

Mobile Bay National Estuary Program  
Raw Output from Community Leaders Workshop, November 2012

type of action	Value	OutcomeSum	outcome	for	against	Category	Action
Status & Trends	Heritage	Collaborate with the business community	Engage support and collaboration of the business community in promoting and protecting the cultural and environmental benefits of the region	1) Well established stakeholders 2) Current Values of our counties 3) Local residents to provide a historical perspective of our area 4) Historical significance of sites 5) Establishment of historical societies	1) Diversity of communities and counties 2) Lack of funding 3) Lack of marketing 4) Lack of experience 5) Tension between developers and preservers 6) Industrialization of Mobile 7) Government involvement	Research	Conduct a meta analysis of economic studies that quantify value of heritage tourism
Status & Trends	Heritage	Collaborate with the business community	Engage support and collaboration of the business community in promoting and protecting the cultural and environmental benefits of the region			Research	Compare heritage tourism's economic impact to the impacts of other forms of tourism
Building Capacity	Heritage	Collaborate with the business community	Engage support and collaboration of the business community in promoting and protecting the cultural and environmental benefits of the region			Direct Assistance	Develop partnerships with Chambers of Commerce and other who benefit from and can assist with promotion and resource development for the preservation needs related to our culture & heritage.
Stewardship	Heritage	Collaborate with the business community	Engage support and collaboration of the business community in promoting and protecting the cultural and environmental benefits of the region			Citizen Involvement	Create educational opportunities that physically engage the business community in connecting with our estuaries, cultural and natural resources.
Stewardship	Heritage	Collaborate with the business community	Engage support and collaboration of the business community in promoting and protecting the cultural and environmental benefits of the region			Citizen Involvement	Create an "Adopt a Cultural Pearl" program that encourages business support and ongoing stewardship for protecting priority cultural properties, archaeological and historical sites, etc.
Status & Trends	Access	Ecotourism	Create successful ecotour transportation economy working in coastal AL.	1) Growing environmental awareness in public, industry, chambers, etc. 2) Diversity of AL resources 3) Success programs already in place elsewhere	1) Lack of funding 2) Growing industrialization/commercial land use 3) Competition for leisure time	Research	Assessment of current ecotourism elsewhere that are successful
Building Capacity	Access	Ecotourism	Create successful ecotour transportation economy working in coastal AL.			technical assistance	Diversify the ecotourism industry through the provision of technical assistance, business support and environmental education training
Building Capacity	Heritage	Educational Enhancement	Develop educational tools (and use existing ones more effectively) for K - 12 and adults on multiple media outlets that convey information on the cultural resources of the estuaries and encourage their use and appreciation	1) Well established stakeholders 2) Establishment of current AL history in schools 3) Geneology groups 4) Establishment of historical societies	1) Lack of education of AL history in higher grades/Education 2) Lack of funding	Direct Assistance	In coordination with curriculum coordinators, adapt existing lesson plans to include local estuarine culture/heritage content for multiple grades. Offer lesson supplements on-line/incorporate into Alabama Science and Technology Initiative

Stewardship	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area	1) Establishment of current AL history in schools 2) Genealogy groups 3) Historical significance of sites 4) Establishment of historical societies	1) Diversity of communities and counties 2) Lack of funding 3) Lack of education of AL history in higher grades/education	Outreach	Explore non-print media and social media to inform the public on educational and tourism possibilities.
Status & Trends	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries	Existing programs for both education & outreach- DHP & Bryant; seafood festivals; fishing rodeos; post oil spill energy and appreciation of resources; watershed planning in underserved area (TMC)	Lack of funding; apathy/time; take available resources for granted; newcomers to area not knowledgeable about the resource; limited target audience; too little hands-on experience	Research	Conduct research to determine how water quality, bathymetry changes, hydrological dynamics and connectivity affect freshwater and marine fishery resources
Building Capacity	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			technical assistance	Encourage collaboration between agencies and academia, and stakeholders (ex. community of practice/MBNEP)
Building Capacity	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			training	Expand partnerships with the Alabama Cooperative Extension System for developing and conducting training, technical assistance, and other educational programming about the estuary/our fish nursery
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Citizen Involvement	Create social marketing campaign targeting younger adults that connect personal habits to the health of our fishery and promote changing those habits for the good of the fishery
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Citizen Involvement	Develop hands on opportunities and experiences for learning about our fishery resources that are accessible to all and particularly underserved populations
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Outreach	Develop outreach to improve understanding of "wise use" of our fishery resources
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Outreach	Develop Summer Camp curricula for 12-15 year olds that teaches about the connection between our coastal environment and the seafood industry
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Citizen Involvement	Expand access to affordable fishing opportunities including shoreline, pier, and boat access and promote to underserved populations

Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			education	Promote the inclusion of an "Alabama Conservation Education" curriculum unit in schools as a core course of study for all grades k-12 to educate about the watershed, estuary, fishery, non-point source pollution including stormwater, erosion and sedimentation and connection between up and downstream environments
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			education	Strengthen environmental education programs by building collaboration and partnerships with educational institutions
Stewardship	FISH	Educational Enhancement	Increase awareness of coastal resources that support fisheries			Outreach	Utilize local TV channels to air short movies that showcase local resources, issues, always including a message of action
Restoration	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Healthy Communities	Create driving/walking/biking/canoe-kayaking trails on historical and ethnic and religious themes to encourage eco-heritage tourism around and on the estuary (Native American, African-American, Civil War, etc.).
Building Capacity	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			tools	Incorporate and expand information on cultural sites of interest in the region (linking to Encyclopedia of Alabama) in the Habitats Tool
Stewardship	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Outreach	Promote information on cultural sites of interest in the region through a variety of electronic media
Building Capacity	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Tools	Develop a FAQ response to common questions about historical and archaeological sites, artifacts, cemeteries, and historic protection laws and make accessible through electronic media

Stewardship	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			education	Develop program to educate about the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations, snowbirds, tourists, and recent arrivals in the area
Building Capacity	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Direct Assistance	Create a collaborative coalition including Dept. of Tourism, Welcome Centers, Mobile Area Lodging Association, Seafood organizations, homeowners' associations, and others to promote cultural/heritage tourism along with natural and recreational attractions.
Stewardship	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Outreach	Develop interpretive signage that will complement electronic GPS/smart phone links to encourage education on-site.
Building Capacity	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Policy	Promote the incorporation of culture and heritage in community, economic, transportation and other planning processes.
Restoration	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area			Healthy Communities	Establish human connections to the water by creating new forms of access: boat tours, pocket parks,
Building Capacity	Heritage	Educational Enhancement	Education enhancement to teach the interrelationship of culture and history in the coastal zone to diverse groups, including the local populations (many of whom do not have personal experience with the waterways), snowbirds, tourists, and recent arrivals in the area				Work to incorporate cultural heritage content into estuarine-oriented lesson plans, and identifying partners in the education community (public, private, K-12, home-schooled, etc.).

x

Status & Trends	Access	Environmentally appropriate access	Increase more environmentally appropriate access for multiple uses (launches, fishing piers, urban areas, greenspace) in each type of ecosystem.	1) Recreational fishermen 2) Community comprehensive planning 3) opportunities to build partnerships through existing programs (Working Waterfronts, Clean Marinas)	1) Privately held waterfront property 2) Habitat/Wildlife protection issues 3) Stewardship Cost (long term) 4) Regulatory permitting barriers 5) Cost to procure and develop land - not economically viable to do it 6) Lack of funding 7) Growing industrialization/commercial land use 8) Territorial issues - Lack of cooperation between governments	Research	Conduct a Comprehensive Public Access Needs Assessment (Existing inventory and type/opps for expansion; user groups, inventory of kind and amount of usage, citizen awareness of access issues and stressors , best practices elsewhere, other) to inform future access planning
Status & Trends	Access	Environmentally appropriate access	Increase more environmentally appropriate access for multiple uses (launches, fishing piers, urban areas, greenspace) in each type of ecosystem.				Create or update user survey of what users want in terms of access
Restoration	Access	Environmentally appropriate access	Increase more environmentally appropriate access for multiple uses (launches, fishing piers, urban areas, greenspace) in each type of ecosystem.			Habitats	Create opportunities for Industry to implement greenspace mitigation and acquisition bank program (bond initiative)
Restoration	Access	Environmentally appropriate access	Increase more environmentally appropriate access for multiple uses (launches, fishing piers, urban areas, greenspace) in each type of ecosystem.			Habitats	Protect/conserv priority habitats through land acquisition for public benefit
Restoration	Access	Environmentally appropriate access	Increase more environmentally appropriate access for multiple uses (launches, fishing piers, urban areas, greenspace) in each type of ecosystem.			Healthy Communities	Restore working waterfronts ( repair launches and others for access use, identify and inventory potential/existing waterfront sites, identify existing/future funding sources)

