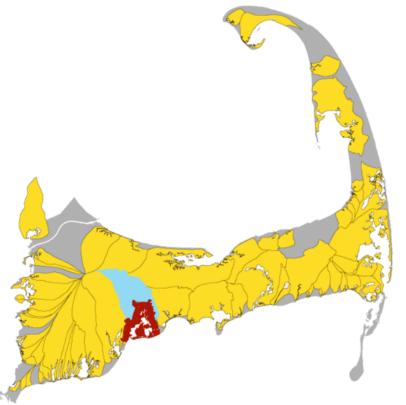
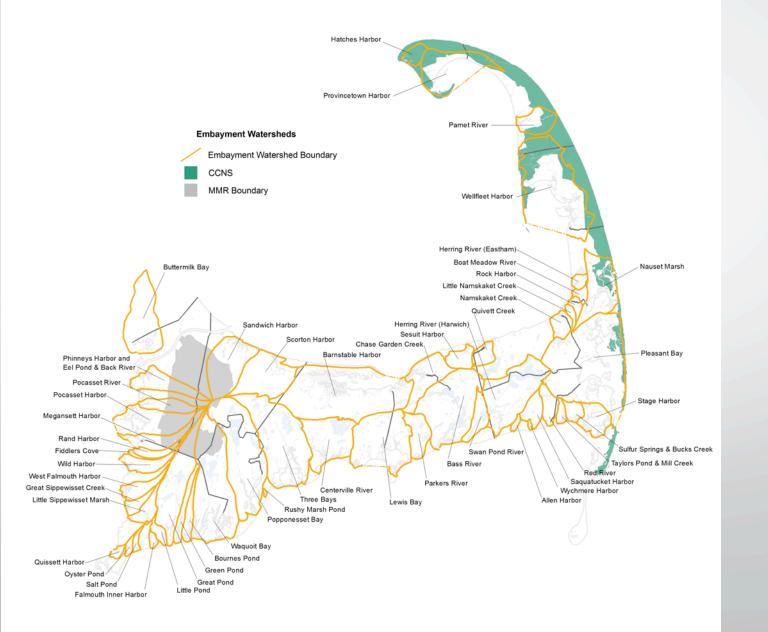
# A Worrisome Watershed: The Journey to Restore the Iconic Three Bays Estuary

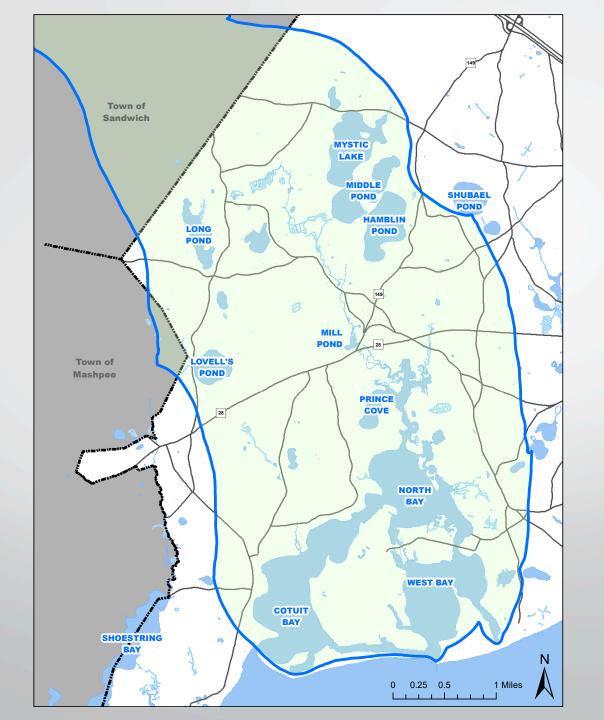
Zenas "Zee" Crocker Executive Director Three Bays Preservation, Inc. 3bays.org

#### FIGURE 7: STUDY SITE



2.435 Households within 10 Minute walk of water in Three Bays
6.285 Households in Three Bays
120,117 Households on Cape Cod





### August 2016

### "The Wakeup Call"

# **Algae Bloom in the Three Bays Estuary**





### Daily: Nitrogen *equal* to sixty-five 50 pound bags of fertilizer flows into the Three Bays Estuary

That's **23,530 50**-pound bags a year

### **Mission of Three Bays Preservation, Inc.**

"Restore and Preserve Clean Water in the Town of Barnstable"

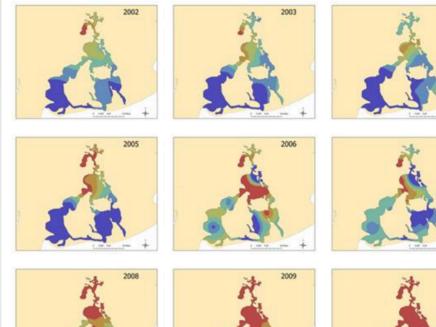
### THREE BAYS PRESERVATION, INC.



