

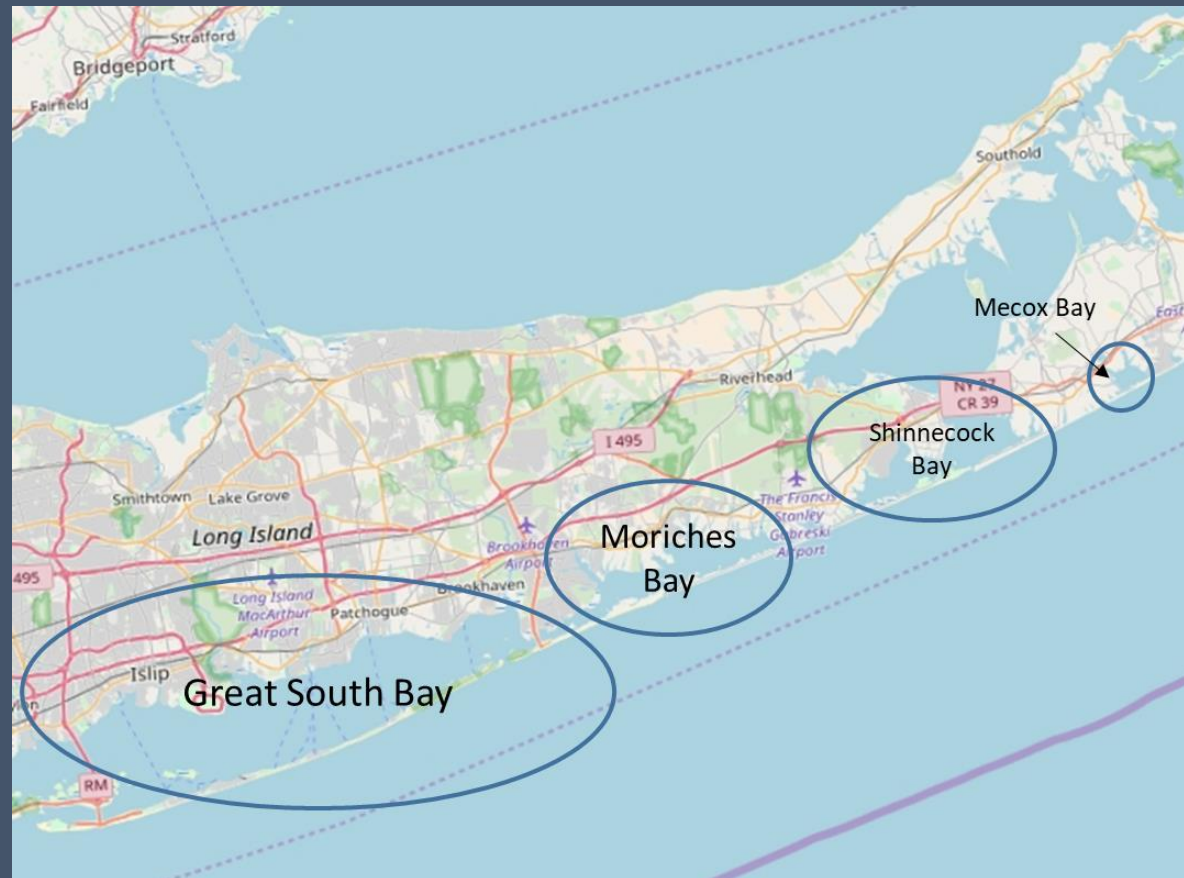
# Applying SEEA EEA to Marine and Coastal Areas: New York Case Study Update

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# Application to Long Island Coastal Bays