Status & Trends	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.	<p>1) Green movement (eg 100/1000)</p> <p>2) Restore Act, NRDA, CIAP, potential funds related to DWH</p> <p>3) RSM/Beneficial users/"Engineering w/nature"</p> <p>4) General permit AL10</p> <p>5) Coastal AL economy/tourism</p> <p>6) increased education/presentation of alternatives</p> <p>7) wave basin &amp; hydrodynamic modeling by academic institutions</p> <p>8) new GSA shoreline characterization/inventory</p> <p>9) Locally funded beach renourishment programs (Orange Beach/Gulf Shores)</p> <p>10) Meaningful collaboration between municipalities, state and Federal agencies and academia</p> <p>11) Coastal AL LS initiative (MASGC/ADCNR)</p> <p>12) Community Inpractice</p>	<p>1) SLR &amp; climate change - increased frequency and intensity of storms</p> <p>2) Interruption of sand transport by ship channel</p> <p>3) SLD prohibition of fill below MHW</p> <p>4) funding availability</p> <p>5) private property rights</p> <p>6) inadequate definition of MHW/shorelines</p> <p>7) ADEM prohibition of sand retention structures</p> <p>8) current policies/regulations &amp; permitting</p> <p>9) maintenance/updating of shoreline inventory</p> <p>10) lack of available culch</p> <p>11) BP oil mats</p>	Research	Continue research to evaluate past and future SL stabilization measures
Status & Trends	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Data Gathering	Identify long-term beach sand resources;
Status & Trends	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Data Reporting	Make data available to researchers and other interests
Status & Trends	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Research	Undertake research to define distribution of residual oil impacts/tar mats along AL coast
Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Policy	Ensure that dredged sand is restored to littoral sand transport system;
Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Tools	Develop long term funding stream for ongoing shoreline restoration/maintenance
Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Policy	Change State regulations to allow for placement of fill seaward of MHW
Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			technical assistance	Develop strategy for storm protection and restoration
Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			technical assistance	Encourage collaboration between agencies and academia, and stakeholders (ex. community of practice/MBNEP)

Building Capacity	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			training	Conduct workshops to educate property owners and contractors on benefits of sustainable shoreline management including use of living shoreline technologies (Coastal AL Living Shorelines initiative)
Stewardship	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.			Outreach	Identify, design and construct HIGHLY visible demonstration projects in different locations and conditions to educate public about natural/living shorelines.
Stewardship	Coastlines	Healthy, resilient, sustainable beaches and dunes	Healthy, resilient, sustainable Gulf beaches and dune systems and dune systems.				Establish steering group to meet biannually to recommend demonstration/pilot projects, regulatory revisions, etc.;
Status & Trends	FISH	Improve health	Improve health of commercial and recreational fishery	Increased demand for seafood; separation of target species; good reputation for Gulf seafood; AL water management plan; recognition of need to improve stormwater management and that it does affect water quality; substantial fishery (comm. And rec) exists; CWA, NRDA	Finite resource; separation of target species; non mechanism for vocational training for commercial fishermen; lack of knowledge of ecosystem populations and dynamics; open access; perceptions of health of fishery after DWH; lack of current public Health plan; need for stormwater and watershed management plans	Research	Conduct research to better understand hydrological dynamics and connectivity between fresh and marine environments
Restoration	FISH	Improve health	Improve health of commercial and recreational fishery			Habitats	Restore D'Olive Bay and its associated tributaries
Restoration	FISH	Improve health	Improve health of commercial and recreational fishery			Habitats	Restore priority rivers and streams and their hydrology to provide more access for coastal species
Restoration	FISH	Improve health	Improve health of commercial and recreational fishery			water quality	Restore headwaters, hydrological streamflows, and freshwater wetlands in priority watersheds to improve watershed discharges to fishery nursery areas and SAV beds
Building Capacity	FISH	Improve health	Improve health of commercial and recreational fishery			technical assistance	Create an "Adopt a Watershed" program with Universities to increase resources available for watershed planning and management

