



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

Ecosystem Coordination Update

Roger Pugliese
Senior Fishery Biologist, SAFMC

Joint Habitat and Ecosystem-Based Management
Committee Meeting

June, 2014

Ponte Vedra, Florida



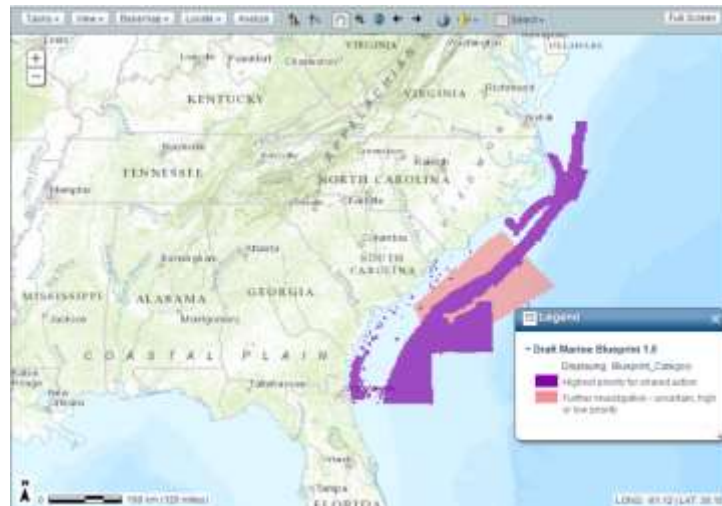
....*To Conserve and Manage*



2014 Developments

- Conservation Blueprint Version 1.0 Developed Guidance for 2.0 Provided
- Key Integration of Council EFH-HAPCs as Foundation of Marine Targets and Support for Regional Ecosystem Modeling and Review of potential Changes to Essential Fish Habitat Distribution as 2.0 is Developed

Draft South Atlantic Conservation Blueprint 1.0 (Review only) | January 21, 2016





2014 Developments

- Funding: In-stream flow work in cooperation with SARP and TNC project that will enhance regional marine habitat distribution potentially supporting refinement of SAFMC EFH and EFH-HAPC spatial designations
- Steering Committee – Reviewed Version 1.0 Conservation Blueprint and and Provided Guidance on Development of Version 2.0





2014 Developments

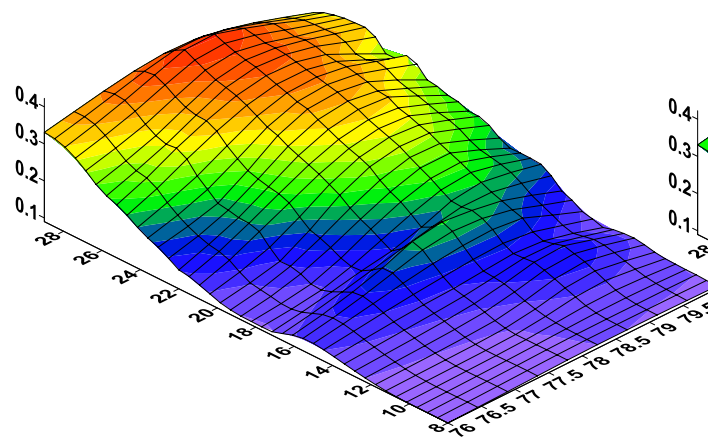
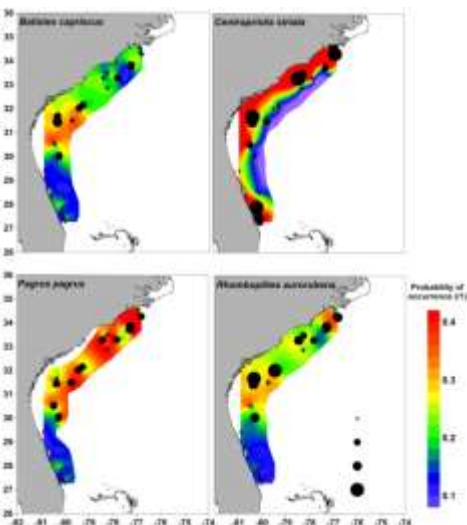
- Continue Support for Fisheries and Development of Species-specific Habitat Models that Integrate Remotely Sensed and In Situ Data to Enhance Stock Assessments for species managed by SAFMC
- May 2014 Meeting Fisheries Session Conducted and Fisheries Team Named
- 2015 Planning Refining 10 Year Build Out Plan



