

Falmouth Dock and Pier Management Options:
Applicability of a water sheet zoning exclusion model
using prioritization methods for protecting aquatic
resources

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Dock and Pier Workgroup

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Includes a summary of technical assistance provided by BBP wetland specialist, John Rockwell, to the Town of Marion and how it may relate to the Town of Falmouth.



About the Buzzards Bay Project

- 1) We are an advisory and planning unit of Massachusetts Coastal Zone Management funded by the US EPA.
(not to be confused with Coalition for Buzzards Bay or BB Action Committee)
- 2) Our mission is to "protect and restore water quality and living resources in Buzzards Bay and its surrounding watershed through the implementation of the Buzzards Bay Comprehensive Conservation and Management Plan."
(grants and tech assistance)

More information at BuzzardsBay.org

Why regulate Docks & Piers Locally?

Premise: Federal Permits for Docks & Piers (Army Corps), state waterways licenses (Chapter 91 permits), and the Massachusetts Wetland Protection Act (administered by local conservation commissions) may not address all special local needs to protect wetlands, water quality, habitat¹, and the "health, safety and general welfare of their present and future inhabitants."²

¹ Can be addressed by local wetland bylaws

² Massachusetts General Laws Chapter 40A (Zoning), Section 1A

Property Owners Do Not have a Constitutional Right to a Dock

The Fifth Amendment of the United States Constitution protects landowners from the government taking their property without just compensation. This provision in the Bill of Rights served to protect landowners from the physical taking of a property.

While the US Supreme Court has affirmed that the government cannot arbitrarily impose regulations on land use, in *Lucas v. South Carolina Coastal Council* (1992) they established that compensation is due only when a regulation deprives a landowner of essentially all property value.

Falmouth Options

- 1) Local Wetland Bylaw and regulations (apparently not proved effective)
- 2) Zoning Bylaws (enforced by either ZBA, Planning Board, or Board of Selectmen)
- 3) Falmouth Selectman's Wetland Regulations¹ (a Zoning bylaw that requires a Special Permit, unique in region, that is independent of the state Wetlands Protection Act, and which could be strengthened with clear performance standards and criteria and adoption of a map with supporting documentation.)

¹ Section 240-77 of Falmouth Code

Note: any dock exclusion zone would also be enforced through the DEP Chapter 91 program (e.g. ACEC areas are dock exclusion zones under the Chapter 91 regulations.)

Difficulty of wetland permit by permit review

- 1) Falmouth regulations were greatly toughened for docks in the late 1990s. The BBP helped the town draft these regulations, and the regulations reflected what the Commission felt at the time was needed. (They have since been modified somewhat).
- 2) The Regulations required a minimum depth of 3 feet MLW (min.) at the end of the dock, and did not allow docks to exceed 100 feet.
- 3) Placed considerable discretion on opinion and maps of the Shellfish Constable, which was not necessarily desired by the constable.
- 4) Falmouth lost case recently. Was it because the decision was written poorly or because the regs were not adequately supported?

¹ Section 240-77 of Falmouth Code

Important Points about Environmental Regulations

Sometimes, scientific information is well ahead of the management and political capacity to address the problem (e.g. Nitrogen TMDLs for nonpoint source pollution).

Sometimes management needs are well ahead of scientific understanding of population and ecosystem response to cumulative impacts and habitat loss from development (e.g. Dock and Pier impacts, boating activity).

The role of managers is to attempt to translate scientific information into a regulatory approaches or water quality standards.

The best you can hope for is that management decisions are made, and regulations adopted that are based on the best available scientific information. In reality, political, social, and economic impacts can overshadow scientific information.

Most new laws and regulations adopted locally are based generalized principals of ecosystem response to disturbance, water quality data, and ever increasing spatial information and habitat change and land use, fueled by sophisticated GIS software.

Marion Dock and Pier Case Study

not idealized, but a real world example

Regulatory Context:

Eight years ago, the Town of Marion adopted a land zoning bylaw that limited the construction of docks on non-conforming lots as follows:

The zoning law said you can build a dock, provided:

"4. The zoning map does not designate the area as a no pier construction zone. [no designations made]

5. The lot for which the permit is sought fully conforms with the current area and frontage requirements for the district in which it is located."

