### Coastal Pollution Remediation Grant Awards FY05

# (1) Town of Duxbury

Snug Harbor Stormwater Mitigation Project

Award: \$150,542

The goal of this project is to mitigate stormwater pollution, particularly bacteria and sedimentation, from municipal roadways that is impacting the receiving water of Snug Harbor and threatening commercial and recreational shellfish beds, and aquaculture resources. The Town of Duxbury seeks funding to improve the existing drainage system and install best management practices to remediate stormwater pollution. The project will include the installation of nine (9) leaching facilities to treat first flush runoff (1-inch rainfall). Engineering services for the design of this project was previously funded by CZM. The project received support from a number of Town boards and local nonprofit organizations. The review committee recommends that this project be funded as requested.

# (2) Town of Bourne

Conservation Pond Stormwater Project

Award: \$25,000

Monitoring data provided by the Bourne Pollution Task Force and the Bourne Board of Health shows elevated fecal coliform bacteria and enterococci counts in Conservation Pond during rain events. Stormwater overtops the catchbasins closest to the pond and flows into the pond. In addition, several roadcuts along the pond provide for road drainage into the pond. Pollution carried in stormwater is suspected to cause the elevated bacterial counts because the counts are mainly elevated during storm events. The town seeks funding to further assess stormwater impacts and design best management practices to mitigate the pollution. Stormwater improvements for the Town of Yarmouth were based on a FY 03 CPR funded assessment project. The project received support from a number of Town boards. The review committee recommends that this project be funded as requested.

#### (3) Town of Marion

Island Wharf LID Stormwater Project

Award: \$150,443

Elevated fecal coliform counts in Sippican Harbor have resulted in a permanent closure of shellfish beds in the Island Wharf area. The Buzzards Bay Program rated this area as "high priority" for remediation due to bacterial counts and subsequent shellfish closures. The drainage area has been defined and the existing drainage system has been located by the Town of Marion through a previous CZM grant award. The Town seeks funding to prepare final engineering plans for best management practices for the Front Street and Marion Village sub-drainage system, and install designed BMPs. Specifically, the Town would like to replace faulty catchbasins, install a Downstream Defender for pretreatment purposes, and construct 4 bio-filter units; a stormwater treatment system that follows Low Impact Development principles (functional greenspace, keeping stormwater onsite, minimizing runoff and maximizing infiltration, and employing natural processes for water quality improvement). The review committee recommends that this project be funded as requested.

### (4) Town of Plymouth

Jenney Pond Portion of Town Brook Assessment and Conceptual Engineering Project

Award: \$24,000

Bacterial contaminants, noxious weeds and sedimentation have been identified within the areas between Frost Cake and Brewster Gardens near the mouth of Town Brook, a direct tributary to Plymouth Harbor. Shellfish beds within the Harbor have been closed, as well as beaches, due to bacterial contamination The Town of Plymouth requests funding to further assess stormwater pollution entering Town Brook and to identify the most effective ways to mitigate the adverse impacts of stormwater runoff and sedimentation

through the implementation of best management practices. The Town proposes to delineate the drainage area, investigate and map the stormdrain system, conduct water quality sampling, assess potential BMP sites, identify preferred BMP alternatives, prepare conceptual designs, and secure necessary permits. The project received support from a number of Town boards. The review committee recommends that this project be funded as requested.

# (5) Town of Wellfleet

Wellfleet Town Pier Rehabilitation

Award: \$21,300

This project is based on recommendations of a previously CZM-funded stormwater assessment project for the area. Data included in the assessment identified fecal material (possibly from dogs & waterfowl) on Town Pier pavement as a source of pollution and a contributor to shellfish bed closures. The Town of Wellfleet proposes to rehabilitate the existing Pier, which would include the construction of a new stormwater collection and treatment system and the construction of a new shore side pumpout system. Funding was requested for the design of the stormwater system, which would include a series of deep sump hooded catch basins to remove oils and sediments, discharging into an installed leaching field designed to capture and infiltrate one inch of runoff. The leaching system is expected to remove bacteria, phosphorous, and nitrogen from entering stormwater. In addition, the Town seeks funding to design the shore side pumpout system. The Town proposes that this project will ensure the long-term quality of the local beaches and shellfish industry. The review committee recommends that this project be funded as requested.

#### (6) Town of Orleans

<u>Stormwater Assessment and Preliminary Design for the Town Cove Outfall Pipe and Watershed Area.</u>

Award: \$37,440

The Town of Orleans will conduct an assessment of stormwater pollution entering Town Cove. The primary pollutant of concern is sedimentation and bacterial contamination because of a prohibited shellfish closure in Town Cove within the proximity of the stormwater outfall pipe. It was stated in the proposal that sediment sources include winter sanding operations, erosion of embankments and poorly vegetated areas, vehicle tracking, and decaying sections of the discharge pipe. Bacterial contamination in stormwater is suspected to originate from animal and waterfowl that washes off pavement, roofs, and other impervious surfaces. Specifically, the Town proposes to identify pollution sources within the existing watershed area, recommend mitigation solutions and best management practices, prepare preliminary designs for structural BMPS. The review committee recommends that this project be funded as requested.

# (7) Town of Nantucket

Consue Springs Restoration Project

Award: \$109,864

This project is based on recommendations of a previously CZM-funded stormwater assessment project for the Consue Springs watershed. Data included in the assessment showed that the Springs were contaminated with elevated levels of nutrients, heavy metals, and bacteria. The source of these contaminants was determined to be a combination of stormwater input and high waterfowl populations. The Springs discharges to Nantucket Harbor where shellfish closures are frequent due to high bacterial counts. The assessment project included the delineation of the drainage basin into three sub-watersheds, and the development of potential BMP strategies and treatment locations. The Town decided to remediate stormwater in two phases. The Town is requesting funding to implement Phase I, which includes the installation of a Cultech infiltration system and an 11,000-gallon septic tank to treat the first flush volume. The review committee recommends that this project be funded as requested.

# (8) Town of Provincetown

Provincetown Harbor Stormwater Implementation Project

Award: \$93,750

This project is based on recommendations of a previously CZM-funded stormwater assessment project for the Provincetown Harbor watershed. This project will implement stormwater best management practices at an existing outfall (P7) that was identified as apriority area in the assessment project. The primary pollutants of concern in the Harbor are bacteria and pathogens. Sampling results from the assessment showed elevated fecal coliform counts at the P7 outfall. The Town seeks funding to prepare final BMP plans and install a Cultec infiltration system (using approximately 39 infiltrators), and a 2500-gallon settling tank. The review committee recommends that this project be funded as requested.