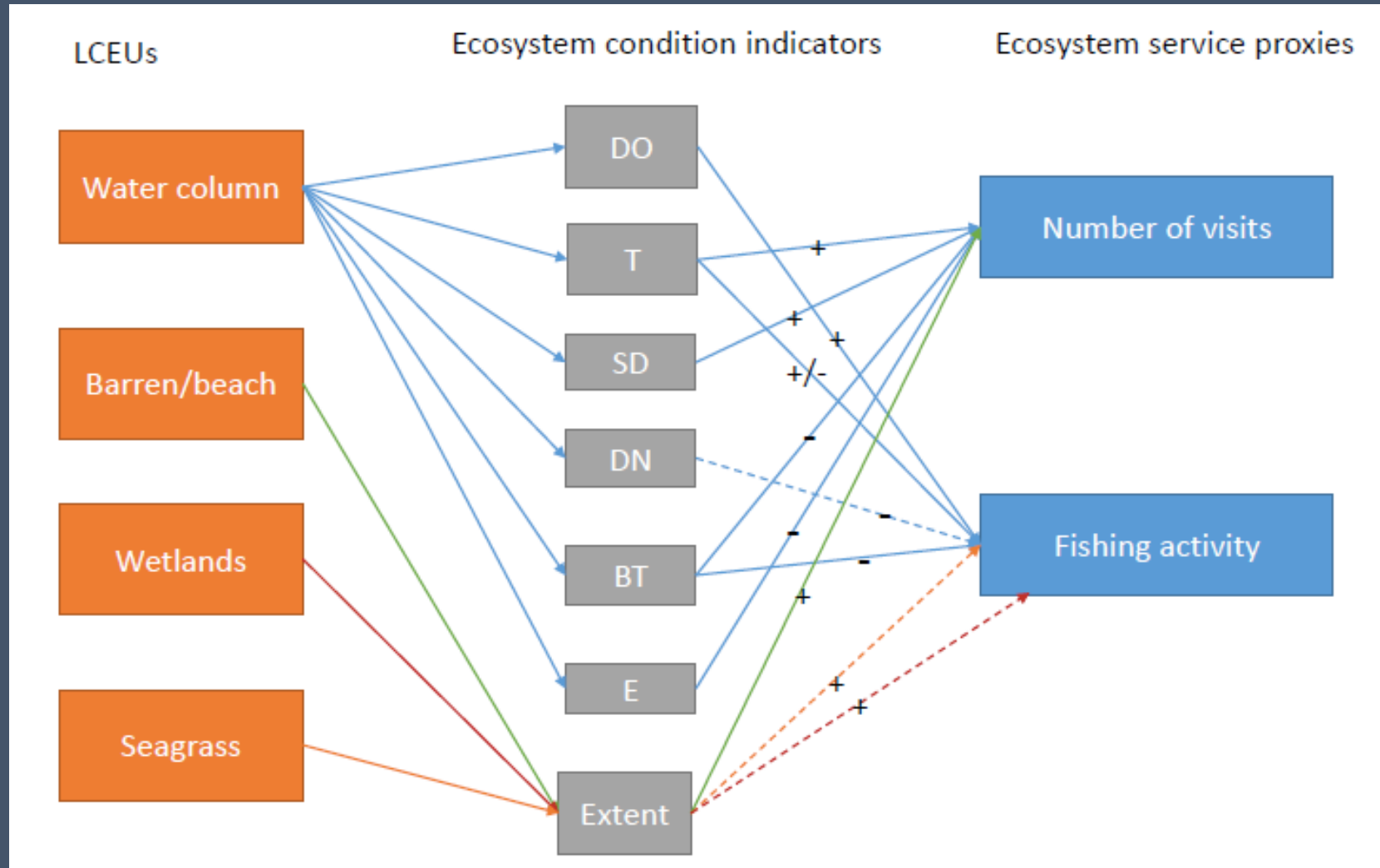
- Focus on prioritized ecosystem services and associated benefits



