
- b. Potential surface water impacts

## 7) Opportunities for implementation

- a. Streambank stabilization
- b. Riparian buffer installation
- c. Floodplain reconnection
- d. Culvert replacement
- e. Estimated cost of each implementation opportunity

## 8) Optional: Flood Risk Assessment and Modeling

- a. Description of initial data collection: hydrological and meteorological data, ortho-imagery, flood zone maps, streamflow, precipitation, flooding and ice jam reports
- b. Field Assessment: rapid “windshield” river corridor inspection, photo documentation, measurement and rapid hydraulic assessments
- c. Watershed Characteristics: study area, environmental conditions, watershed land use, geomorphology, hydrology, infrastructure
- d. Climate change implications
- e. Flooding characteristics/flooding history
- f. Flood risk assessment
  - i. Flood mitigation analysis
  - ii. Debris analysis
  - iii. Ice jam analysis
  - iv. Cost estimate analysis
  - v. High risk area description
- g. Mitigation recommendations/alternatives
- h. Description of additional data collection, modeling, or analysis needs

**V. Site Photographs:** Photographs that are representative of existing site conditions.