-Section 7.4.5 Accessory Piers (Marion Zoning Bylaws)



Impetus:
Four years ago the Town of Marion down zoned. This effectively prohibited new dock construction over large areas

Current Dock Prohibition

Based on lot size and road frontage, over 55% of the Marion water front is closed to new pier construction.

The situation is politically untenable, so the Marine Resource Commission wanted to develop a rational on dock exclusion based on protection of natural resources.

Base Dock & Pier Decision-Making on Natural Resources

Resources evaluated for CRITERIA RANKING:

- Eelgrass
- Quahogs
- Soft Shell Clams
- Razor Clams
- Diamond-backed Terrapin (habitat)
- Oysters
- Bay Scallops
- Swimming Beaches



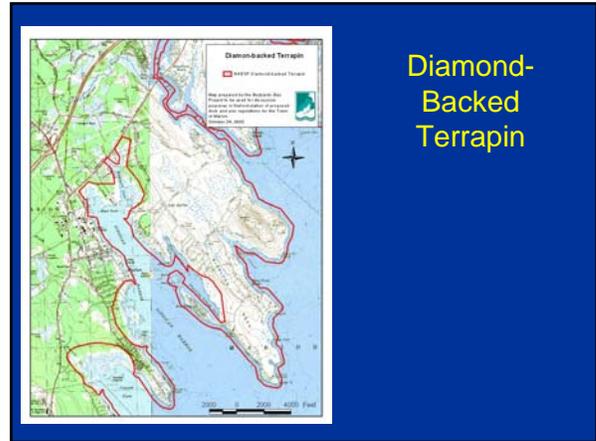
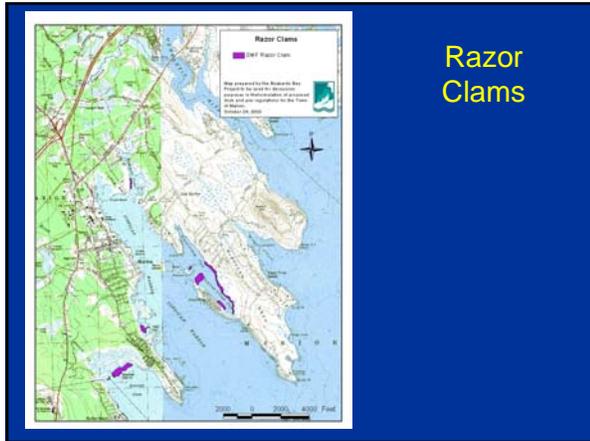
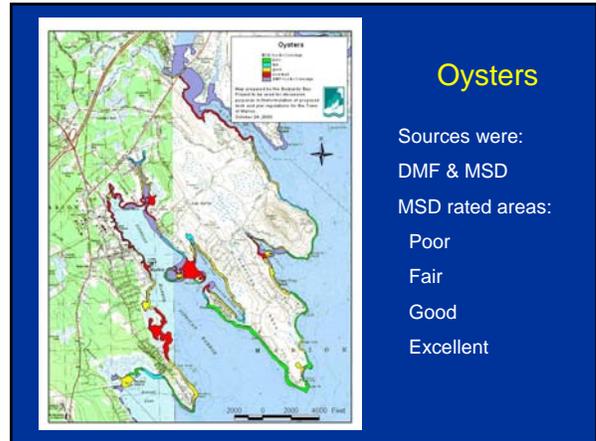
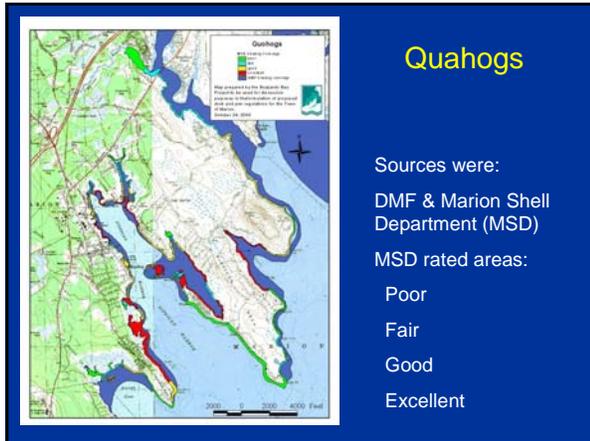
Eelgrass & Scallops

