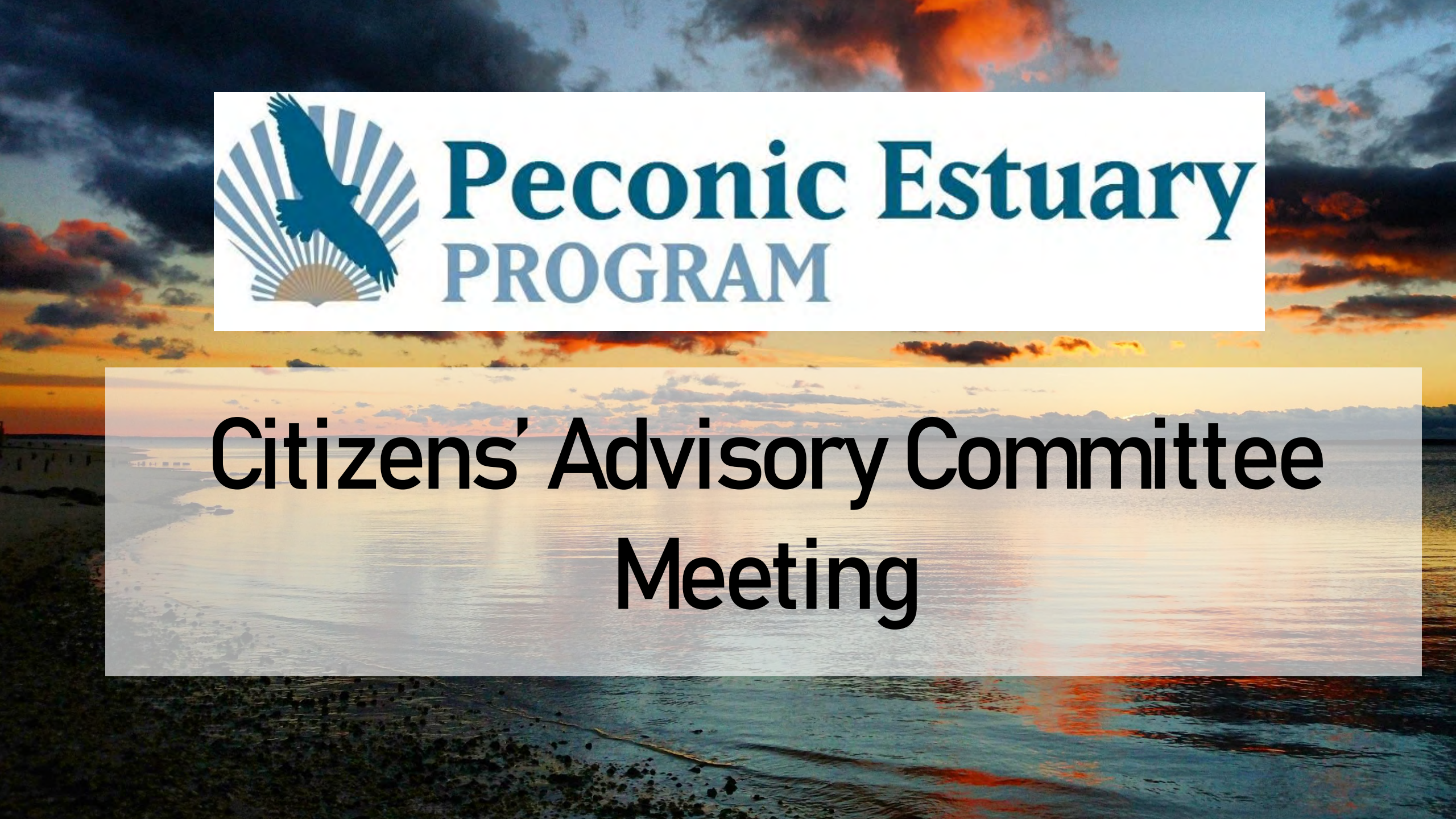


Peconic Estuary PROGRAM

Citizens' Advisory Committee Meeting

What is the PEP?

Peconic Estuary PROGRAM

As a National Estuary Program, the Peconic Estuary Program is a PARTNERSHIP of Federal, State, Local Governments, Non-Profit and Community Organizations and interested members of the public who want to be a part of preserving and restoring the waters of the Peconic Bays and the watershed.

Rebranding the PEP

Our Mission

To Protect and Restore the Peconic Estuary and Its Watershed

Our Vision

A successful partnership dedicated to restoring clean water, protecting and enhancing vibrant ecosystems and communicating sound science for nature-based coastal planning in the Peconic Estuary and its watershed.

Our Core Values

Sound Science, Strong Partnerships,
Community Leadership, Effective Communication