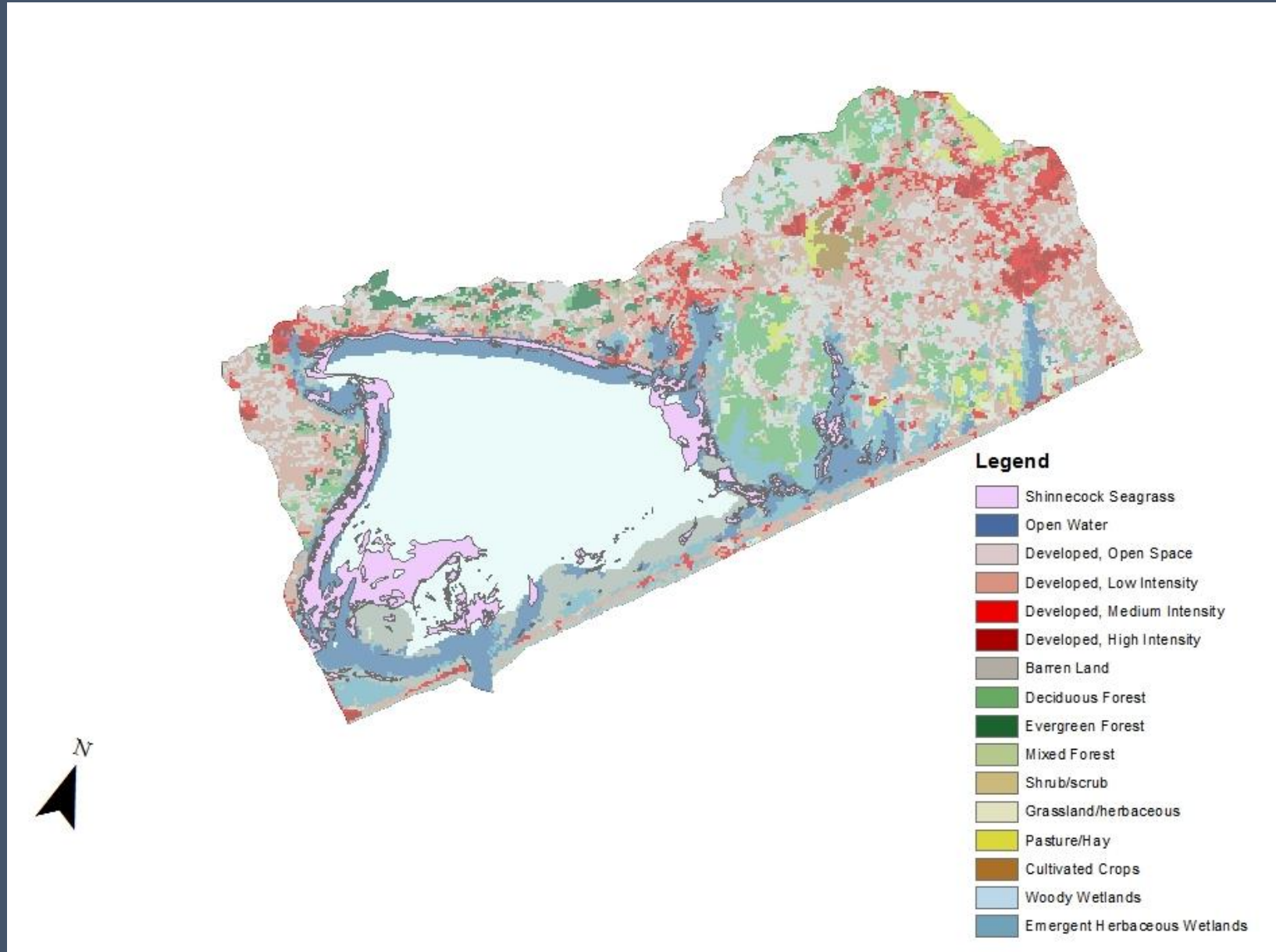
# Ecosystem Accounting Units

- 12-digit HUCs incorporate watershed and waterbody
  - Relevant spatial area for management action likely multiple HUCs (bay-scale)
- Mapping data sources
  - Land cover – NLCD USGS
  - Wetland – National Wetland Inventory
  - Seagrass – Nature Conservancy
  - Water column data – Suffolk County Department of Health

# Conceptual Map



# Shinnecock Bay – Land and Aquatic Cover



# Condition Indicators within EAU by Identified Habitat Areas

LCEU	Extent (km <sup>2</sup> )	Characteristics of ecosystem condition					
		Physical/Chemical				Biological	
Year: 2006		DO (mg/l)	T (°C)	S (ft)	DN (mg/l)	BT (cells/ml)	E** (MPN/100 ml)
<b>Water column</b>	310	9.8	9.4	5.2	.33	1,945	29
<b>Barren land (Beach)</b>	23.8	N/A	N/A	N/A	N/A	N/A	N/A
<b>Wetlands</b>	50	U	U	U	U	U	U
<b>Seagrass*</b>	67.4	U	U	U	U	U	U

# Ecosystem Condition Across Time Periods

	Characteristics of Ecosystem Condition				
	DO (mg/l)	T (°C)	S (ft)	BT (cells/ml)	E (MPN/100 ml)
<b>Opening condition</b>	9.8	9.4	5.2	1,945	29
<b>Improvements in condition</b>			.5		8
<b>Improvements due to natural activity</b>			?		?
<b>Improvements due to human activity</b>			?		?
<b>Reductions in condition</b>	1.3			82,329	
<b>Reductions due to extraction and harvest</b>	?			?	
<b>Reductions due to ongoing human activity</b>	?			?	
<b>Catastrophic losses due to human activity</b>	?			?	
<b>Catastrophic losses due to natural activity</b>	?			?	
<b>Closing condition</b>	8.5	14*	5.7	84,274	21

- What is driving the condition changes? Management actions?

