

# Connecting land, water, and people on changing coasts...

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Barnegat Bay Partnership,  
Assoc. of National  
Estuary Programs**





# National Estuary Program



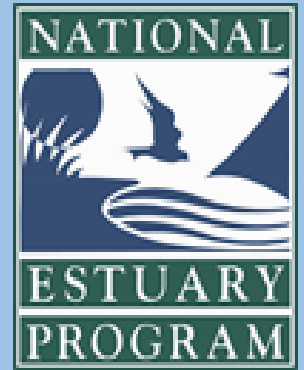
- CWA Section 320 (1987) established NEP to protect “estuaries of national significance”; **unanimously reauthorized in 2016**; directed EPA to convene a Management Conference to develop plans (CCMP) for attaining and maintaining water quality in an estuary.
- CCMP includes protection of public water supplies; the protection and propagation of native populations of shellfishes, fishes, and wildlife; CCMP allows recreational and other activities; requires control of point and nonpoint sources of pollution.
- Promotes ... research to identify the movements of nutrients, sediments & pollutants through estuarine zones and the impact of nutrients, sediments, and pollutants on water quality, the ecosystem, and designated or potential uses of the estuarine zones.

# National Estuary Program





# **NEPs and ANEP**



**NEPS have a unique decision-making framework:  
non-regulatory, consensus-driven, and science based.**

**NEPs are efficient: for each federal dollar...  
NEPs leverage \$19 of local investment.**

**NEPs are successful:  
NEPs have protected/restored  $2 \times 10^6$  acres since 2000.**

**NEPs enjoy strong bipartisan support.  
ANEP is a 501(C)3 represents and provides a unified  
voice for all 28 NEPs.**





ASSOCIATION OF NATIONAL  
ESTUARY PROGRAMS

# NEPs and ANEP



## The National Estuaries of the Southeast, Gulf Coast & Puerto Rico

From the Albemarle-Pamlico Sounds of North Carolina, south down to America's Space Port and the Indian River Lagoon, across the Caribbean and back again to the Florida Gulf Coast and Charlotte Harbor, Sarasota follow the coast to Alabama's Mobile Bay and on past the mighty Mississippi Terrebonne Estuaries, and finally along the Texas coastline to Galveston Bay. And Estuaries, these 10 Estuaries of National Significance critical American industries and military bases, calm harbors and bustling ports.

ANEP Update: Winter 2018



## THE ASSOCIATION OF National Estuary Programs

America's Estuaries of National Significance - Looking to the Future

### Innovative Leadership

The National Estuary Program (NEP) was created by Congress in 1987 as a non-regulatory, core program of the Clean Water Act (Section 320) to address complex environmental and economic threats facing estuaries of national significance. Estuaries support natural resources, built infrastructure, and tourism that provide a foundation for the U.S. coastal economy.

### Strategic Partnerships

Trusted by private- and public-sector partners and local and state governments, the NEP has established a 30-year track record of success to protect and restore our national estuaries using strategic and innovative approaches to build consensus and solve problems.

### Productive, Effective & Efficient

NEPs implement specific actions based on the best available science and a Comprehensive Conservation and Management Plan to improve water quality, manage public lands and waters, update critical coastal infrastructure, and reduce the risks, impacts, and costs of coastal flooding and storm events. For every dollar EPA provides, NEPs leverage \$19 in local funds to protect and improve coastal environments, communities, and economies.

### The NEPs Recognized for its Value to the Nation

With a record of success in 2016, the U.S. Commerce



100% of NEPs implement core water protection

The coastal population of the U.S. (total) is growing

Estuaries are economic coastal states, which more than 80% of U.S. and GDP (NOEP).

Nutrient pollution is widespread, costly, an environmental problem

Harmful algal blooms environmental and economic

Despite their environmental importance, wetlands are being lost at a rate they are being

Critical infrastructure along coastlines from sea level rise, erosion, and

NOEP, 2016. State of the Coastal Economies 2

www.ocean-economics.com

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and our state

ional Estuary P

## National Estuary Program



## Economic Value of the Barnegat Bay Watershed

October 2012

prepared for the



prepared by Gerald J. Kauffman and Catherine Cruz-Ortiz  
of IPA's Water Resources Agency

Institute for Public Administration  
School of Public Policy & Administration  
College of Arts & Sciences  
University of Delaware

www.ipa.udel.edu  
serving the public good, shaping tomorrow's leaders



## NEP Summary of CWA Core Program Implementation Update



Presented by:

Holly Greening, Curtis Bohlen, Sheida Sahandy,  
and Stan Hales

February 24, 2015



ute to improvements in the en  
quality of life.