Building Capacity	FISH	Improve health	Improve health of commercial and recreational fishery	TNC- Coastal Resilience tools; attractive system; Forever Wild; Inshore and offshore reef systems	Lack of regional vision and regionalism; lack of respect/trust between industry and environment	tools	Develop watershed management plans for each HUC - 12 discharging into salt (Bay, Sound, Gulf) waters to identify/remediate negative impacts of upstream inputs on water quality and quantity including improved management of stormwater and other sources of non-point source pollution that are detrimental to fishery health
Building Capacity	FISH	Improve health	Improve health of commercial and recreational fishery				Develop revenue stream alternatives for addressing improved stormwater management at the watershed scale
Status & Trends	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized				Develop a quantitative understanding of water quality impairments in priority watersheds
Restoration	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized			water quality	Restore headwaters, hydrological streamflows, and freshwater wetlands in priority watersheds to improve watershed discharges to fishery nursery areas and SAV beds
Restoration	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized			water quality	Restore hydrology to Choccolatta Bay/ John's Bend/Justins Bay by opening up the Causeway
Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized			Direct Assistance	Develop mechanism for increasing resources to support additional enforcement of water quality regulations
Restoration	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized				Implement recommendations of developed WMPs
Restoration	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized				Promote living shorelines instead of hard/armored
Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized	RESTORE/NRDA funds, NEP leadership, tourism tied to the environment, education programs	Potential loss of beach pathogen funding, No State funding dedicated to WQ monitoring, Lack of understanding of connection to the watershed	Policy	Promote the need to emphasize Water Quality as a goal of the State Water Resources Management Plan to government officials/legislators
Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized			technical assistance	Pursue the development of "Green Port" status for ports within the estuary through assessment of needs and development / implementation of consistent green Port policies to improve bay sediment and water quality

x

x

x

Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized			Policy	Develop and facilitate implementation of model ordinances and incentive packages that institutionalize the use of low impact development practices in communities.
Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized				Develop more WMPs for Coastal HUC 12s
Building Capacity	Water Quality	Improve trends in Water Quality	Overall trends in WQ categories are improving or stabilized				Develop stronger coastal MS4 programs
Status & Trends	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews	1) Established organizations for management of sites 2) Genealogy groups 3) Establishment of historical societies 4) Local residents to provide a historical perspective of our area	1) Lack of funding 2) Diversity of communities and counties		Conduct archaeological survey to identify gaps in knowledge related to historical and cultural significance of estuary through time
Status & Trends	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews			Research	Conduct an ethnographic study of the coastal area that analyzes the terrain, climate, and habitat/watersheds of the estuary and to articulate how these elements contributed to the cultural development of the different ethnic/racial and social stratas of residents of coastal Alabama over time.
Status & Trends	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews				Identify cultural themes of particular significance in this place. What creates a sense of place here?
Status & Trends	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews			Research	Conduct a (long-term longitudinal) study of the use of the estuary based on primary documentary and archaeological data.
Status & Trends	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews			Research	Conduct a toponymy or place names study of the estuary to identify their origins, meanings, cultural themes, ethnic settlement patterns and how communities through time utilized estuarine resources for survival and enjoyment.
Stewardship	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews			Outreach	Develop a coordinated oral history program that solicits interviews with all segments of the community to explore individuals' relationship to the estuary.

