



Watershed Stormwater Mitigation

Paines Creek/Stony Brook Watershed Town of Brewster, Massachusetts

The Project

The Cape Cod Town of Brewster was awarded a \$19,150 Coastal Nonpoint Source Pollution (NPS) grant through the Massachusetts Office of Coastal Zone Management (CZM) program to assess municipal drainage and stormwater pollutants in Stony Brook and its tidal estuary, Paines Creek, which flow into Cape Cod Bay.

The Town's goals for the grant project were as follows.

- Improve water quality in the Stony brook watershed, so that closed shellfish areas in Paines Creek could be reopened.
- Protect open shellfish areas in the Brewster North Coastal shellfish growing area.
- Improve anadromous (migratory) fish, rare species and salt marsh habitat.
- Improve water quality at public bathing beaches.
- Improve water quality in the impacted headwaters of Stony Brook (*i.e.*, Lower and Upper Mill Ponds, Walkers Pond, Slough Pond).

Stearns & Wheler's Approach

Stearns & Wheler was retained to assess municipal drainage and stormwater pollutants in the Stony Brook watershed (including Paines Creek) and to prioritize future stormwater remediation in this important and sensitive watershed. The assessment included:

- Stormwater system mapping and drainage area delineation
- Stormwater feature mapping
- An estimate of first flush stormwater volumes and flows
- Review of existing water quality data, water quality sampling, and soils evaluation.



Existing Conditions



Existing Conditions

The Town was provided with an updated map of drainage structures, estimates of watershed areas, and calculations of impervious areas and stormwater runoff in the watersheds. A prioritized list of drainage areas in need of remediation was developed, including identification of sites to install Best Management Practices (BMP). Conceptual design plans of BMPs were provided.

Project Benefits

Stearns & Wheler's assessment provided the Town of Brewster with a plan to implement stormwater mitigation measures and to pursue additional grant monies to implement those measures.