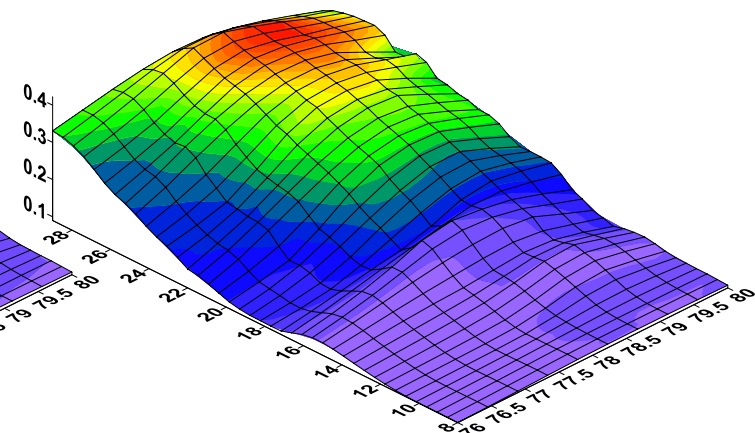


Habitat Modeling For Fisheries-independent Trap Surveys

- Provide species-specific habitat models that integrate remotely sensed and *in situ* data to enhance stock assessment of species managed by the SAFMC
- Incorporate environmental factors into fishery independent indices of abundance
- Activities: Participation in Data Workshop for Gray Triggerfish and Schedule Report out to SSC in Fall
- Funding by SECOORA to continue Project Secured for 2015



***Balistes* Model**



***Rhomboplites* Model**



SECOORA

Southeast Coastal Ocean Observing
Regional Association

SECOORA Build Out Plan (e.g., Identified Mobile Platform/ Mapping Needs)

SECOORA MOBILE PLATFORM SUBSYSTEM TEMPLATE

Surface drifters	surface currents	GPS	Region: 150	\$300	
AXBTs, AXCTDs, AXCPs	water temperature and current water temperature, conductivity and depth	AXCPs/AXCTDs AXBTs	500 @ \$1.5k/probe 500 @ \$0.5k/probe Outer shelf, shelf break and deep ocean	\$750k \$250k	
Habitat	Depth (m)	Square miles	mi ² mapped	Remaining to be mapped (sq mi)	Mapping rates & costs
shelf	10 to 45	35,423	9909	25,514	100-m AUV: 24 hr dive + 6 hr battery turnaround = 150 linear km & 18.75 sq. km; \$3k/day plus support vessel
shelf edge	46 to 70	3,634	652	2,982	100-m AUV: 24 hr dive + 6 hr battery turnaround = 150 linear km & 18.75 sq. km; \$3k/day plus support vessel
shelf break	70 to 140	3,716	538	3,178	Bluefin AUV: 2 person team ~\$3k/day plus support vessel
shelf offshore	141 to 300	8,969	449	8,520	Ship Multibeam: \$12k/day
deep	> 300	138,539	9	138,530	Eagle Ray AUV: 3 person team ~11k/day plus support vessel
SA EEZ		190,281	11557	178724	

Governor's South Atlantic Alliance

- Developed GSAA Regional Driver Across Steering Committee, EPT and Technical Teams to Focus on Resiliency and Refine Links
- Estuarine Layers Added to Regional Information Management System – Healthy Ecosystem Technical Team





South Atlantic-focused Connectivity Study Continues

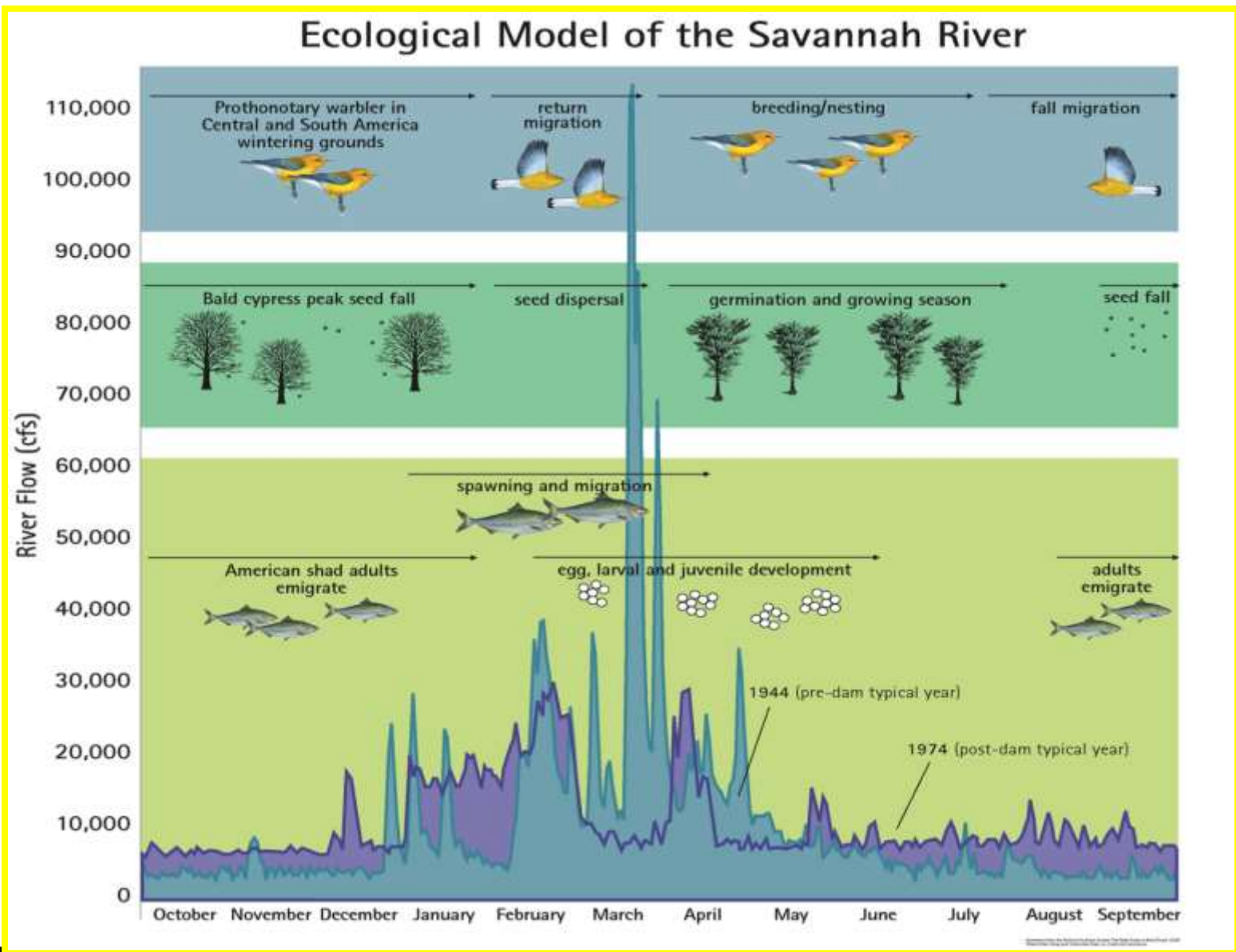
SARP and The Nature Conservancy recently launched the Southeast Aquatic Connectivity Assessment Project, or SEACAP, which aims to help identify which dams in the South Atlantic Landscape Conservation Cooperative's region have the greatest adverse impact on aquatic connectivity.