Stewardship	Heritage	Improve understanding of historic connections to estuary	Capture traditional knowledge of the human use and appreciation of the estuaries through historical and ethnographic studies and oral history interviews			Outreach	Develop outreach program that promotes public contributions to archaeology and cultural knowledge base of the community. Establish electronic format for submission of data, opportunities for protection
Status & Trends	Water Quality	Improve Water Clarity to promote SAV Health	SAV is restored	RESTORE/NRDA funds	Lack of understanding of connection to the Watershed	Monitoring	Develop Long-term monitoring program of SAV as indicator of status and trends for WQ
Status & Trends	Water Quality	Improve Water Clarity to promote SAV Health	SAV is restored				Synthesis of data (spatial/temporal) compare to baseline studies
Stewardship	Resiliency	Improve Water supply	Improve water supply - both quality and quantity	1) Statewide water management plan 2) RESTORE/Clean H2O/NRDA 3) Rainfall high 4) F&W foundation and NRDA funding 5) BP funding for research	1) Long term maintenance costs 2) Lack of data on groundwater availability and long term trends 3) Lack of involvement upstream 4) Size of watershed 5) Perception - water conservation is not an issue 6) Long term living marine resources conservation 7) What is current status of Mobile Bay 8) Poor stormwater management needs to be brought to local scale, enforces at local level 9) Rainfall high	Outreach	Host a joint state watershed management meeting with water management stakeholders to share tools, best management practices, water policy and water supply
Building Capacity	Access	Increase awareness	Improve Private landowners (including businesses) attitudes towards public access near their properties.	1) Mitigation opportunities 2) Large industry support of environment (European companies moving into Mobile)	1) Privately held waterfront property 2) Cost to procure and develop land - not economically viable to do it 3) Lack of funding	training	Educate stakeholders (private landowners, enviro organizations, etc) about conservation options
Status & Trends	Access	Increase awareness	Increase awareness of access locations (waterway trails, remote locations).	1) NPS Great American Outdoor Program/ National Public Lands Day 2) Public rights to use water/land	1) Lack of awareness of public water rights 2) Lack of funding 3) Competition for leisure time		Gauge awareness of environmental access issues
Status & Trends	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.	1) Easy to get education information out to younger generation 2) Movement for getting children out in nature	1) Stewardship Cost (Long term) 2) Lack of funding 3) Pressures on time in K-12 classrooms 4) Apathy/lack of motivation for education	Data Gathering	Conduct a gap analysis of K - 12 environmental education curriculum including what is/is not taught regarding environments of Mobile and Baldwin County to inform access planning and interpretive signage messaging
Building Capacity	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.			tools	Update Habitat Mapping tool with enhanced GIS and CMSP data to inform development of access points
Stewardship	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.			Outreach	Create campaign to promote use of existing access points

Stewardship	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.			Outreach	Develop promotional campaign to showcase the diverse opportunities to access the estuary for recreational enjoyment. Promote the availability of ADCNR's public access maps
Stewardship	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.			Outreach	Develop and install interpretive signage at access points to educate users on living shorelines, other access points, bird migration, etc.
Stewardship	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.			Outreach	Promote the availability of ADCNR's public access maps
Stewardship	Access	Increase awareness	Increase public education opportunities for K-12, adults, and under-served communities.				Promote and enhance existing programs such as Coastal Training Program and SeaGrant
Status & Trends	Access	Increase awareness of access demands	Increase awareness/understanding of what residents and tourists want regarding access.	1) Increasing health consciousness 2) Increase quality of life	1) Lack of awareness of public water rights 2) Lack of funding 3) Competition for leisure time		Create or update user survey of what users want in terms of access
Building Capacity	Access	Increase funding	Increase funding available for public access.	1) Forever Wild and other state/federal land acquisition programs 2) Restore Act/NFWF funds/NRDA	1) Political opposition 2) Lack of cooperation 3) Territorial issues - lack of cooperation between governments		Encourage responsible use of available funding for access
Building Capacity	Access	Increase funding	Increase funding available for public access.			technical assistance	Create South AL task force to leverage available funding for land acquisition
Building Capacity	Access	Increase funding	Increase funding available for public access.			technical assistance	Develop or identify a one stop shop for funding sources
Building Capacity	Heritage	Integrate cultural concerns with other environmental concerns	Promote networking that integrates cultural concerns with other environmental concerns and connects interest groups and encourages broad support	1) Established organizations for management of sites 2) Geneology groups 3) Establishment of historical societies	1) Diversity of communities and counties 2) Lack of funding 3) Lack of experience	Direct Assistance	Establish a collaboration of coastal environmental practitioners and historic preservationists to investigate opportunities for communicating the value of coastal Alabama's heritage to its present day activities and promote preservation and protection actions
Stewardship	Heritage	Integrate cultural concerns with other environmental concerns	Promote networking that integrates cultural concerns with other environmental concerns and connects interest groups and encourages broad support			education	Add cultural content to the biennial Bays and Bayous conference
Restoration	Access	Maximize/improve current access	Maximize and improve current access locations	1) Community comprehensive planning	1) Political opposition 2) Lack of funding 3) Pollution/Trash	Habitats	Restore living shorelines at current/future access points to mitigate the impacts of boat/other wakes
Building Capacity	Access	Maximize/improve current access	Promote a fair and reasonable regulatory process for private/public access.	1) Growing environmental awareness in public, industry, chambers, etc.	1) Political opposition 2) Regulatory permitting barriers 3) Lack of funding 4) Lack of cooperation	policy	Benchmark regulatory practices for environment - identify issues with current regulatory process, establish list of model ordinances already in place in other areas.