Sources were;
DMF for Scallops
DEP/Costa for Eelgrass
MSD for Scallops & Eelgrass



Soft shell Clams

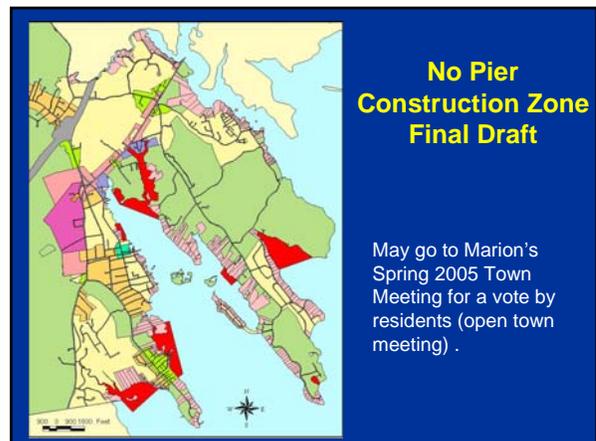
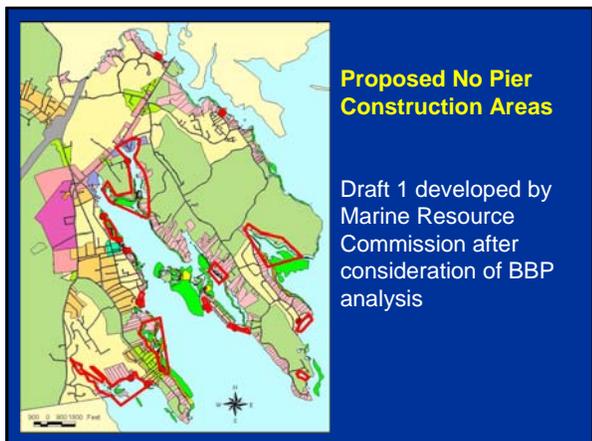
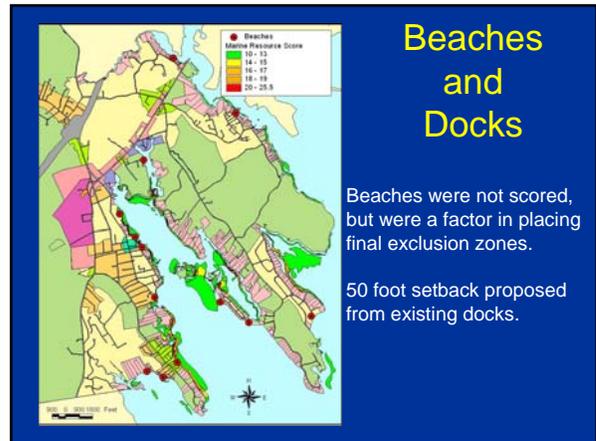
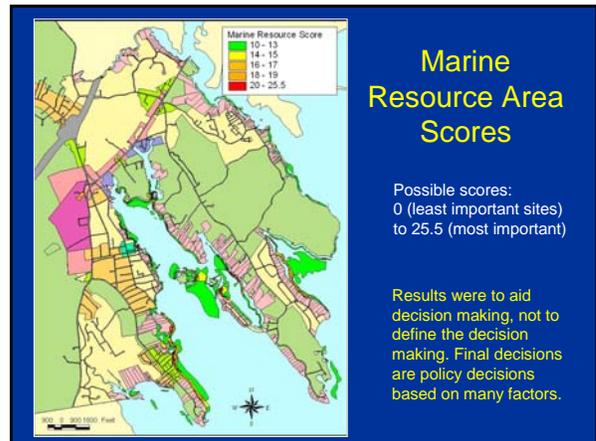
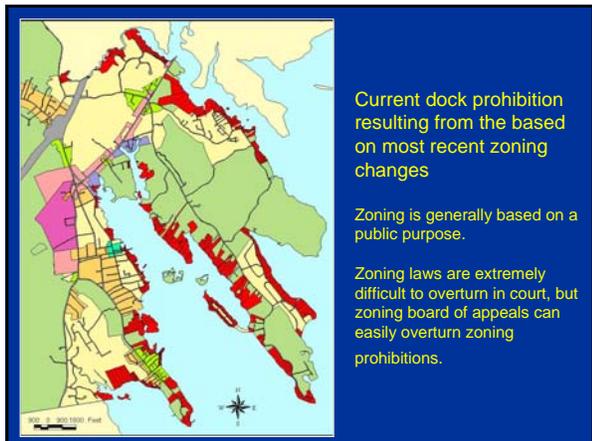
Sources were:
DMF & Marion Shellfish Department (MSD)
MSD rated areas:
Poor
Fair
Good
Excellent