The Story of the Peconic Estuary

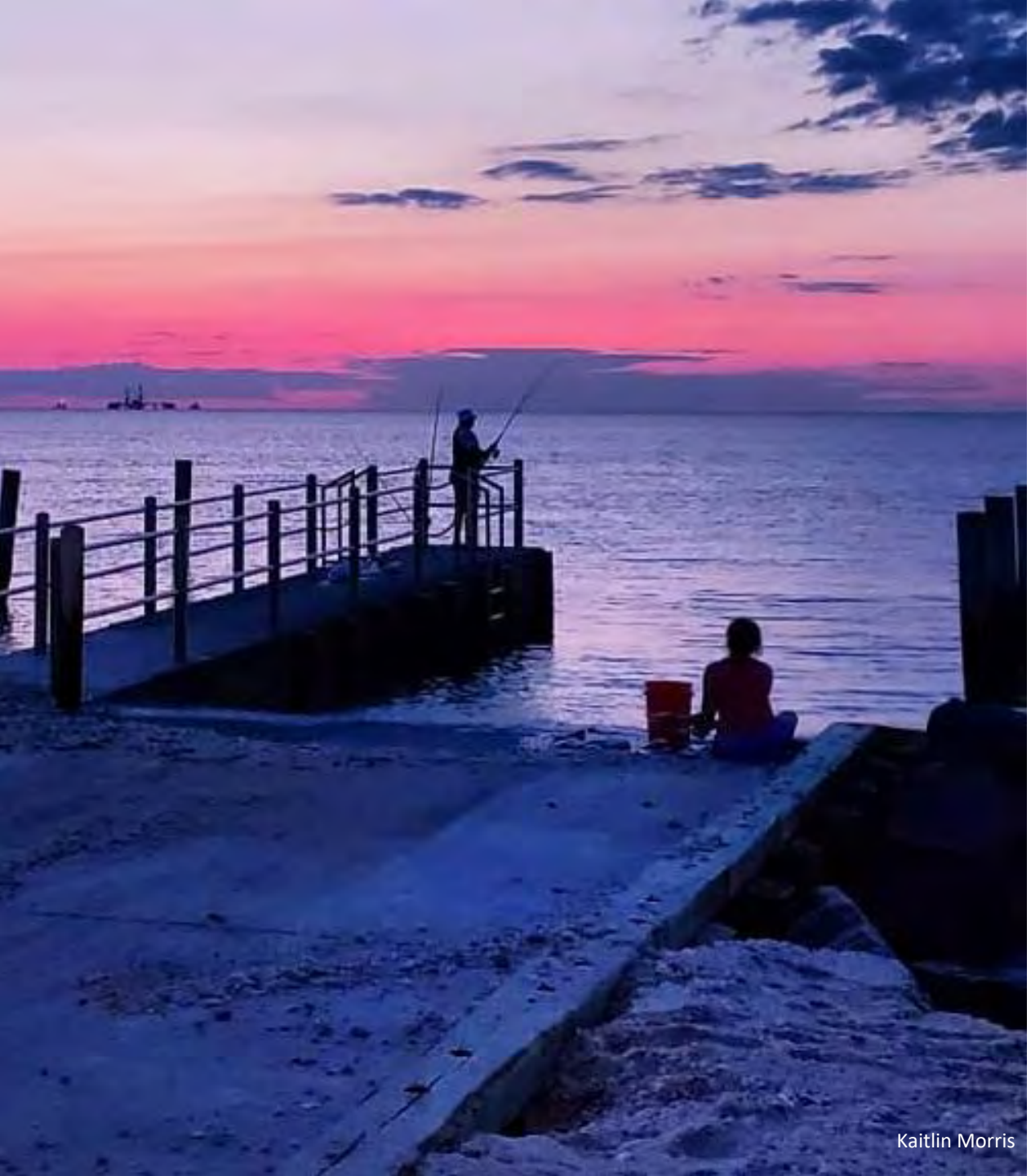
"One of the last great places in the Western Hemisphere"

-The Nature Conservancy

Kaitlin Morris


Kaitlin Morris

Kaitlin Morris



Kaitlin Morris


Kaitlin Morris


Barry Udelson


Barry Udelson


Ralph Rosella


Kaitlin Morris


Barry Udelson

Harmful Algal Blooms


Coast Guard Auxiliary


Wikimedia Commons


Denise Civiletti

In 1985, Brown Tide turned the waters of the Peconic Estuary brown and led to the near collapse of the Peconic bay scallop population, in addition to severe declines in other shellfish species and eelgrass… **Harmful Algal Blooms still persist in many colors…**

"Brown Tide Spreading Misery on L.I." - The New York Times (1995)

"Toxic red tide appears in bays" – 27east.com Southampton (2008)

"Cyanobacteria blooms found in Forge Pond and Peconic Lake; health officials warn residents to stay out of the water" – Riverhead Local (2016)

"Expert: Rust tide bloom off East End could kill finfish, shellfish" – Newsday (2017)

"Peconic River is turning brown with dense 'mahogany tide,' algal bloom blamed in last year's massive bunker fish kills" – Riverhead Local (2016)

"Toxic 'Rust Tide' Makes An Unwelcome Return To The Peconic Estuary, Local Bays" – 27east.com (2013)

"Red Tide Causes Shellfish Closures in Sections of Peconic" - PeconicBathTub (2017)

"In Peconic Estuary, rising temperatures appear responsible for several issues" – The Suffolk Times (2016)

