Project Update:

Place-Based Recreational Fishery Conservation in Charlotte Harbor



to

Charlotte County
Board of County Commissioners
Board Workshop













Economic Impacts of Sport Fishing

- Natural resources & Ag. is a quarter of Charlotte County's economy ¹
 - \$5.6 B Real GDP generated by 49,000 workers in 2021²
- Recreational sport fishing generates 8 – 9% of total economic output
 - \$497.3 M economic output & 4,300 jobs in 2021 (CD 17)³
 - \$108.6 M economic impact of Harbor tarpon fishing in 2010 ⁴



¹ Coastal & Heartland NEP, 2020; ² Federal Reserve, 2022; ³ American Sportfishing Assoc., 2023; ⁴ Everglades Foundation, 2011

Social Impacts of Sport Fishing

Local cultural icons





- The harbor and its fishing is central to attracting residents and tourists
- Tarpon Fishing Capital of the World
 - Boca Grande Pass
 - Peace River, Harbor grass flats, creeks
 & backwaters



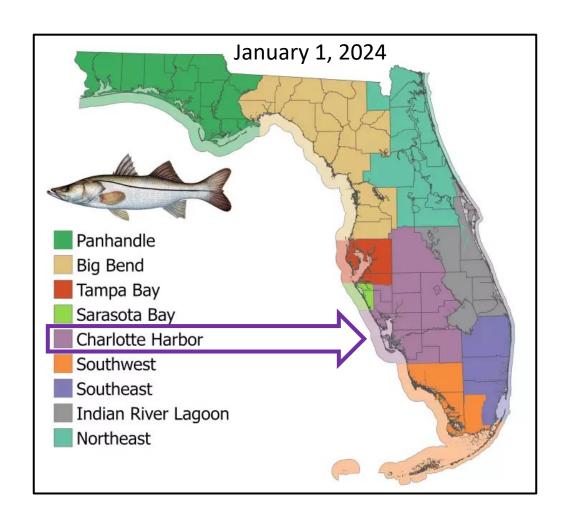
The conservation of natural resources is the fundamental problem. Unless we solve that problem, it will avail us little to solve all others.

- Theodore Roosevelt, 1907



Holistic Fisheries Management Strategy

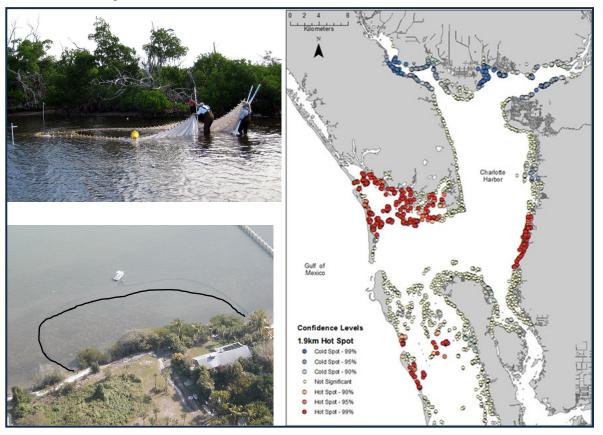
- New FWC regional fisheries management framework
 - Grassroots-driven by angler input
 - Explicitly includes regional differences in habitat and fishing effort into management process
 - Metrics evaluated annually
 - Includes **habitat** extent trends, etc.
- Collaborating with key partners
 - Habitat conservation & restoration