### "...a 1% decline in water quality led to an average loss in home value of 0.61%..."

From the Cape Cod Commission's Property Values Study, March 2015

#### FIGURE 8: TREND IN NITROGEN LEVELS IN THREE BAYS WATER

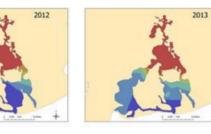




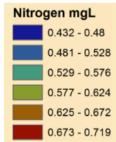
2004

2007





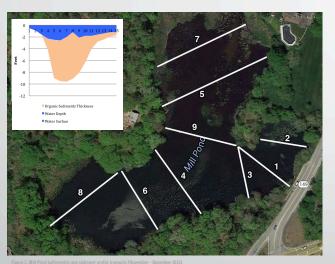
MASSACHUSETTS ESTUARIES PROJECT'S THRESHOLD FOR HEALTHY WATER = 0.38 MGL



# Mitigation

### **Mitigation: Mill Pond in Marstons Mills**

#### Conceptual Project Plans

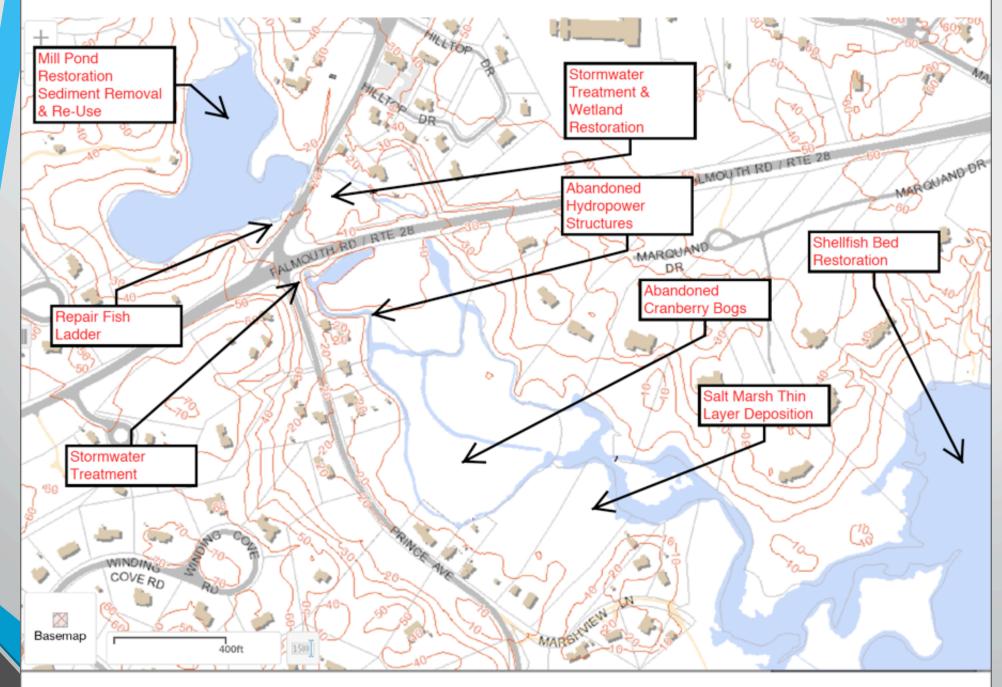


Watershed Report for Th

June 2016 3

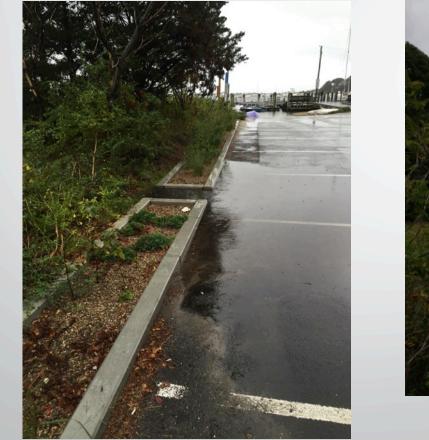