“Long Island Sees a Crisis as it Floats to the Surface” – The New York Times


The Suffolk Times

“Algal blooms, rising temps caused **fish kills** in Peconic River” -Newsday


Dan’s Papers

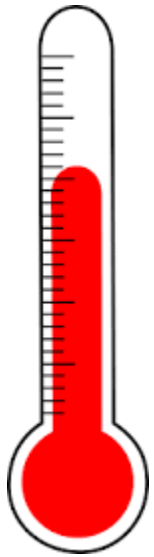

The New York Times

Marine Debris & Pollutants

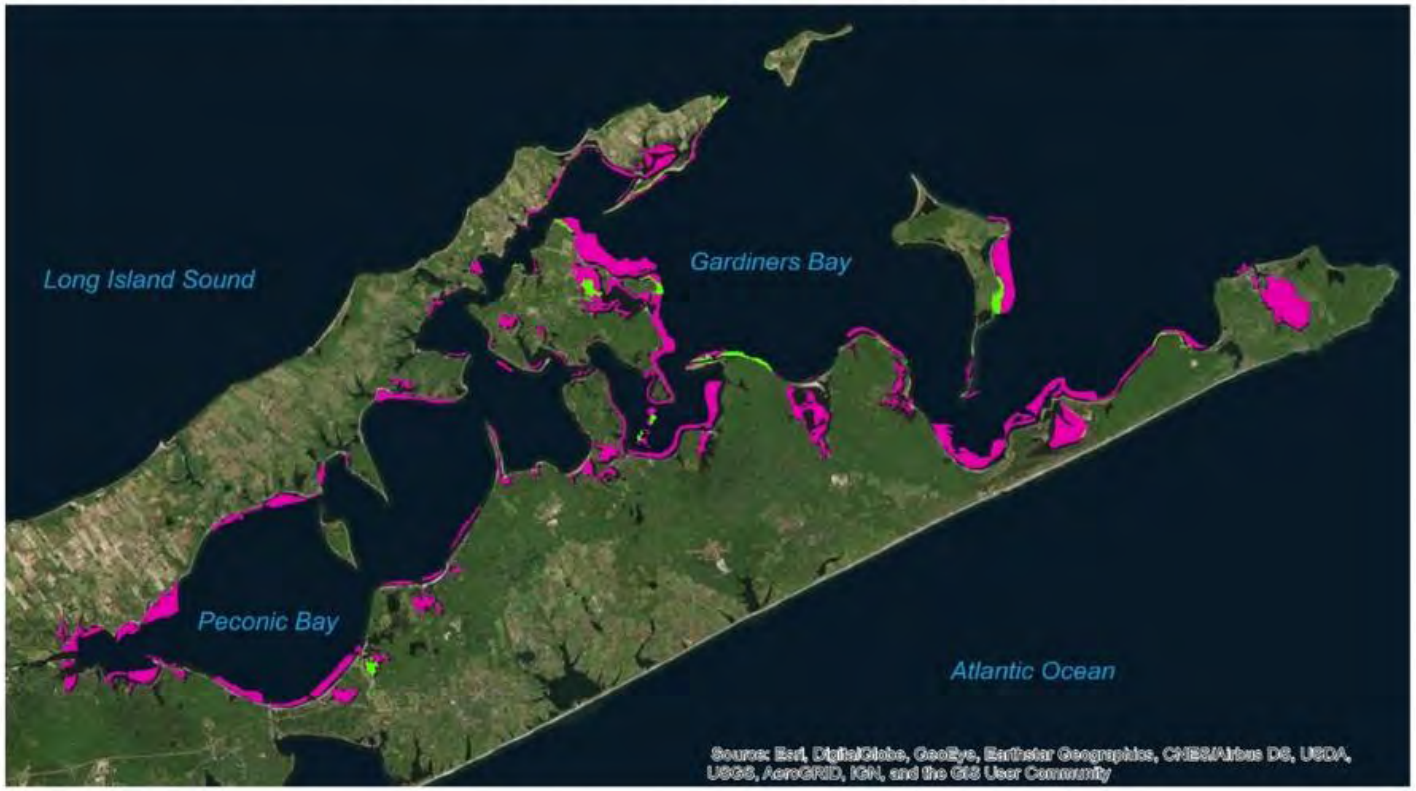
Hardening Shorelines

Kaitlin Morris

Eelgrass Decline



Seagrass Distribution in 1930 vs. 2014 in the Peconic Estuary



Peconic Estuary PROGRAM

Coordinate System: NAD 1983 UTM Zone 18N
Projection: Transverse Mercator
Datum: North American 1983
Units: Meter
Author: Peter Larios

N
W E
S

Cornell University Cooperative Extension of Suffolk County

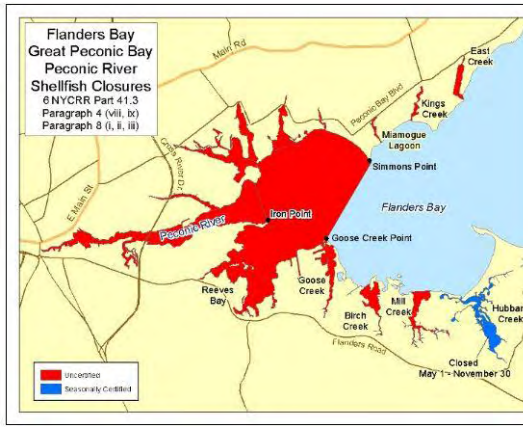
2014 Eelgrass
1930 Eelgrass

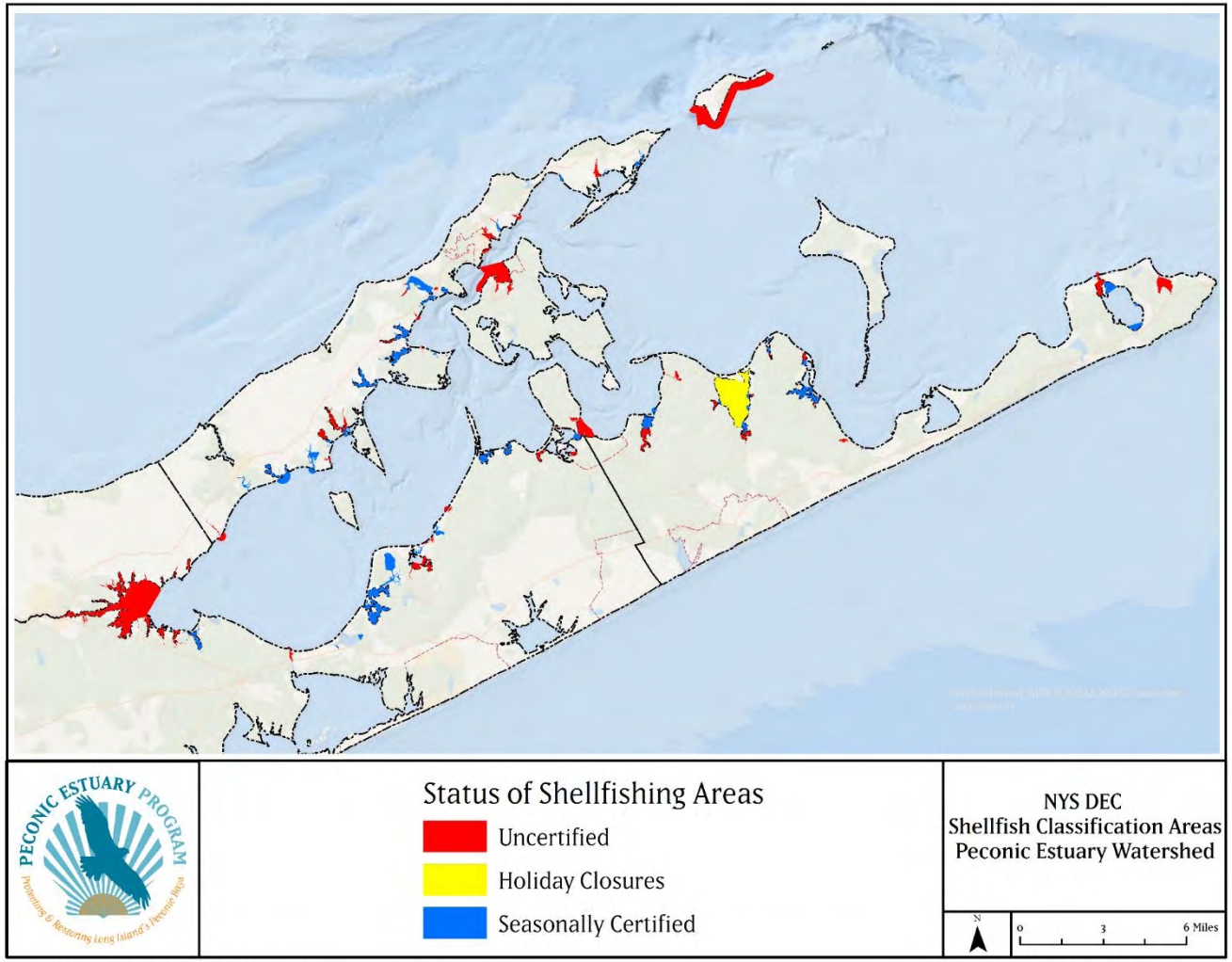
2014 Eelgrass Distribution (2014) [Download]. Peconic Estuary Program.
1930 Eelgrass Distribution (2014) [Download]. Peconic Estuary Program.