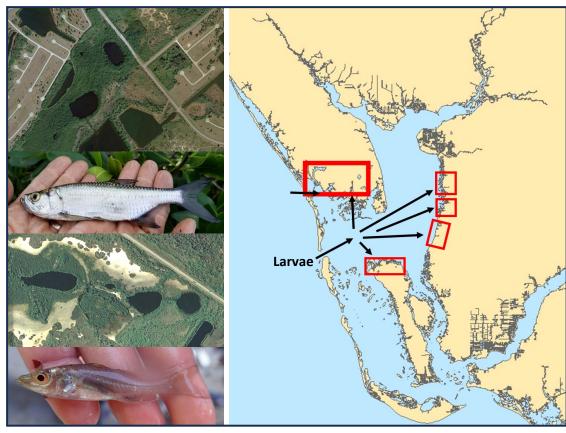
Building Foundational Knowledge

FWC Adult Fish Research

Important Snook Habitat Locations

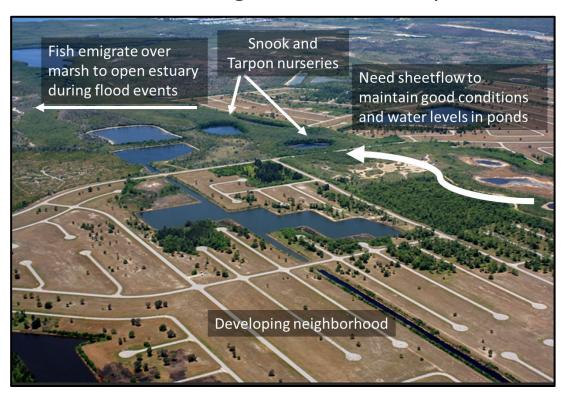


FWC & BTT Juvenile Fish Research **Juvenile Tarpon & Snook Habitats**

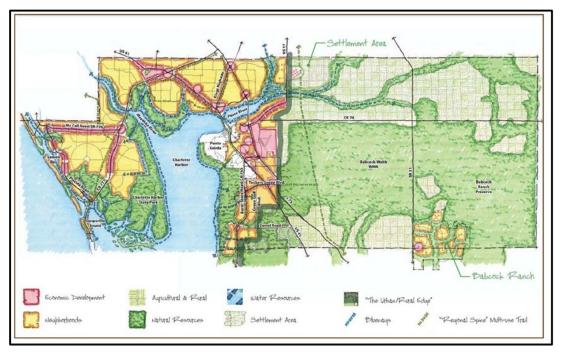


Leveraging that Knowledge

Juvenile fish need seasonal flooding to reach nurseries high in the landscape



Charlotte 2050 Plan expands development near juvenile tarpon habitat



Complimentary Goal

- How do we develop in a sustainable way?
- A 2-phase project gets at this question
 - Achieve county goals of sustainable development along Burnt Store and Cape Haze
 - Ensure a high-quality fishery
 - Collaborate across jurisdictions and expertise



Phase 1: A Co-Produced Plan

- Planned Research Needs and Applications
 - Experts and community-guided CHNEP advisory committee workshops
 - Grant funded in 2021-22 by NOAA RESTORE Science Program
- Recommendations
 - Additional fish habitat research
 - Habitat and stormwater modeling
 - Public outreach for residents
 - Conservation decision support tools

Final Version

Knowledge Co-Production for Place-Based
Recreational Fishery Conservation in
Charlotte Harbor, Florida:
A Research and Application Plan



Photo Credit: Sportfish habitats, Charlotte County, FL | Corey Anderson/FW

Prepared For:









August 17, 2022

Phase 1: Plan Collaborators













Punta Gorda Isles Fishing Club











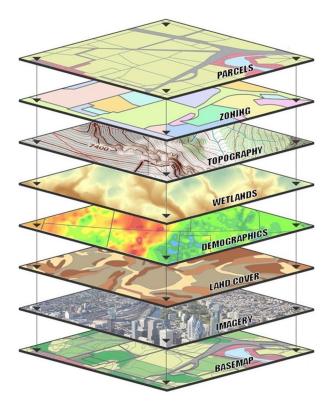
Phase 2: Inform Local Conservation

- FWC received \$1.2 M from NOAA to implement the plan and recommendations over the next 5 years
- Purpose of this phase is to identify priority locations
- Develop decision support tools for conservation policy
 - Which habitats are most important to sport fish (now & future)?
 - Where are they most vulnerable and why?
 - Maps and geographic information available to partners



Decision Support Tools

- Products and applications
 - Fish habitat location maps
 - Assess fish habitat conservation opportunities [Cape Haze and Burnt Store]
 - Storm water management modeling
 - Fish habitat and smart growth compatibility [Rotonda Meadows & Villas]
 - Habitat restoration effectiveness
 - Compare existing projects, identify appropriate new locations for habitat restoration [Cape Haze and Burnt Store]





Applying the Research to (Local) Management

- Develop urban planning recommendations from results
- Find solutions that ensure economic resilience through environmental stability
 - Prioritized list of habitats for restoration or conservation
 - Incorporate into State fisheries and habitat management plans
- Expand the model to other localities



O Punta Gorda/Engle

Let's Continue to Work Together!

- The project team appreciates county staff's engagement with pursuing shared goals:
 - Preserving sport fish nurseries to sustain iconic and economically important sport fish populations into the future
 - Growing the economy and enhancing community life by conservation of wildlife and natural resources¹











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