Build on 30 Year  
INVEST IN NATIONAL

Thanks to strong bipartisan Co  
record of success in protecting  
actions (e.g., stormwater inf  
serious and the best available  
critical coastal infrastructure.

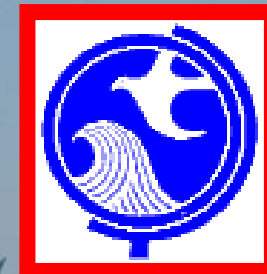
Congressional support for EPN  
ship with local communities,  
and our quality of life depend

MERCERIA L. LUDGOOD  
District 1 Commissioner  
Mobile County Commission

Member  
Mobile Bay NEP



# Some BBP Partners





# How is the BB watershed changing?





# **BBP Priorities**

- **Reduce eutrophication & improve water quality.**
- **Address water supply & flow issues.**
- **Prevent habitat loss & support habitat restoration.**
- **Protect and restore fish and wildlife.**
- **Address land use.**

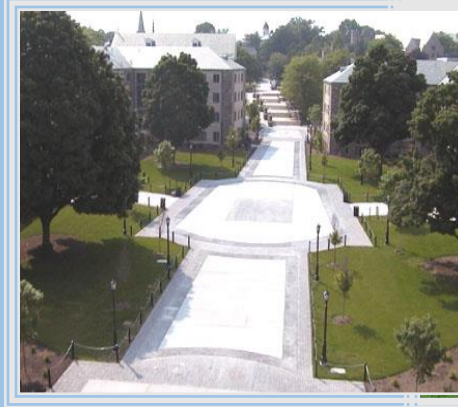
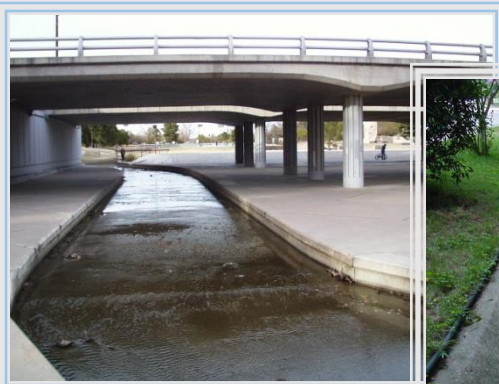




# Governor's 10-Point Plan for the Barnegat Bay

- **Closing OCNGS in 10 yrs**
- **Stormwater Mitigation (\$10 million x 10 yrs)**
- **Fertilizer Regulation**
- **Soil Health Restoration Regulation**
- **Land Acquisition**
- **Special Area Management Plan (SAMP)**
- **Rigorous Water Quality Standards (TMDL)**
- **Education**
- **Comprehensive Research**
- **Reducing Water Craft Impacts**