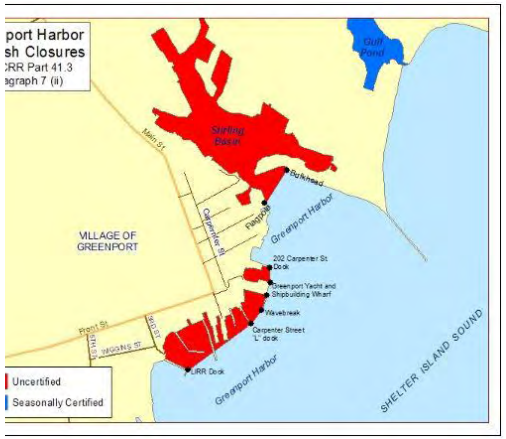
Habitat Loss and Degradation

Shellfish Closures

New York State Department of Environmental Conservation







Pathogens – Bathing Beach Closures

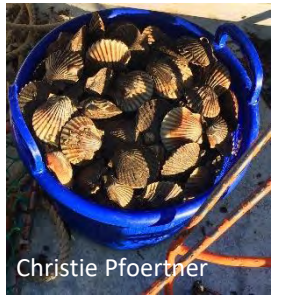
Long Island Community Foundation

2019 Scallop Die-off

A Better Tomorrow - Goals

- Clean clear waters that are swimmable and fishable
- Healthy habitats with abundant diverse wildlife
- Resilient communities prepared for climate change
- Strong collaborative partnerships

Restoring & Protecting



Targets

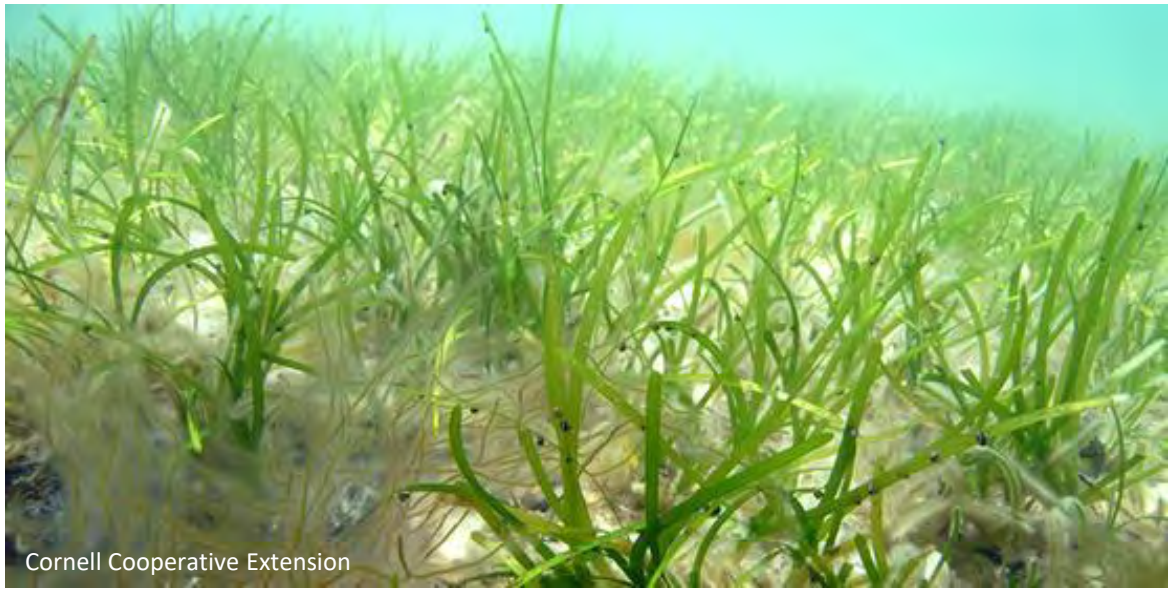
Scientific numbers or benchmarks to achieve
to reach our goals

*Site-specific (different types of areas throughout estuary)

*Water quality metrics should always be measured – temperature, salinity, pH, DO etc. as indicators or predictors