Relative Importance

• DEP eelgrass (<i>Zostera marina</i>),	4.0 points
• MSD bay scallop (<i>Argopecten irradians</i>) & eelgrass habitat	3.7 points
• MSD soft shell clam (<i>Mya arenaria</i>) (poor fair good excellent)	0.9 - 3.6 points
• MSD quahog (<i>Mercenaria merceneria</i>) (poor fair good excellent)	0.9 - 3.5 points
• MSD oyster (<i>Crassostrea virginica</i>) (poor fair good excellent)	0.8 - 3.2 points
• DMF bay scallop (<i>Argopecten irradians</i>)	3.1 points
• DMF razor clam (<i>Ensis directus</i>)	2.7 points
• NHESP diamond-back terrapin (<i>Malaclemys terrapin terrapin</i>)	1.6 points

Scoring strategy based on Athey 1982 book, Systematic Systems Approach (corporate decision making).



Back to Falmouth Special Permit Zoning Bylaw...

§ 240-77. Purpose.

The purpose of this Article is to provide for the reasonable protection and conservation of certain irreplaceable wetlands, their resources and amenities, for the benefit and welfare of the present or future inhabitants of the town.

§ 240-78. Applicability.

Any person wishing to perform, or cause to be performed, any of the following acts or operations shall first obtain a special permit from the Board of Selectmen. **[Special permits require a super-majority or 4 positive votes on a 5 member board. It is extremely difficult to successfully appeal a well-written denial of a special permit.]**

A. Obstructing, filling, dredging, excavating or changing the course of any stream or tidal water.

B. Filling, excavating, diking, bulkheading or riprapping within any part of any swamp marsh or tidal marsh, or in or along the shore of any pond, bay, harbor or tidal river, so as to alter the shoreline of said swamp, marsh or body of water, or separate any section of said swamp, marsh or body of water from the main part.

[Note: This section is appears broader than the permits actually issued by the Selectmen]

Falmouth Special Permit Zoning Bylaw continued...

§ 240-79. Decision. [Amended STM 10-27-1982, Art. 65; ATM 4-5-1983, Art. 43]

Following the public hearing and with due regard to the effect on the immediate area and the general welfare of the town, the Board of Selectmen shall grant or deny a special permit for any of the foregoing acts or operations. In granting a permit the Board may impose reasonable restrictions and time limitations on the work to be done. In doing so, it shall be guided by what in its judgment is desirable to protect and conserve the shellfish and other aquatic resources of the town. **[The purpose and applicability of this bylaw is very broad, but this decision section is very narrow, possibly too narrow.]**

The Board of Selectmen shall require that the applicant post a cash deposit or surety bond, in form acceptable to the Town Treasurer, in an amount determined by the Board to be sufficient to ensure satisfactory compliance with the permit and any specific restrictions and limitations thereof, or to restore any area of unfinished work to its original condition.

No special permit shall be issued in the area of critical environmental concern (ACEC) **[or identified in the dock exclusion zone map and report adopted by Town meeting on]** unless all available means of mitigating or reducing environmental damage have been implemented and any remaining environmental damage is minor or insignificant enough to not irreparably affect the ACEC or its resources.

[possible new language:

§ 240-80. Setbacks.

No dock or pier closer than xx feet to extended property lines of adjoining properties or x ft to another dock...

§ 240-81. Definitions.

Extended property line is defined as the]