# Nonpoint-source pollution & stormwater management

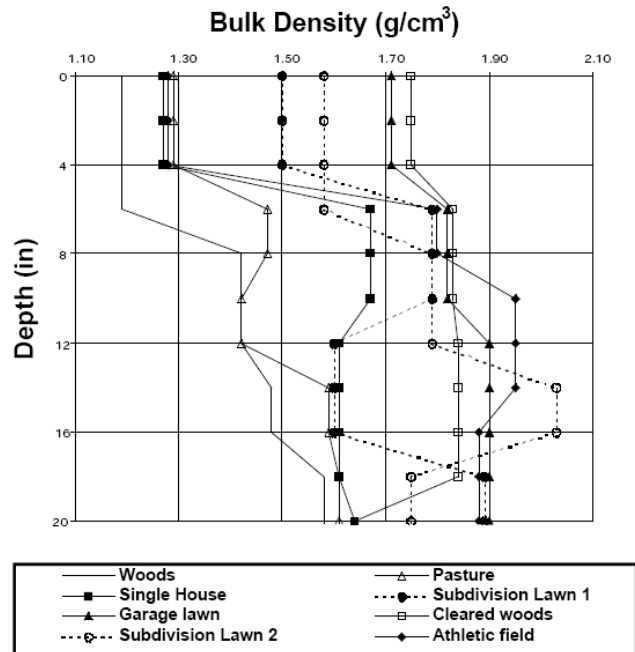


**Keep your stormwater to yourself!**

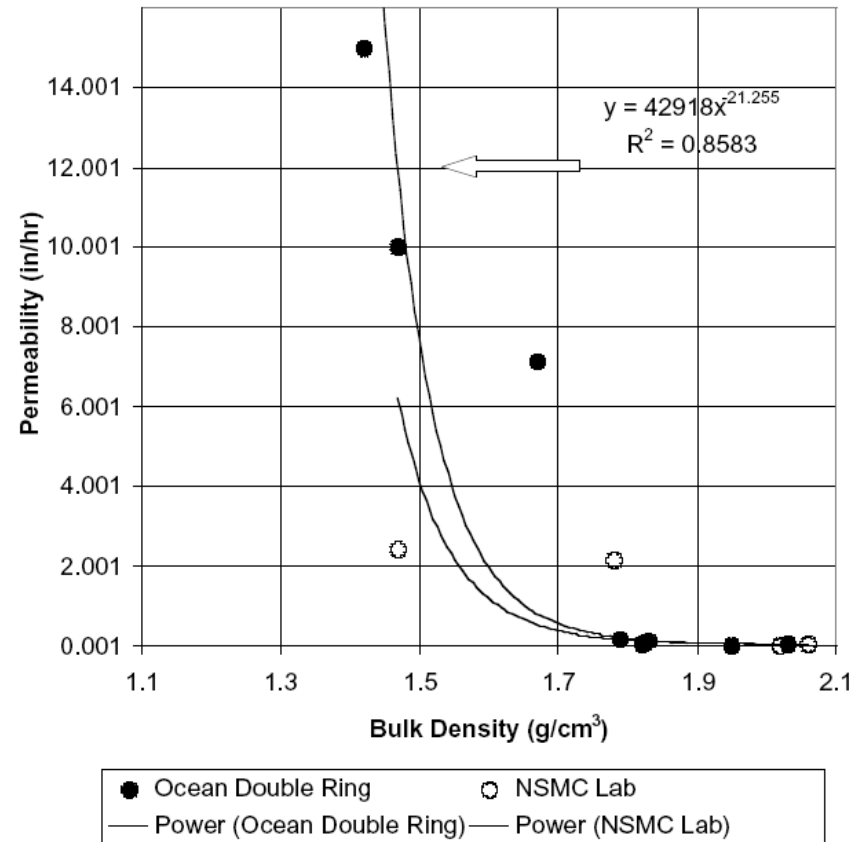


# Don't treat soil like dirt!

**Bulk Density Profiles of  
Permeability Testing Sites  
Ocean County, NJ**



**Bulk Density vs. Permeability**







# Jersey-Friendly<sup>SM</sup> Yards

Landscaping for a  
Healthy Environment



**BARNEGAT BAY  
PARTNERSHIP**  
RESEARCH · EDUCATE · RESTORE

## JerseyYards.org

Your guide to a beautiful, healthy and eco-friendly yard.





Threats to Bays & Rivers ▾ Create a Jersey-Friendly Yard ▾ Jersey-Friendly Plants ▾ Additional Resources ▾

# Create a Jersey-Friendly Yard



© Danny Perez



## The Interactive Yard

The Interactive Yard is a tool to help learn about the basic concepts behind transforming your yard into a Jersey-Friendly Yard.