Clean Clear Waters

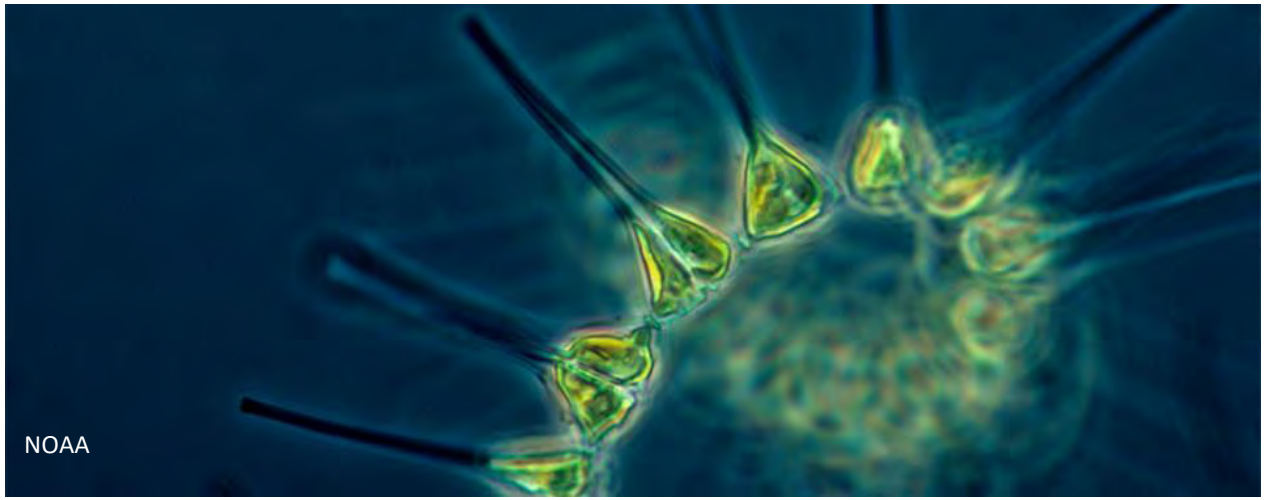
Water Clarity = Secchi depth greater than **2 meters** (6.56 feet) during the growing season (April 1 through October 31)


Cornell Cooperative Extension


EcoHealth

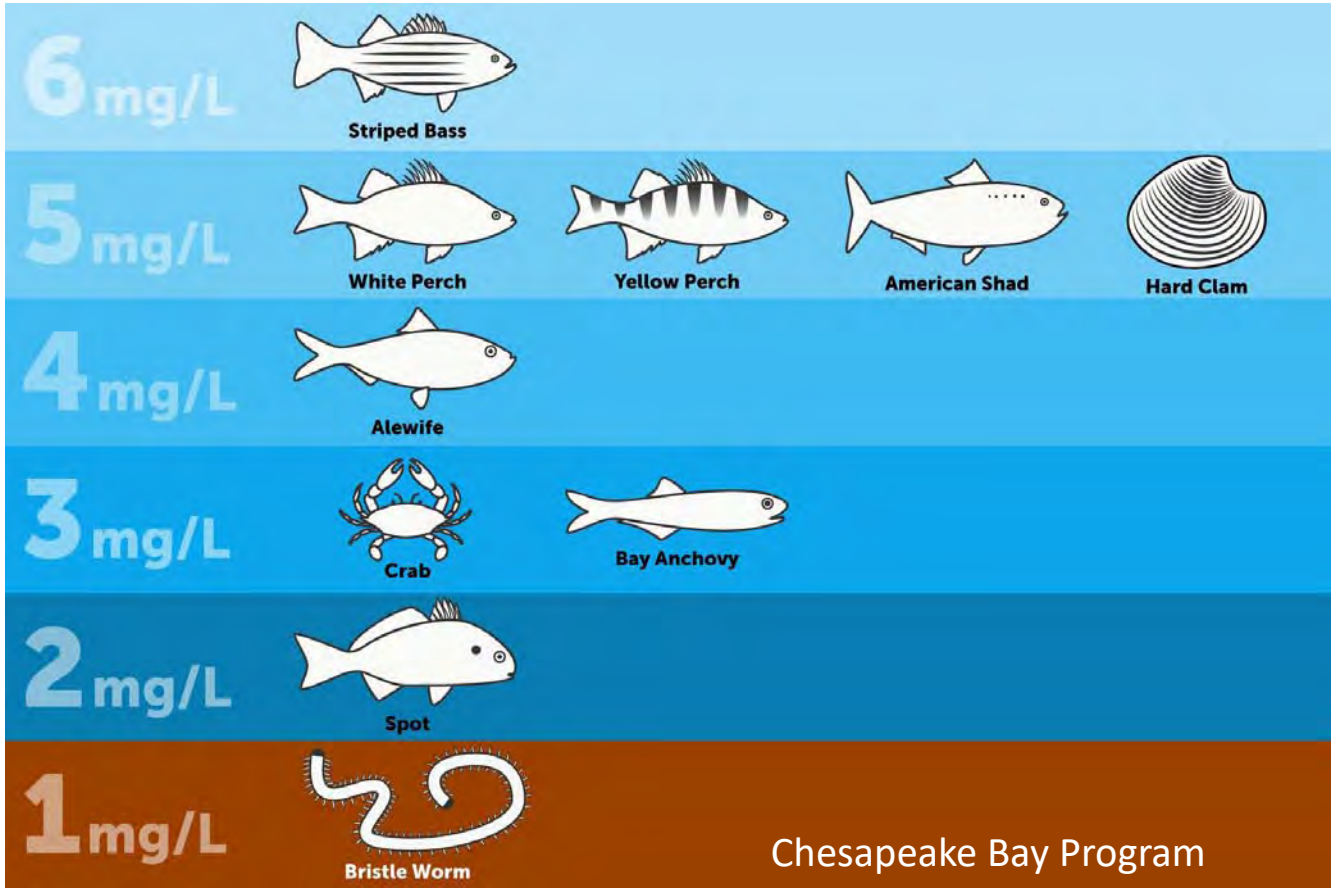
Clean Clear Waters

Chlorophyll-*a* concentration = should not exceed **5.5 µg/L** during the growing season



Clean Clear Waters

Dissolved oxygen (DO) concentration = Not less than 3.0 mg/L, and >4.8 mg/L as a daily average in 90% of samples



Clean Clear Waters

Harmful algal blooms (HABs) = HABs with environmental impacts should not occur more than once in any 10-year period. HABs with human health impacts should not occur in any 10-year period.