WATERSHED REPORT: Three Bays





MARSTONS MILLS RIVER RESTORATION PROJECT

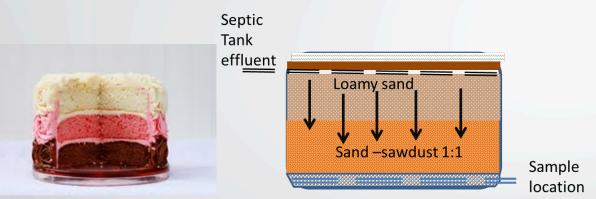
### **Bio-Retention: Rain Garden in Cotuit**



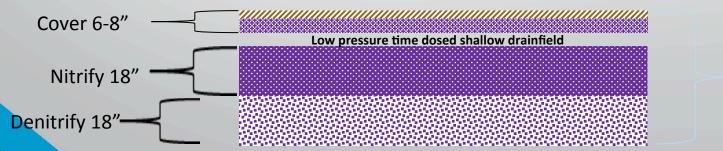


# Solutions Municipal Treatment to Carry Lion's Share of the Load, but... NTT's are vital!

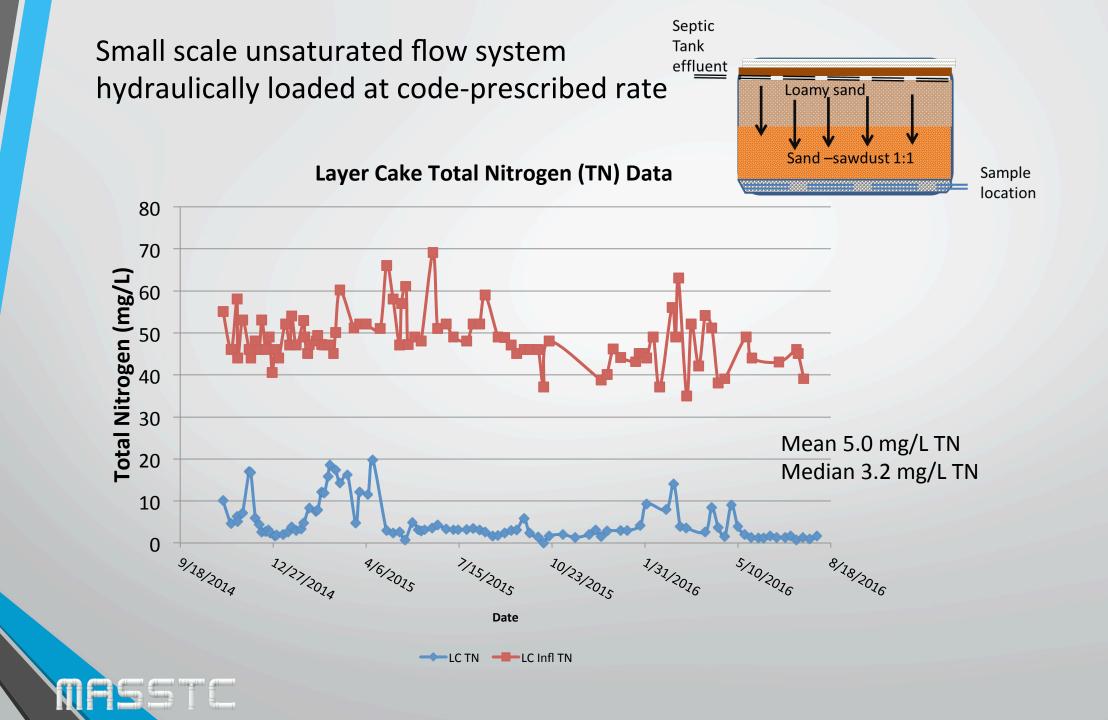
## Small-scale unsaturated flow "layer cake"







System Profile < 48"



### What We Need In Our Community: Advocacy & Activism & 'Get Out the Vote'

Three Simple Scientific 'Next Steps'

> Dilution Mitigation Prevention



# Arriving on June 23, 2017 The Barnstable Clean Water Coalition

Monitoring Education Mitigation Advocacy