SARP Collaboration with SALCC on Instream Flow

Provides: Hydrologic Foundation, Ecological Databases, Flow-ecology Literature Review, Flow Alteration Assessment, River Classification and Aquatic Conservation Priorities



“Hydrologic regimes are the master variables in aquatic ecosystems.” Poff et al. 1997



Southern Instream Flow Network



Purpose - To facilitate protective instream flow policies and practices in 15 southern states by providing science-based resources and opening lines of communication.



More information at:

www.southeastaquatics.net/programs/sifn/

Value to SAFMC of SARP NFHP Data and Information Systems:

- Address conservation and management of Essential Fish Habitat of species managed by the South Atlantic Fishery Management Council
- SARP Aquatic Fish Habitat Plan and Conservation Targets Integrated into SAFMC Regional Fishery Ecosystem Plan
- SAFMC developing Fishery Ecosystem Plan II and update to EFH to meet 5 year review in cooperation with SARP and other regional partners SALCC, SECOORA and GSAA
- Instream flow research and coordination advances long-term recommendation to develop flow regimes for all SA to support and maintain healthy river and estuarine habitats essential to managed species and prey/forage species they depend on.
- SARP projects and projects developed in cooperation with SALCC will provide baseline information for identifying potential impacts climate change will have on structural EFH (estuarine habitats including but limited to salt and brackish marsh, freshwater wetlands, seagrass and oyster/shell habitat...) and pelagic EFH (currents and river flows) and ultimately impacts to managed species and prey they depend on.



Ecosystem Coordination Activities (Continued)

- Pulley Ridge Connectivity Project Oversight
- Coordination with NOAA Ocean Exploration Program and Okeanos Explorer 2014 Gulf Mission – Mapped South Atlantic Habitats Primarily in Unexplored Northern Stetson-Miami Terrace CHAPC
- Ecopath Model – Forage Fish in SA Region (Working Paper Completed) Presentation as Part of Modeling Workshop
- SEAMAP Data Management System Live, Short Bottom Longline and Review 5 Year Research Plan Components for FEP II
- Atlantic Coast Climate and Fisheries Governance Workshop - Build on Species/Complex Review and Possible Vulnerability Assessment
- Coordination with ESRI Ocean Staff – Potential Development of Proposal to Support Integration of ESRI Tools / Platforms and Refinement of SAFMC Fishery and Regional Spatial Information Systems



Ecosystem Tools - Links

- [SAFMC Dashboard](http://ocean.floridamarine.org/safmc_dashboard/)
http://ocean.floridamarine.org/safmc_dashboard/
- [SAFMC EFH](http://ocean.floridamarine.org/sa_efh/)
http://ocean.floridamarine.org/sa_efh/
- [SAFMC Managed Areas](http://ocean.floridamarine.org/safmc_managedareas/)
http://ocean.floridamarine.org/safmc_managedareas/
- [SAFMC Fisheries](http://ocean.floridamarine.org/SA_Fisheries/)
http://ocean.floridamarine.org/SA_Fisheries/
- [SAFMC Atlas](http://ocean.floridamarine.org/safmc_atlas/)
http://ocean.floridamarine.org/safmc_atlas/
- SEAMAP Online Data Management System
<https://www2.dnr.sc.gov/seamap/>