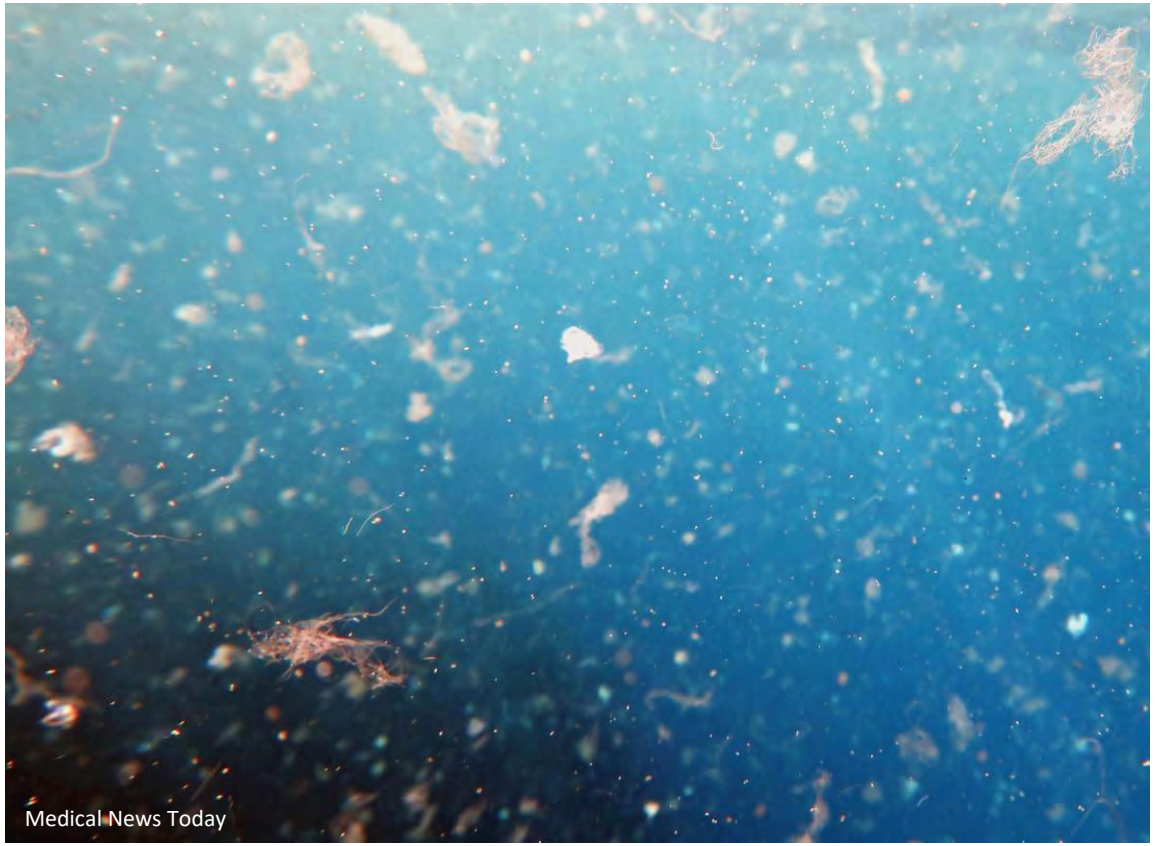
* COMPLEX

Clean Clear Waters

Pathogens = Enterococcus levels measured at bathing beaches

Clean Clear Waters

Current **macro/micro plastic pollution and toxic contaminants** concentrations



Reporting:

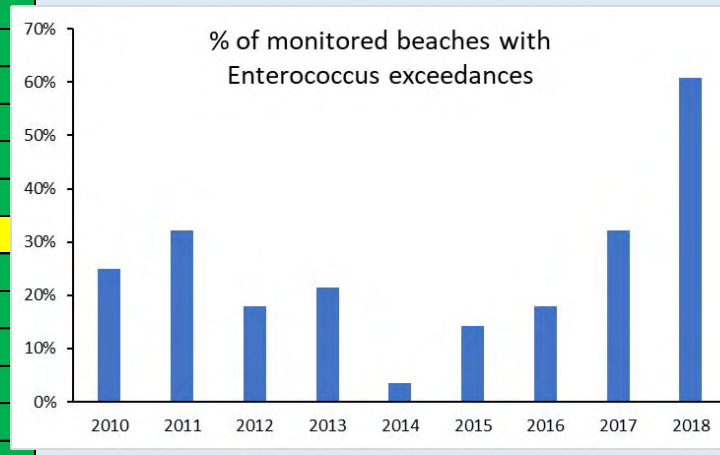
Potential stoplight graphic and management zones (coastwise partners)

Station Number	StationName	Distance from Peconic River dam (km)	Met Secchi Target?	Met Chla Target?
60280	Peconic River	1	NA	NA
60275	Peconic River	1	0	NA
60270	Peconic River	1	0	NA
60265	Peconic River	2	0	NA
60266	Peconic River	2	0	NA
60260	Peconic River	3	0	NA
60250	Sawmill Creek	3	0	0
60210	Reeves Bay	4	0	0
60220	Meetinghouse Creek	4	0	0
60230	Terrys Creek	4	0	0
60240	Peconic River Mouth	4	0	0
60170	Flanders Bay	6	0	0
60101	East Creek (South Jamesport)	8	0	0
60130	Great Peconic Bay	12	0	0
60290	Cold Spring Pond	17	NA	1
60148	Bullhead Bay	18	0	0
60102	Cutchogue Harbor	19	0	0
60103	East Creek (Cutchogue)	19	0	0
60104	North Sea Harbor	20	0	0
60113	Little Peconic Bay	20	0	0
60105	Hog Neck Bay North	22	0	1
60300	Wooley Pond	22	1	0
60106	Goose Creek	25	1	0
60107	Town Creek	26	1	0
60310	Noyack Creek	26	1	0
60320	Mill Creek	27	1	0
60340	Hashamomuck Pond 1	28	1	1
60109	Mill Creek (Hashamomuck Pond)	28	0	1
60114	Paradise Point	28	1	0
60121	Noyac Bay	28	1	0
60119	West Neck Bay	30	0	0
60124	West Neck Harbor	30	0	0
60127	Sag Harbor Cove	31	0	0
60126	Sag Harbor	32	1	0
60111	Greenport Harbor	33	1	0
60122	Coecles Harbor	34	1	0
60118	Northwest Harbor	35	1	1
60131	Northwest Creek	35	1	1
60115	Orient Harbor	36	1	0
60116	Gardiner's Bay West	37	1	1
60330	Hallocks Bay	40	1	1
60132	Three Mile Harbor	41	1	1
60137	Gardiner's Bay Central	43	1	1
60133	Acabonac Harbor	45	1	1
60134	Napeague Harbor	52	1	1
60135	Lake Montauk	63	1	1

