

## **INCLUDING HYDROECOLOGIC CONNECTIONS AT THE LAND-SEA INTERFACE IN CONSERVATION OF SPORTFISH HABITAT**

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Throughout much of Florida, coastal wetlands include tidal creeks, many of which have headwaters comprised of coastal ponds, that are the primary habitat used by juvenile Common Snook and Tarpon, two iconic sport fishes. Research has shown that successful emigration of these species from nursery habitat to the open estuary hinges on hydroecologic connections in the landscape. As fisheries management evolves to include habitat and ecosystem function, we are seeking partnerships with managers that govern at finer spatial scales to conserve or restore these connections. In southwest Florida, county government is part of a collaboration to characterize the locations and physical attributes of fish nursery habitats (e.g., elevations, frequencies of tidal inundation, landscape resistance). One of the goals is to integrate sportfish habitat into county GIS used in land-use planning and stormwater engineering to influence local decision-making. Workshops supported by NOAA RESTORE Science Program were held to plan actionable science using a facilitated co-production process that aimed to bridge gaps between science and policy. The findings were incorporated into a research plan that will be implemented over the next five years. The development of highly site-specific information will allow targeted actions that encourage sustainability of coastal wetlands and supporting fisheries.

PRESENTER BIO: Philip Stevens is a Research Scientist that oversees FWC's Fish Biology group at the Fish and Wildlife Research Institute. Dr. Stevens received his PhD from the systems ecology program at the University of Florida. His background is in marine fish ecology, coastal restoration, and movements of aquatic animals.