

Summary of SECOORA User Needs

Issue	Products	Services	Data	Technology
Climate Change	SLR scenarios and vulnerability maps	Impact forecasts of climate and SLR	Baseline Mapping Data	Visualization Tools for SLR impacts
Fisheries	Predictions of spawning stock size; recruitment, and sustainable yield	Habitat assessments	Circulation patterns; pH; bathymetry/bottom type; turbidity; water quality	
Habitat Change	Characterization/impact assessments; Change/analysis trends/predictions	GIS mapping spatial extent and condition	Light penetration; water quality; species	High-resolution remote sensing; GIS
Hazards (erosion/inundation/wind)	Risk/vulnerability assessment maps; coastline visualization tools; integrated wave and water-level product (see visualization tool); land-use decision tool that includes inundation vulnerability; sediment dynamic models; advanced/detection warning	Improved forecast accuracy (storm surge and tracks)	Topo-bathy, shoreline water level, surface winds; sediment dynamics	Storm surge models; 3D predictive circulation modeling
Invasive (Non-indigenous) Species	Species inventory; profiles	On-line, one-stop regional non-indigenous species information source	Spatial/temporal distribution	Early detection/rapid response through monitoring

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Marine Weather	Electronic gridded forecast charts	Online, one-stop for regional observations and forecasts; improved forecast accuracy	Real-time wind (speed, direction, gusts), waves, and currents; SST	Surface and satellite sensors
Coastal Water Quality	Accurate estimates of water quality; alerts of probability of HAB formation; maps with nutrient layers	Real-time water quality monitoring/forecasting	Nutrients, chemicals, suspended solids, HABs, pathogens/toxins, bacteria	Inexpensive real-time sensors and monitoring instruments
Marine Operations	Current models	Oil spill detection/prediction; ship detection	Winds; sea state; currents; sea level;	Aerial/satellite imagery
Ecosystem management	Cumulative impact assessments; simulation/prediction models	Habitat/biodiversity loss; baseline data/information	Marine spatial planning	
Marine Debris		Current circulation; source identification	Removal/disposal	

Resources Reviewed

IOOS Regional Association Needs Assessment Final Report. October 2006 (NOAA CSC)

Meeting the Needs of Southeastern Coastal Resource Managers through Coastal Ocean Observing Systems. 2006 (CSO/SECOORA)

South Atlantic Regional Research Plan Research Priorities Needs Assessment. June 2007 (South Atlantic Sea Grants/Georgia Coastal Research Council)

NOAA User Needs in the Southeast and Caribbean Region: A Systematic Review of Existing Needs Assessments. September 2008
(NOAA CSC)

Southeast Aquatic Resources Partnership website (www.sarpaquatic.org)