

Lombardo Associates, Inc.
Representative Groundwater &
Stormwater Treatment
Project Descriptions

- Passive Groundwater Treatment Project Description

Environmental Engineers/Consultants

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Passive Groundwater Treatment for Nitrogen, Phosphorus & Perchlorate Removal

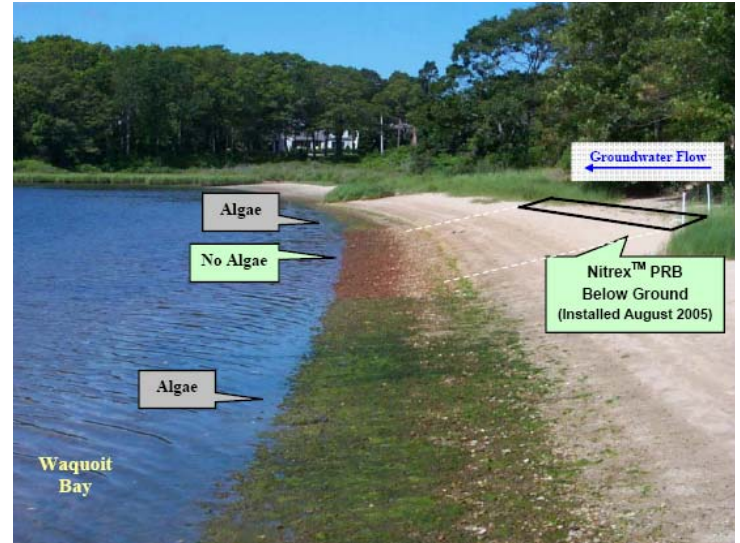
Nitrate Nitrogen < 0.1 -0.6 mg/l

Total Phosphorus < 0.1 mg/l

Total Perchlorate < 0.2 ug/l

Project: Permeable Reactive Barrier (PRB)
Passive Groundwater Treatment
Nitrogen Removal

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Site 1 – Nitrogen Removal – Cape Cod, Massachusetts



As part of a Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) funded demonstrated project, the Woods Hole Marine Biological Lab (MBL) retained Lombardo Associates, Inc. (LAI) for installation of the patented Nitrex™ groundwater nitrogen removal technology at two locations on Cape Cod, MA in the Waquoit Bay watershed.



Performance

Site	Influent Nitrate – N (mg/l)	Effluent Nitrate – N (mg/l)
Waquoit Bay, MA	1.74	0.007
Childs River, MA	7.19	0.568

