



*Stewards  
For the  
Coastal Environment*

## **Salt Ponds Coalition**

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Preserving our coastal ponds: Point Judith, Potter, Card, Trustom, Green Hill, Ninigret, Quonochontaug, Winnapaug, Maschaug, Little Maschaug

Position of the Salt Ponds Coalition  
Regarding Rezoning of  
Bill's Island, Quonochontaug Pond  
November 10, 2008

It is the recommendation of the Salt Ponds Coalition that the highest and best use of Bill's Island (a/k/a Great Island) in the southeast corner of Quonochontaug Pond remain zoned as open space recreation. It is the further opinion of the Salt Ponds Coalition that residential development would be detrimental not only to the island but also to the adjacent saltmarsh, natural resources, and water quality of Quonochontaug Pond.

The Salt Ponds Coalition is a non-profit educational and advocacy organization devoted to the protection and preservation of the salt ponds. It is designated by the Rhode Island General Assembly as the Watershed Council for the salt pond watershed.

### Background Information:

Bill's Island is a 5.7 acre island bordered on two sides by one of the state's largest saltmarsh communities, most all of which is currently owned and preserved by the state and land trusts. This ecosystem represents an important link of the Atlantic Flyway for migratory waterfowl and shorebirds, approximately 41 species, including two endangered species (Paton et al 2004). It is expected that the flora and fauna of Bill's Island is similar to Nope's Island to the west and comparisons to their productivity and ecological importance can be made. The Quonochontaug Barrier Beach ecosystem is composed of nineteen habitat types; Bill's Island and Nope's Island provide the high tree canopy (Oak-Hickory) component of the system.

The waters surrounding Bill's Island provide habitat for fish, shellfish and supports significant recreation. Shellfish surveys by the Department of Environmental Management (DEM) have documented the productivity of this area (Ganz et al 1975, 1988 & 2001). Soft shell clams, quahaugs are harvested from flats to the south, east and west of the island. The rocky shoreline of Bill's Island that once supported a significant oyster population through the 1990's has been recently targeted by DEM for a restoration of the oyster resource next spring. Quonochontaug Pond is a very important nursery ground for finfish, supporting over 100 species (CRMCM, 1999). It supports both commercial and recreational fishing, as well as, supporting the offshore fishery.

Water quality testing done by the Salt Ponds Coalition indicate that water quality around the "Bill's Island site" is the best in the pond, compared to other sites in Quonochontaug Pond. Dissolved oxygen is near 100% saturation, in both surface and bottom waters, throughout the Spring-Summer-Fall. Nitrate concentrations are near those of Block Island Sound seawater; chlorophyll concentrations are low; and benthic macroinvertebrate populations are healthy and diverse.

Western Quonochontaug Pond is experiencing dissolved-oxygen depletion in bottom waters caused by reduced circulation of ocean water and contact with organic-rich bottom sediments. Low oxygen events occur multiple times in the western basin of the Pond. Ecological conditions, as indicated by benthic biology, is moderate to poor in the west end of the Pond. Such conditions could develop in marsh areas south of Bill's Island if plant denudation, sediment erosion, and seepage from ISDS occurs as a result of a zoning change from open space to residential.

Rezoning of Bill's Island will result in residential development of the island and will severely impact the natural beauty and habitat quality of the island and surrounding ecosystems. An application for a six-bedroom residential system on the island has been submitted (ISDS #0205-0826).

Construction on Bill's Island for a dwelling, well and septic system will require significant excavation and devegetation/deforestation. This will result in habitat loss. Soils on the rocky island are stabilized by the vegetation, and once the vegetation is removed soil runoff and erosion will occur. Siltation over the delicate shellfish beds has a high probability of occurring, which can smother the resident population and undermine the state DEM oyster restoration project. Additional fill material needed for grading will compound erosion.

Water quality degradation by the addition of excessive nutrients through runoff, non-point transport and poor land use practices is an ever-present issue in all the coastal ponds. Results of the combined effects of this have resulted in loss of hundreds of acres of eelgrass beds, oxygen depletions, noxious algal blooms and shellfish harvesting prohibitions in other salt ponds. Some of these symptoms exist in western Quonochontaug Pond. Nutrient transport from a developed Bill's Island has a high probability of degrading the shallow waters south of the island.

Many questions arise as to the utility and safety aspect of a developed Bill's Island. Access to the island is only by boat and fire apparatus and other safety apparatus will not be able to respond effectively in case of an emergency. The developed island must have electric power to operate mechanical devices for the proposed "Advan Tex" septic and water pump(s). In addition the "Advan Tex" system, if installed, will require constant monitoring and service as required. Service response to address a system failure will be complicated by boat-only access to the island. Thus, sewage treatment may be compromised affecting the pond. Should underwater utility cables be required, their installation will also seriously impact the benthos of the pond. Installation of underwater cables would involve burying them, which would amount to dredging which is prohibited in a Type 2 waterway (CRMC "Red Book").

The development of Bill's Island will require the scrutiny of the Coastal Resources Management Council (CRMC). A current CRMC management objective is for coastal planning for sea level rise. An enclosed map (exhibit X) indicates the effect of a 3' sea level rise on Bill's Island. Needless to say, Bill's Island is very vulnerable to storms.

"The CRMC's goal of the Special Area Management Plan for the Salt Ponds Region includes (1) maintaining the exceptional scenic qualities of the salt ponds and diversity in the mix and intensity of activities they support, (2) to manage expansion of near areas of the salt ponds that are threatened by harmful bacteria or eutrophic conditions, (3) to ensure that the ground water will be unpolluted, (4) to preserve and enhance the diversity and abundance of fish, shellfish and waterfowl, (5) to restore barrier beaches, saltmarshes, and fish & wildlife habitats damaged by past construction or present use and to prevent further degradation of the natural system by over-development, (6) to encourage preparation for storms, and both pre- and post-storm response." (CRMC, 1999)

For the reasons above, the Salt Ponds Coalition believes that Bill's Island should not be rezoned and should remain as wild habitat .



Art Ganz, President

## Literature Cited

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