# Linking to Economic Production Accounts: Recreation and Fisheries Benefits

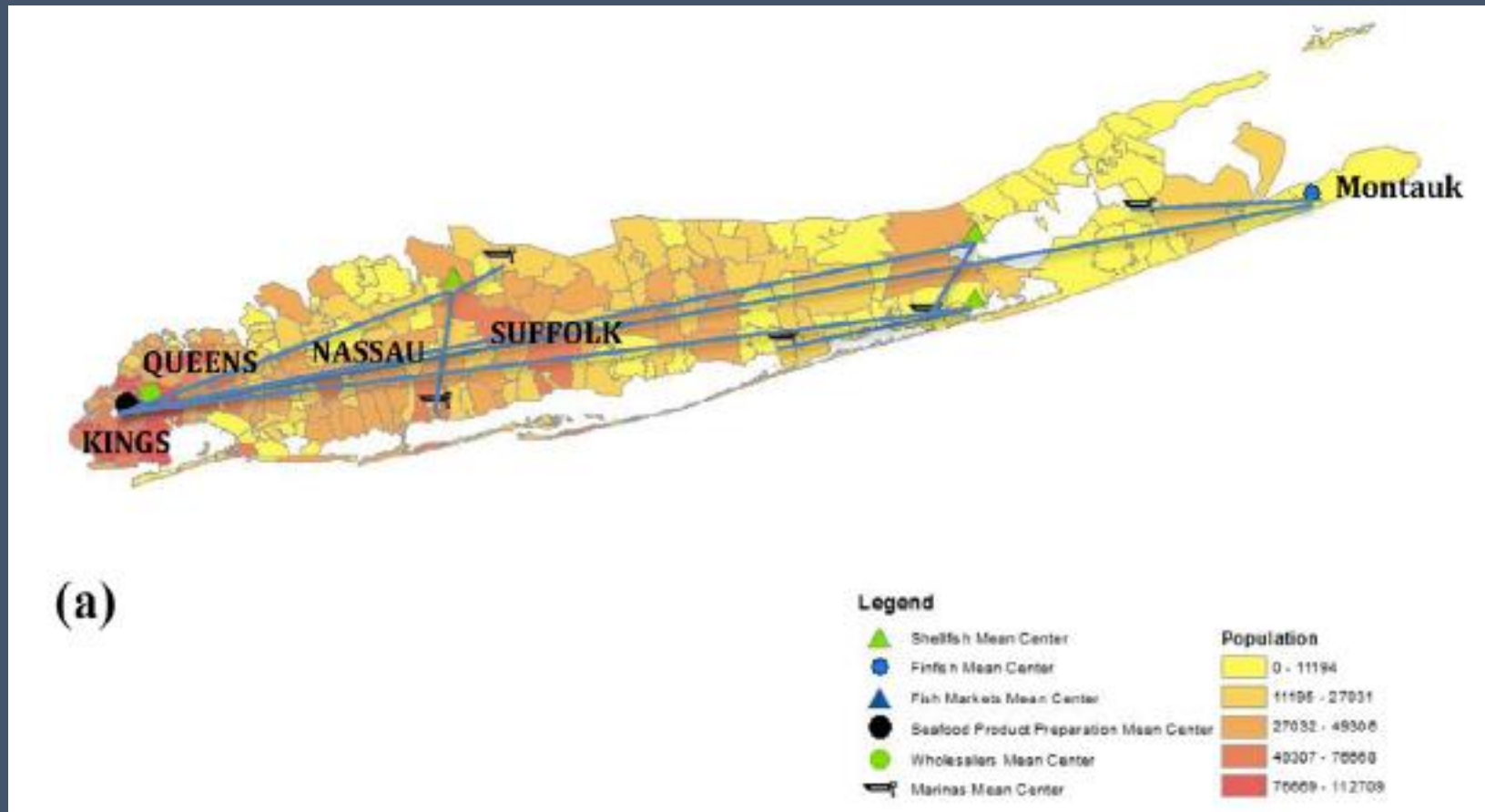
- Consumption of recreation often directed toward discrete space by infrastructure investments
  - Estimate flows to economic units/sectors within defined terrestrial EAU
- Much data where landings occur not necessarily where fish caught
  - VTR, SHAs in NY to tackle this question