# NRCS at home on the water!







# BARNEGAT BAY PARTNERSHIP

RESEARCH · EDUCATE · RESTORE











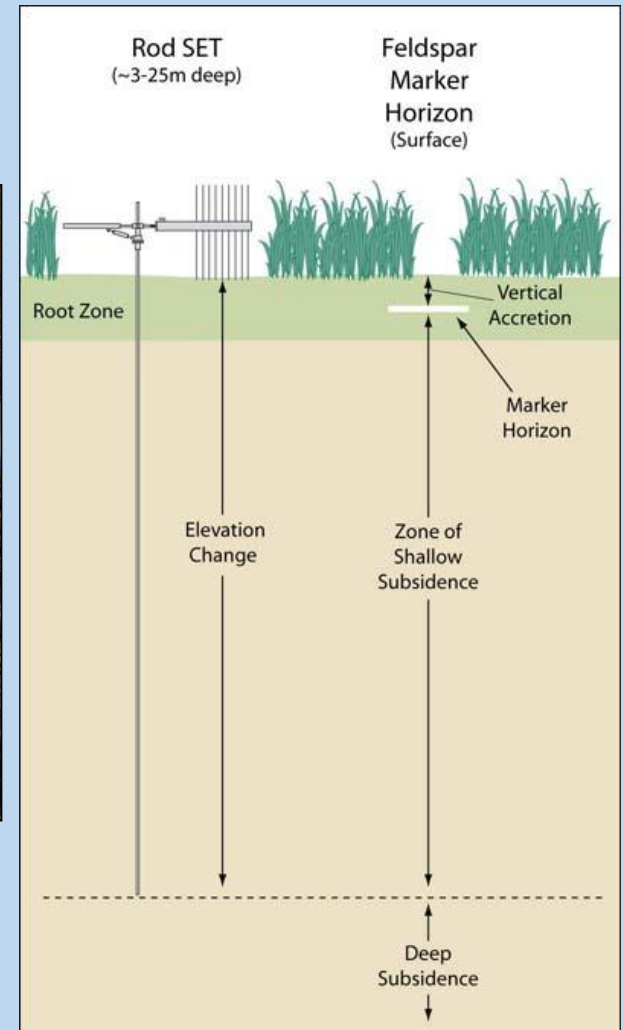
- Establish an integrated wetlands monitoring and assessment program in the Delaware Bay and Barnegat Bay Estuaries and beyond.



# SETs and MHs



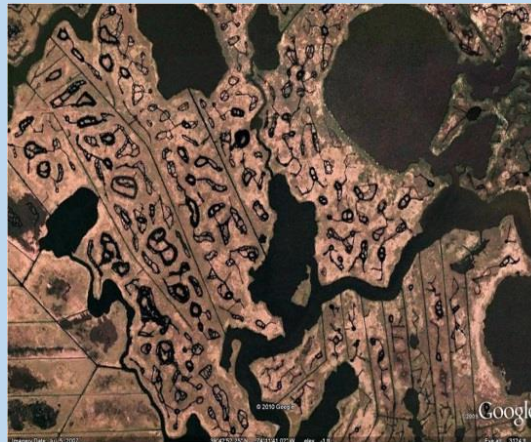
- Measures elevation change
- Paired with marker horizons to measure surface accretion





# Barnegat Bay Wetland Trends

- 45% of BB is bulkheaded
- 1995-2007: shoreline loss baywide = 54 ft (4 ft per yr)
- High conversion of wetlands to mudflats
- Open Water Marsh Management (impacts?)



# Soils of Barnegat Bay

**Cottman**



**Indian  
Rvr tax.**



**Indian  
River**



**Figgs**



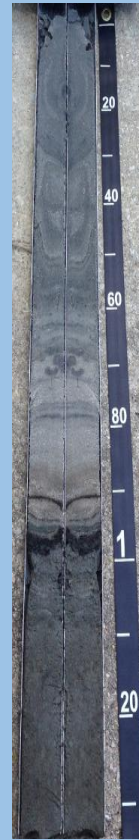
**Truitt**



**Demas**



**Demas**



**Cottman**



**Indian  
River tax.**



**lian  
River**





# Barnegat Soil Survey Uses?

- Eelgrass restoration
- Aquaculture restoration (oyster, clam, etc.)
- Relict inlet identification
- Shoreline erosion documentation
- Finfish restoration
- Baseline soils data never before provided
- ID high-C sequestration subaqueous soil areas
- ID living shoreline areas.

# Carbon sequestration, sulfidic soils & wetland/upland restoration....







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jerseyyards.org

**PROTECT OUR BAY. PROTECT OUR FUTURE.**



**BARNEGAT BAY PARTNERSHIP**  
RESEARCH · EDUCATE · RESTORE

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609A The message has been funded by the 2019-2021 Ocean Watch grant agreement to Ocean County College and the not-for-profit BBP. ©2019 BBP.

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COUNTY COLLEGE

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**What can we ALL do to protect the Barnegat Bay Estuary?**



Consider issues locally

