

AN ATTEMPT TO ESTABLISH A PILOT WETLAND MITIGATION BANK IN MASSACHUSETTS

Presented by:

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BEALS+THOMAS

Historical Highlights

- 2004 Massachusetts legislation to establish a pilot wetlands mitigation bank.
- Taunton River Watershed selected as the bank location.
- RFP process to select a team to design, permit, construct and operate the bank.
- Entrepreneurial venture – no state \$ to be invested to support the work of the selected team.

Blue Wave Strategies Team

John DeVillars, Managing Partner of Blue Wave

Secretary of Environmental Affairs, MA (1988-1991); EPA Region 1 Administrator (1994 – 2000)

John Teal, PhD, PWS

Teal Partners, Design Advisor and Wetland Scientist

John Thomas, PWS

Beals and Thomas, Inc., Design and Engineering

Chad Sumner

SumCo Eco-Contracting, Construction Contractor

Robert Cleaves, Esq.

Created and implemented New England's only wetlands bank in Maine

Wetlands Mitigation Banking Review Team

- MA Executive Office of Energy and Environmental Affairs
- MA Department of Environmental Protection
- Ma Division of Fisheries and Wildlife
- MA Executive Office of Transportation
- Massachusetts Bay Transportation Authority
- MA Wetlands Restoration Program/Coastal Zone Management
- U.S. Fish and Wildlife Service
- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- National Association of Industrial and Office Properties
- Taunton River Watershed Residents
- Representatives of Environmental Advocacy Groups

Proposed Site

- 30 acres
 - Portion of 1,700 acre Burrage Pond Management Area – acquired by MA Fisheries & Wildlife
- History of wetland enforcement actions associated with construction of the cranberry bogs.
 - Benefit of prior studies – soil and ground water
 - Regulatory stigma
- Historically part of a white cedar swamp – a rare plant community in the northeast.
 - Mining of bog iron in the 19th century
 - Box industry
 - Cranberry Industry
- Opportunity to partly restore the land converted to agricultural use back to white cedar swamp.



Abandoned Bog



Wetland Creation/Enhancement Area



Proposed Design

- “Replication in kind” - ACOE criterion.
- Diverse plant community design based on the ability to sell credits to a variety of customers.
- Wetland creation at nine acres on land used as a staging area for cranberry operations – highly disturbed mineral soils.
- Enhancement of 16 acres including:
 - ▣ 8.5 ac forested
 - ▣ 1.5 ac shrub swamp
 - ▣ 5.5 ac emergent marsh
- Strong groundwater hydrology – stable groundwater table.
- Intermittent streams providing surface flow.



Review Process

- 10+ review team meetings focused on design.
- Many “cooks in the kitchen.”
- ACOE Public Hearing – comments on the details and topics already covered by Mitigation Bank Review Team.
- Local Conservation Commission not fully supportive based upon broader issues for wetlands mitigation under the MA Wetlands Protection Act.

Mitigation Criteria

- State Wetland Protection Act criteria for mitigation of wetland alterations.
 - The surface of the replacement area to be created (“the replacement area”) shall be equal to that of the area that will be lost (“the lost area”);
 - The ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;
 - The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;
 - The replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;
 - The replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area.
- ACOE mitigation criteria for wetland filling.
 - In kind mitigation;
 - Functionally & geographically approximately similar in the overall watershed context;
 - Replacement of lost functions;
 - Provides for overall watershed concerns.

Issues

- WPA criteria require mitigation proximate to the area of alteration.
- Most projects involving mitigation are administered on a Town-by-Town basis under the WPA – concern about mitigation outside Town boundaries.
- Concern that providing developers/landowners with a bank would lead to more wetland alterations.
- Banking as a concept is inconsistent with WPA performance standards.
- Economic recession has placed the pilot bank project on-hold for over several years.

Recent Developments

ACOE GP January 2010

Expands what is considered a secondary impact; includes VP buffers.

Potential for sale of credits with expanded mitigation requirements and a preference for wetland banks.

South Coast Rail Project

(Link Fall River to Boston)

Potential for purchase of design outright rather than operating as a bank