Type of service	End of 2006 Accounting Period	End of 2011 Accounting Period
<b>Provisioning services</b>		
Shellfishing (bushels landed)*	12,169	21,501
<b>Cultural Services</b>		
Beach visitation (number of visits)**	772,803	1,125,800

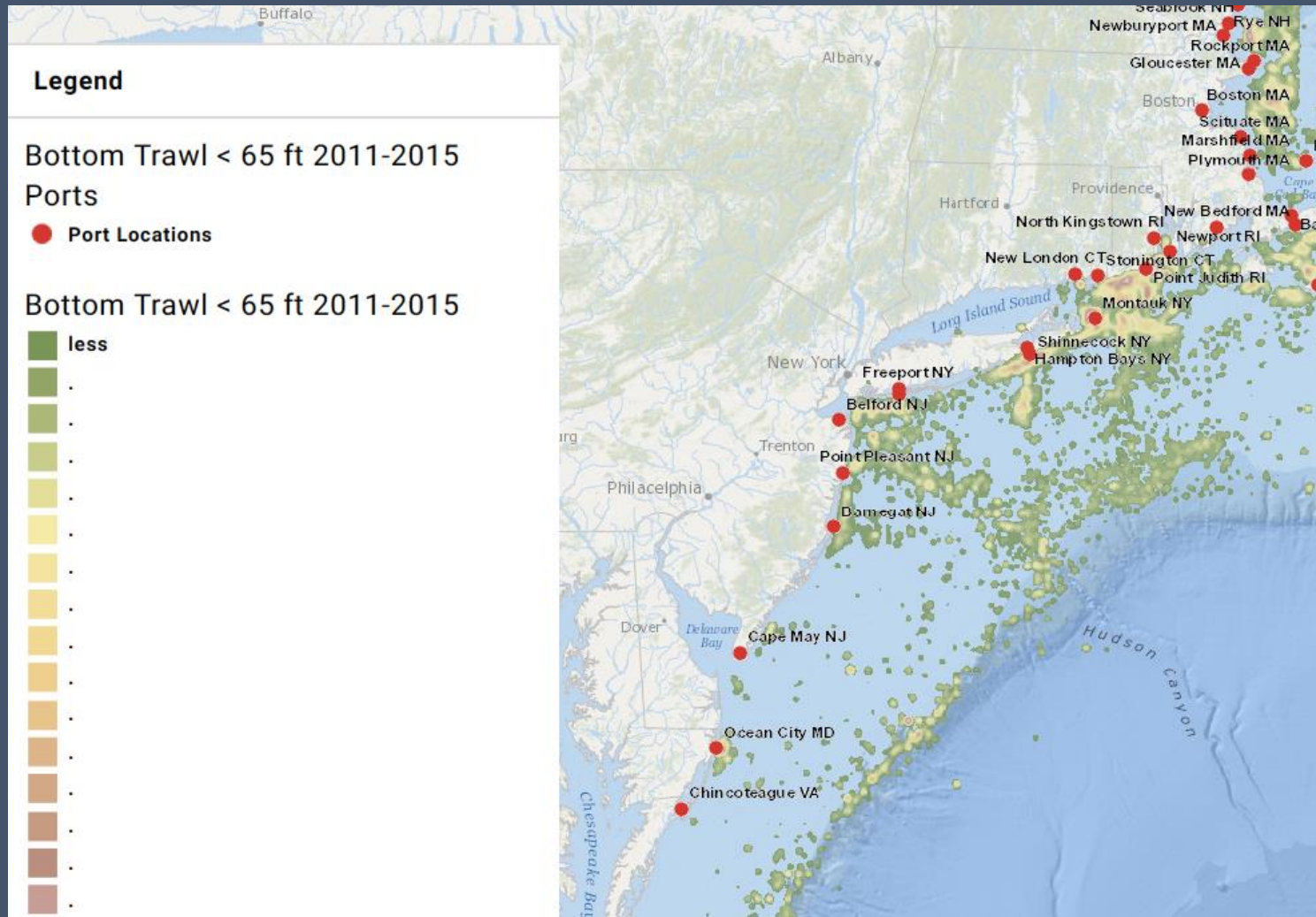
\*Totals across all study bays  
\*\*Represents data from a single park