Reporting: stoplight graphic for reporting pathogen-related beach impairments

Enterococcus exceedances by beach and year

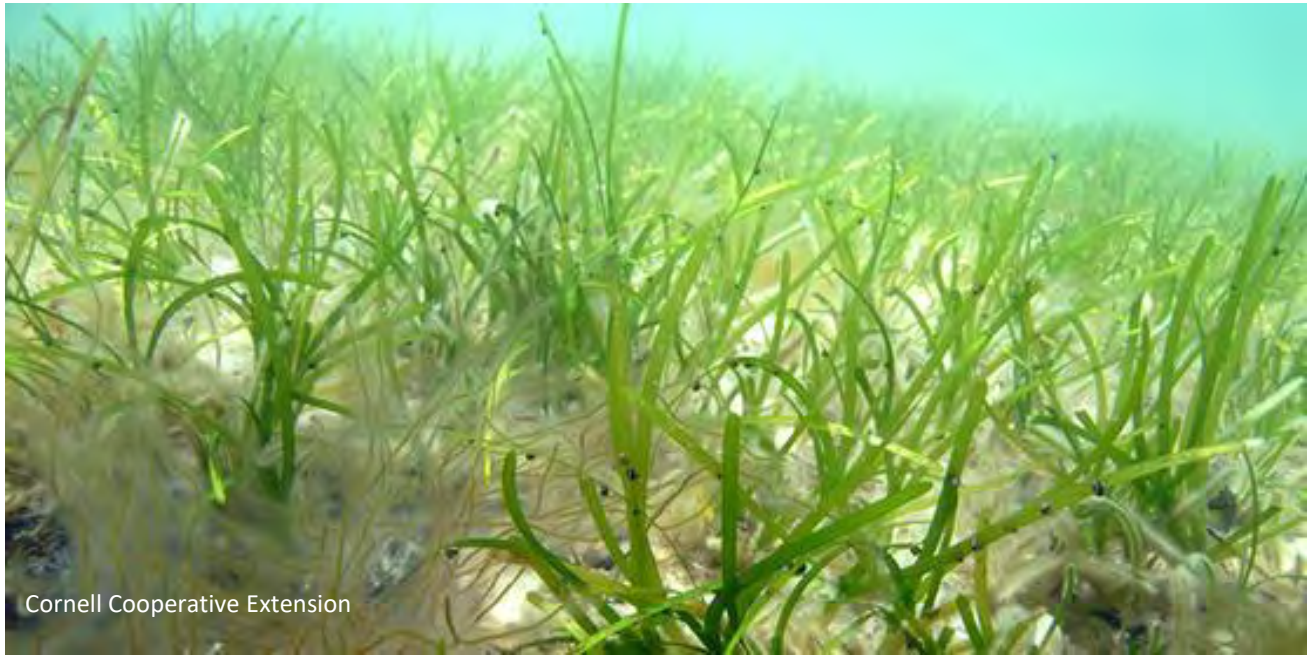
Beach Name	2010	2011	2012	2013	2014	2015	2016	2017	2018	Subtotals
Alberts Landing Beach	0	0	0	0	0	0	0	0	1	1
Camp Blue Bay Beach	0	0	0	0	0	0	0	0	1	1
Camp Quinipet Beach	0	1	0	0	0	2	1	0	1	5
Clearwater Beach	0	0	0	0	0	0	0	0	1	1
Cornell Cooperative Extension Marine Center Beach	0	0	0	0	0	0	0	0	0	0
Crescent Beach - Shelter Island	0	0	0	0	0	0	0	1	0	1
Culloden Shores Beach	0	0	0	0	0	0	0	0	0	0
Devon Yacht Club Beach	0	0	0	0	0	0	1	0	1	2
East Lake Drive Beach	0	0	0	0	0	0	0	0	0	0
Fifth Street Park Beach	0	0	0	0	0	2	0	2	1	5
Fleets Neck Beach	0	1	0	0	0	0	0	0	0	1
Foster Memorial Beach	0	0	0	0	0	0	0	0	0	0
Founders Landing Beach	2	1	1	1	0	0	1	3	1	10
Goose Creek Beach	1	0	1	0	0	0	0	0	0	2
Havens Beach	2	1	0	0	0	0	0	0	0	3
Maidstone Beach	0	0	0	1	0	0	0	0	0	1
Meschutt Beach	0	0	1	0	0	0	1	0	1	3
Nassau Point Causeway Beach	0	1	0	0	0	0	0	1	1	3
New Suffolk Beach	0	1	0	0	0	0	0	0	0	1
Norman E. Klipp Park Beach	0	0	0	0	1	0	0	1	0	2
Perlman Music Camp Beach	0	0	0	0	0	0	1	0	1	2
Pridwin Hotel Beach	1	1	0	0	0	0	0	0	1	3
Shelter Island Heights Beach Club Beach	0	0	1	0	0	0	0	0	1	2
Silver Sands Motel Beach	0	1	0	1	0	0	0	0	2	4
South Jamesport Beach	1	0	1	0	0	0	0	0	2	4
Southampton Peconic Beach & Tennis Club Beach	0	0	0	1	0	0	0	0	0	1
Veteran's Memorial Park Beach	0	1	0	2	0	0	0	0	1	4
Wades Beach	0	0	0	0	0	0	0	1	0	1
Subtotals	7	9	5	6	1	4	5	9	17	63
% of beaches with exceedances	25.0%	32.1%	17.9%	21.4%	3.6%	14.3%	17.9%	32.1%	60.7%	



