

**PROJECT APPLICANT:** Hampton Hills Association

**PROJECT TITLE:** Installing a Permeable Reactive Barrier (PRB) to remove ground water nitrogen behind a bulkhead in Shinnecock Bay.

**PROJECT TYPE:** Non-Point Source Abatement and Control

**SCALE:** Neighborhood/Watershed

**APPROACH:** Remediation of Nitrogen in Groundwater.

**DESCRIPTION:**

The Hampton Hills Association is planning to replace 100 feet of bulkheaded shoreline at their own cost and seeks water quality funding to install a permeable reactive barrier behind the bulkhead during installation to remediate nitrogen loading to the Bay and establish guidelines for design of bulkhead treatments such as this.

**PROPOSED PROJECT**

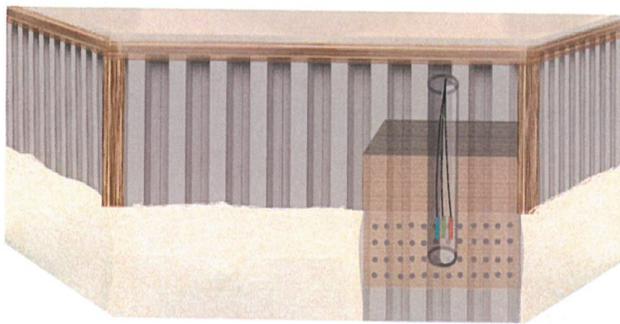


Figure 2. Schematic of bulkhead PRB test cell. Woodchip/gravel PRB matrix behind the bulkhead is indicated by the shaded brown box. Multiple autonomous sensors are deployed in the center of the PRB in a PVC pipe for continuous data. Holes in the bulkhead allow treated water to leave the system.

**MAP OF PROJECT LOCATION**



Figure 4. Site location showing the recently replaced bulkhead (blue), the proposed replacement where the BPRB will be installed (red), and the old bulkhead which will require future replacement (orange). TC1-TC10 indicate treatment cells which may include different PRB treatments and controls.

<b>TOTAL CPF FUNDS REQUESTED</b>	<b>\$ 220,841</b>
Applicant matching funds pending approval	\$ 227,100
<b>RECOMMENDED FUNDING AWARD</b>	<b>\$168,178</b>