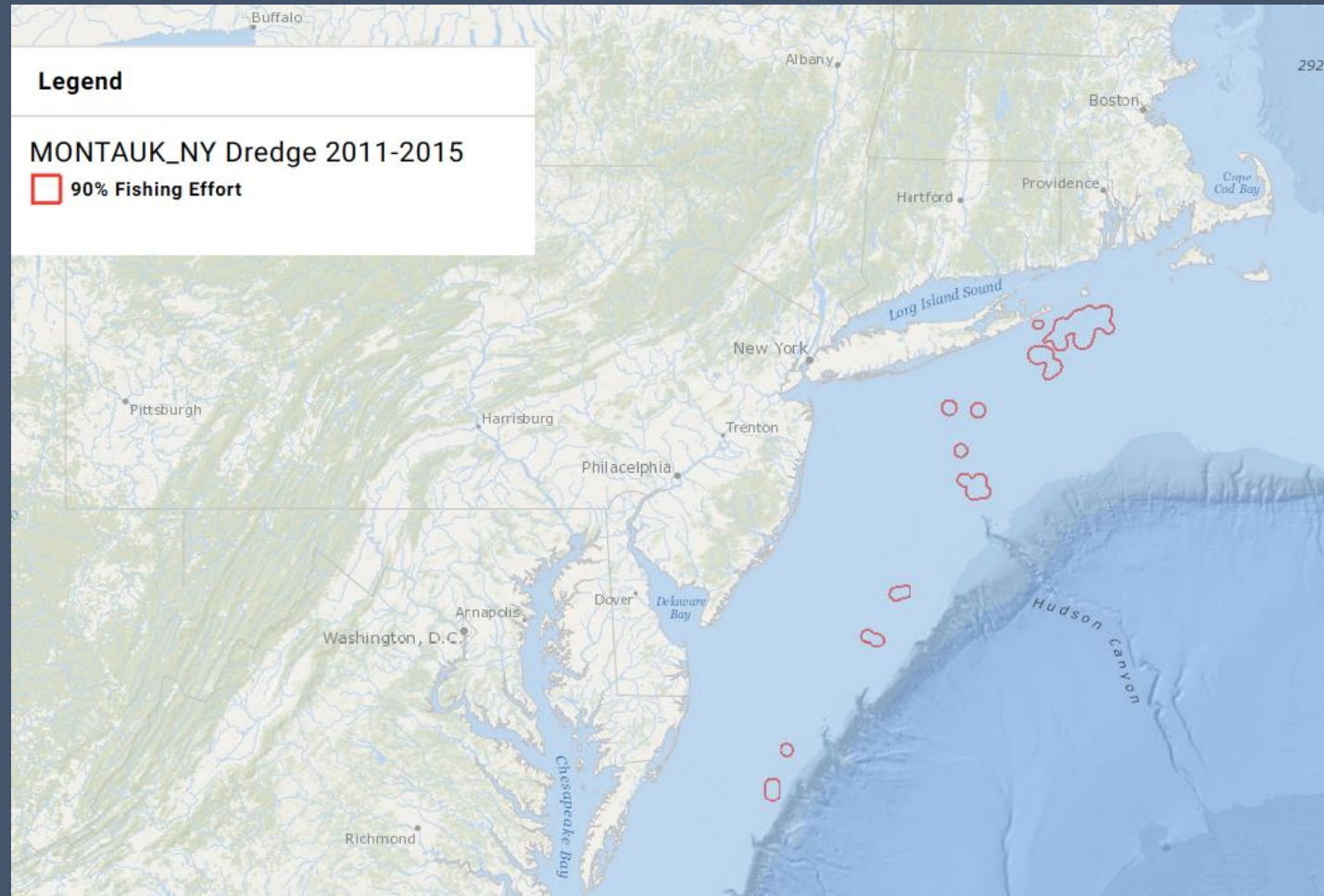
# Link to Supply Chains/Expenditures



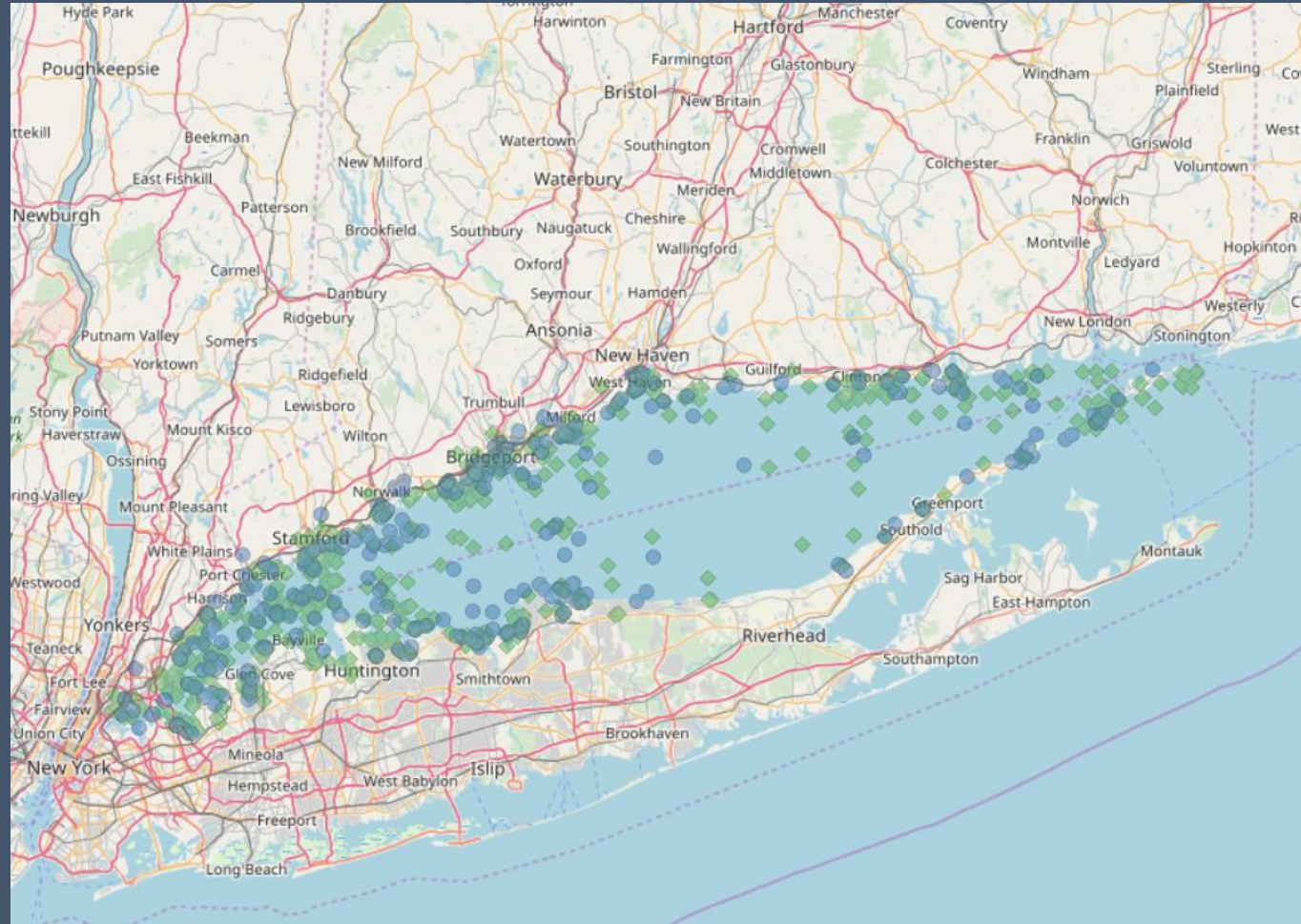
# Expansion to New York Bight – Commercial Fishing



# Expansion to New York Bight – Commercial Fishing (cont'd)



# Ongoing: Recreational Fishing Spatial Demand



# Questions?

- Contact information

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