Exceedance threshold = 104 cfu/100mL
Data source: SCDHS

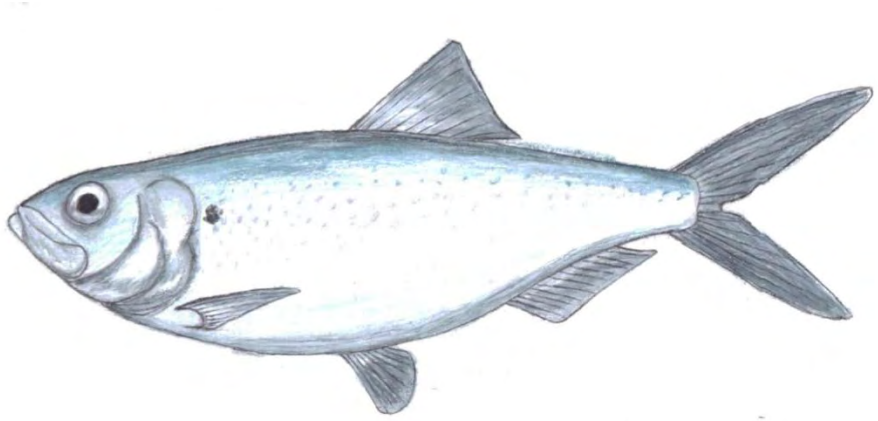
Healthy habitats with abundant diverse wildlife

Eelgrass = Increase in shoot density and extent in existing beds
= Suitability (acres) with use of Seagrass Bio-Optical Model



Healthy habitats with abundant diverse wildlife

Tidal Wetland Habitat = Restore **250** acres



Diadromous Fish Habitat = Restore **242** acres of the Peconic River and additional **60** acres in watershed, increasing alewife population from current level

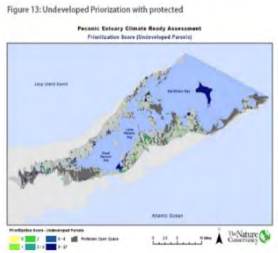
Resilient communities **prepared for climate change**

Shorelines = No net increase in hardened shorelines, **protect existing** open access land

Steps taken…

Water Quality

- TMDL (Pollution Diet)
- Sewage Treatment Plant Upgrade and Re-Use
- Vessel Waste No-Discharge Zone
- Suffolk County Fertilizer Reduction Law
- Homeowner Rewards Program (HRP)
- Suffolk County Septic Improvement Program
- Suffolk County Subwatersheds Wastewater Plan
- Suffolk County Plastic Bag Law



Climate Change

- Critical Lands Protection Strategy

Habitat & Natural Resources

- Efforts allow over 100,000 Alewife in the Lower Peconic River!
- Shellfish Restoration - grown and seeded in 2013
- Habitat Restoration Plan 2017
- Living Shoreline Projects
- Seagrass Bio-Optical Model

The Peconic Estuary is the heart of the East End

Economic Value $$$

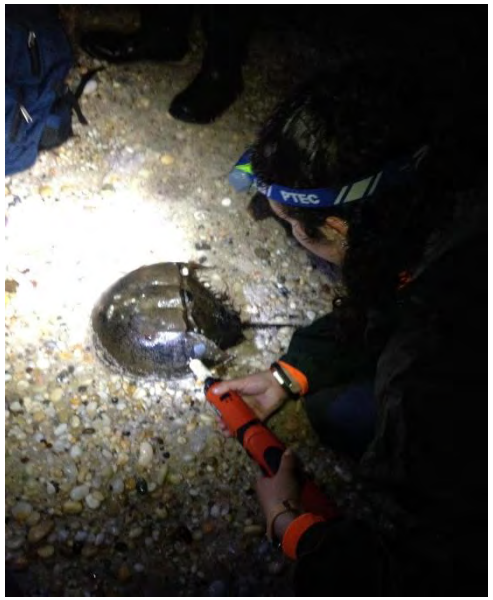
$18.4 M	**Commercial Fish and Shellfish** Landings (1994)
$442 M	**Estuarine-Dependent Sectors** Gross Revenue (1993)
$117 M	**Estuarine-Dependent Wages** Paid (1993)
$49.3 M	**Birdwatching and Wildlife Viewing** annual value (1995)
$22.4 M	**Recreational Fishing** annual value (1995)
$18.1 M	**Boating** annual value (1995)
$12.1 M	**Swimming** annual value (1995)

Improved Water Quality = Increase in Values

*New Economic Valuation of the Peconic Estuary System is needed

What you can do…


Jenna Schwerzma




Jenna Schwerzmann

Jenna Schwerzmann


Kaitlin Morris


Suffolk County

We live by the water's edge because we love it

Let's protect and restore what we treasure

Feedback:

Citizens' Advisory Committee Proposed Roles and Responsibilities

The Citizens Advisory Committee represents the broader interests, issues and perspectives of the business, commercial, and advocacy communities and partners as well the interested public within the PEP. The Citizens' Advisory Committee has responsibilities for the following….

1.

Represents the collective perspectives, concerns, and opportunities of the full array of business, commercial, and advocacy communities and partners present in the Peconic Estuary watershed in the consensus-based decision- and policy-making of the Peconic Estuary Program.

2.

Actively liaisons with full array of business, commercial, and advocacy communities and partners to understand their perspectives, engaging them in the roles they can play in implementation of the CCMP, and brings the resultant insights back to the decision-making with the Peconic Estuary Program.

3.

Takes the lead as the sounding board for other PEP committees and PEP office staff in the development of public messaging that can be readily understood by the interest public and other target audiences.

4.

Recommends the best approaches to be taken by partners in engaging citizens in PEP’s restoration and recovery strategies.

5.

Oversees development, review and delivery of PEP’s outreach and education elements.

6.

Reviews and recommends for Management Committee approval of products to communicate PEP’s mission, targets and goals, challenges, and progress.

CAC@Peconicestuary.org