

Linking Water Quality and Migratory Fish Passage to Economic Contributions of Fisheries and Water Use in the Cape Fear River



John Hadley

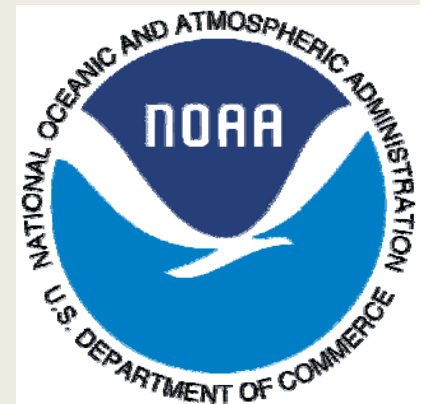
North Carolina Division of Marine Fisheries

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- Collaborative project between the Nature Conservancy and the North Carolina Division of Marine Fisheries (NCDMF)
 - UNC Wilmington
 - UNC Environmental Finance Center
 - Funded by grant from NOAA Office of Habitat and Conservation



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Economic Analysis Of Fisheries in the Middle and Lower Cape Fear River

- Provide baseline economic and social analysis for fishery resources
 - Dual Focus
 - Fisheries for anadromous species (American shad)
 - All fisheries combined (freshwater and coastal)
 - Demographic profile
 - Economic value
 - Net benefits recreational anglers (limited)
 - Economic impacts
 - Jobs, income, and business sales

Methods

- Middle Cape Fear
 - Utilized NCDMF survey data survey
 - Demographic information, trip expenditures, and net benefits
- Lower Cape Fear
 - Trip expenditures from NCDMF economic study of coastal recreational fishing (Crosson 2010)
 - Commercial landings from NCDMF Trip Ticket Program

Methods Continued

- Economic Value
 - Anglers stated additional willingness to pay for fishing trip
- Economic Impact
 - Recreational:
 - Used IMPLAN input with trip expenditures
 - Commercial:
 - NCDMF economic impact model for commercial fishing
 - Uses combination of IMPLAN and multipliers from other economic studies



Study Results: Middle Cape Fear

- Demographics (N=140)
 - Mostly male (94%) and Caucasian (71%)
 - Average age was 44 years
 - All surveyed anglers were North Carolina residents
- Trip characteristics
 - On average anglers traveled 57 miles round trip
 - Spent approximately \$37 per trip
 - Rated their fishing trip with a high level of satisfaction but lower level of success
 - Were willing to spend an additional \$9 for a trip of equal satisfaction



Study Results: Economic Value and Impacts

- American shad
 - Up to \$107,000 net benefits for recreational anglers
 - 9 jobs, \$292,000 in income, \$658,000 in business sales
- Economic impacts for the Middle and Lower Cape Fear River combined
 - 467 jobs, \$14.2 million in income, \$35.7 million in business sales



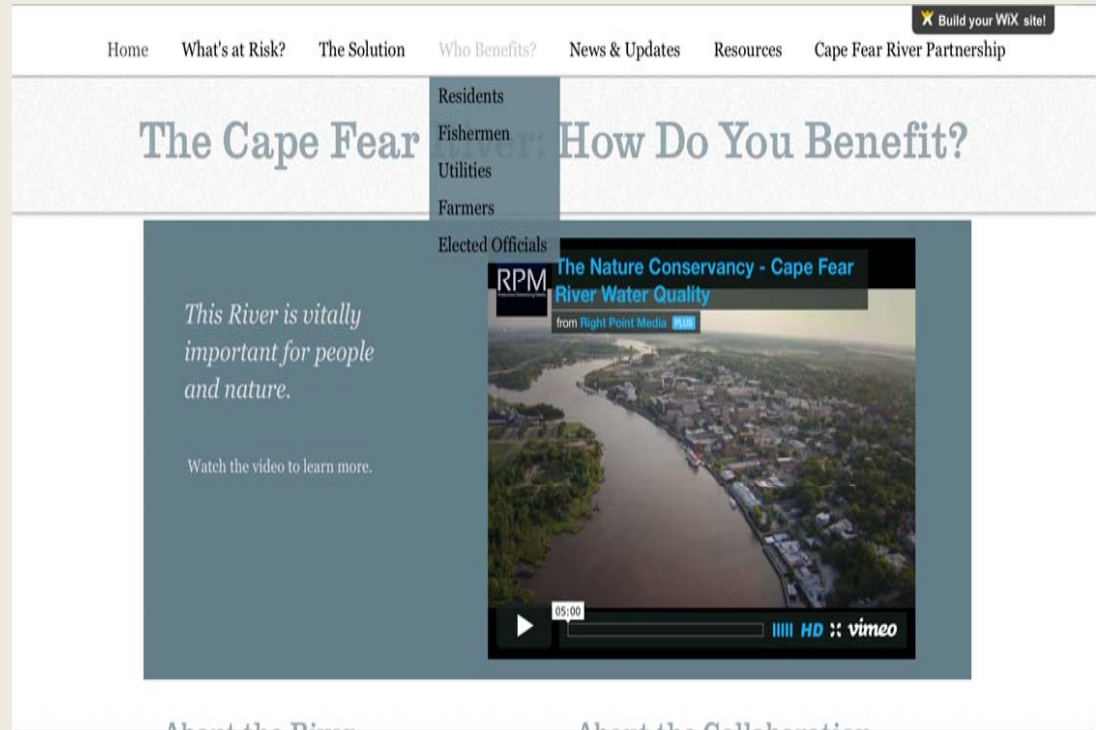
Project Results

- Baseline economic analysis for fisheries in the Cape Fear (NCDMF)
- Watershed model for nutrient inputs (TNC)
- Helped launch discussion of a Cape Fear River Water Fund (TNC and UNC Environmental Finance Center)
- Literature review on relationship between water quality and fish health (UNC Wilmington)

Outreach

- Website
 - Various target audiences
- Brochure
- Project deliverables
- Informational video

– <https://vimeo.com/113233364>



<http://capefearriver.wix.com/communitybenefits>

Questions?

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