



# Pete Peterson contribution to Panel chaired by Todd Miller

4:00 PM ON WED: A STRATEGIC BLUEPRINT FOR NC COASTAL ECONOMY

# Beck et al. (2011): Oyster Reefs at Risk



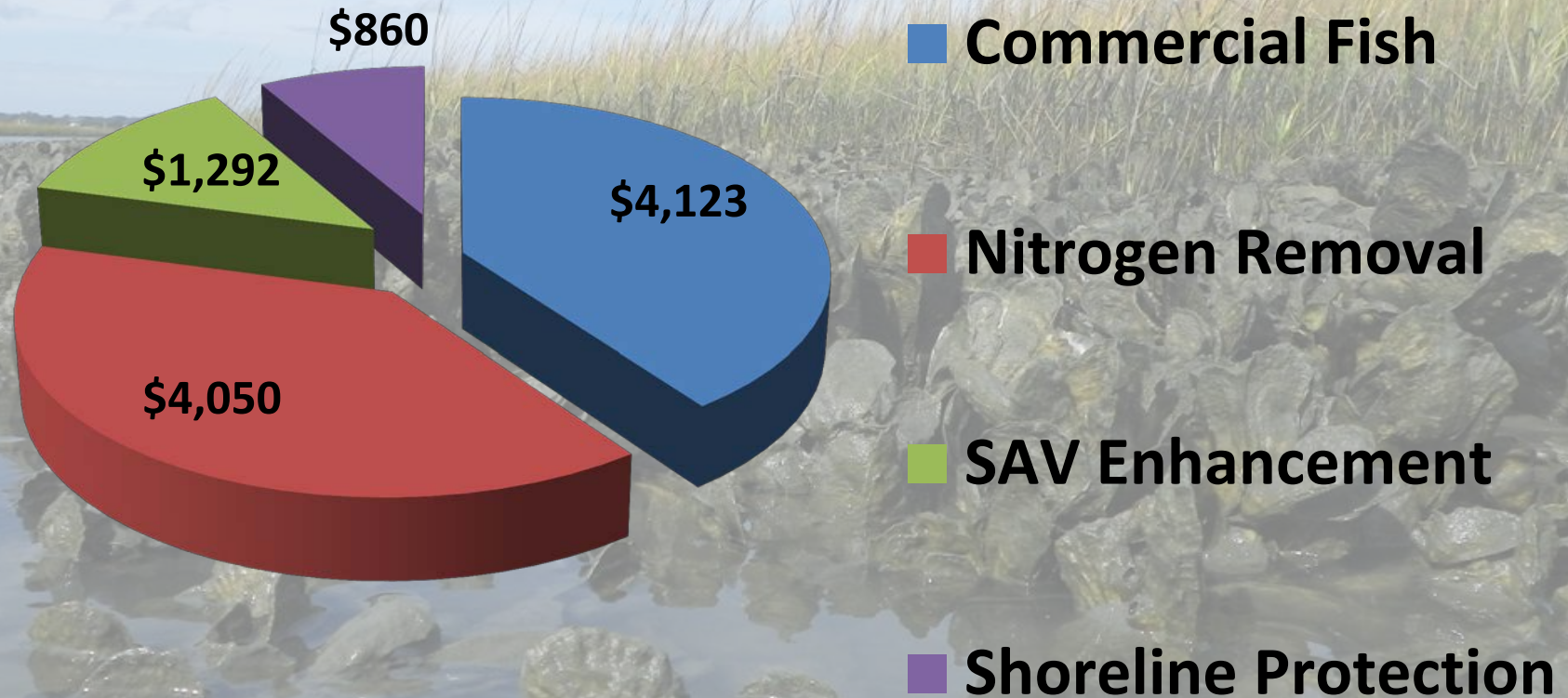
In many bays, more than 99% of oyster reefs have been lost and are functionally extinct.  
85% of oyster reefs have been lost globally.

# Ecosystem Goods & Services Provided by Oyster Reefs

Ecosystem Service	Benefit/Value
1. Production of oysters	Market & recreational value
2. Augmented fish/ crustacean production	Market & recreational value
3. Water filtration & concentration of pseudofeces	↑ SAV, recreational use & remove anthropogenic N
4. Stabilization of adjacent habitats	↑ SAV & salt marsh habitat
5. Provision of habitat for fauna	↑ biodiversity & productivity
6. Carbon sequestration	↓ greenhouse gas concentrations
7. Diversifying the seascape	↑ synergies among habitats

# Summary: Oyster Ecosystem Services

Average value of oyster services= \$10,325 per hectare





**Fishery disturbance (reef height reduction) x Eutrophication (hypoxia/anoxia)**  
**= mass mortality of oysters**