BSC GROUP

MEMORANDUM

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Nature-Based Solutions Implementation Resource Guide

Nature-based Solution (NbS): River/Pond Bank Revegetation

Project Number per matrix: **(1)**

PREREQUISITES

- Conduct a species assessment.
- Obtain necessary regulatory permits from local, state, and federal regulators and funder approvals.
- Conduct a site-specific environmental assessment to understand the local ecosystem, soil conditions, and potential impacts.

RECOMMENDED IMPLEMENTATION STEPS

- **Project Planning and Administration**
  - Coordinate the location of invasive control to achieve stability through critical mass.
  - Assess bordering threats such as the proximity of established invasive seed sources.
  - Assess opportunities for coordinated habitat enhancement and educational resources.
  - Ensure project budgets and contracts with private companies include sufficient retainage for maintenance and establishment period and coordination costs for oversight.
  - Coordinate efforts to pair restoration with public amenity features to ensure community investment, visibility, and assessment of best practices.
- **NbS Installation**
  - Install erosion control measures including aquatic silt curtain.
  - Clear and grub site, ideally by DPW or contractor.
  - Remove invasive vegetation.
  - Complete planting through volunteer efforts or private contractors. Methods may include but are not limited to the following: live-stake of armored banks, live-stake of wetland, live fascines for bank stabilization/revegetation, plug/container planting, conservation seeding, seeded compost top-dress, seeded wattle, and use of tree trunks and root masses.
- **Maintenance**
  - 60-day maintenance period to include watering twice weekly, hand weeding, and replacement of failed plantings.
  - 2-year establishment period to include biannual removal of invasive plants and weeds, annual replacement of failed plantings, and watering as needed to naturalize plantings.

NATURE-BASED SOLUTION SPECS

- Typical project size: 10x500 ft.
- Minimum size: 1000 sq. ft.

BUDGET ESTIMATE

- Typical project Budget Order of Magnitude: $1,000 – $15,000
- Use the BSC Group Nature-based Solutions budget tool to develop more detailed concept budgets

SCHEDULE ESTIMATE

- 1 day of construction per unit
- 60-day maintenance period
- 2-years establishment period, permanent
- Annual regular maintenance