Status & Trends	Access	Maximize/improve current access	Take Environmental impacts into account when considering access projects.	1) Community comprehensive planning	1) Political opposition 2) Stewardship cost (Long term) 3) Lack of funding 4) Growing industrialization/commercial land use 5) Pollution/Trash 6) Territorial Issues - lack of cooperation between governments		Conduct a Comprehensive Public Access Needs Assessment (CPANA) to include: Definitions (Users groups, launch types, stakeholders), Current conditions, Inventory of use, Future needs, stressors on current access points	x
Restoration	Access	Maximize/improve current access	Take Environmental impacts into account when considering access projects.				Retrofit parking lots with permeable surfaces (Use BMP when constructing/improving access sites)	x
Building Capacity	Access	Maximize/improve current access	Take Environmental impacts into account when considering access projects.				Promote outreach, education, and training regarding living shorelines and support streamlining of regulatory process	x
Stewardship	Access	Maximize/improve current access	Take Environmental impacts into account when considering access projects.			training	Create a program for local officials to increase awareness of access benefits	x
	Heritage	Mobile Tensaw Delta Federal Designation	Create a National Park/National Reserve/ National Heritage Area in the Mobile- Tensaw Delta	1) Historical significance of site 2) Current values of our counties 3) Planning groups 4) Established organizations for management of site	1) Lack of Funding 2) Government involvement		Confer with Alliance of National Heritage Areas (& with Mississippi NHA)	x
Stewardship	Heritage	Mobile Tensaw Delta Federal Designation					Garner Congressional support by visits to Delta	x
Status & Trends	Water Quality	Monitoring-Bay and Tribs	Establish a monitoring program for Mobile Bay and associated tributaries				Determine where data gaps exist	x
Status & Trends	Water Quality	Monitoring-Bay and Tribs	Establish a monitoring program for Mobile Bay and associated tributaries			Monitoring	Develop a Mobile Bay water quality monitoring program that targets watersheds based on areas under most and least stress (Build off of Healthy Watersheds Initiative currently in process)	
Building Capacity	Water Quality	Monitoring-Bay and Tribs	Establish a monitoring program for Mobile Bay and associated tributaries			tools	Develop a comprehensive mapping/GIS tool to provide information on water quality by watershed (ex. Florida WaterAtlas.org)	
Building Capacity	Water Quality	Monitoring-Bay and Tribs	Establish a monitoring program for Mobile Bay and associated tributaries	RESTORE/NRDA funds, Longterm monitoring through NRDA/NOAA, strong University network	Potential loss of beach pathogen funding, No State funding dedicated to WQ monitoring, Lack of understanding/synthesis of data for the Bay, Lack of a Mobile Bay data clearing house (portal), Lack of a tool for the public to view data		Emphasize WQ in the State planning document	x

Status & Trends	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers	<ul style="list-style-type: none"> <li>1) Green movement (eg 100/1000)</li> <li>2) Restore Act, NRDA, CIAP, potential funds related to DWH</li> <li>3) RSM/Beneficial users/"Engineering w/nature"</li> <li>4) General permit AL10</li> <li>5) Coastal AL economy/tourism</li> <li>6) increased education/presentation of alternatives</li> <li>7) Natural marsh/donor availability</li> <li>8) coastal economy &amp; tourism modeling by academic institutions</li> <li>10) new GSA shoreline characterization inventory</li> <li>11) meaningful collaboration between municipalities, state, federal agencies and academia</li> <li>12) community inpractice</li> <li>13) wave climatolory study - B. Webb, Mobile Bay.</li> </ul>	<ul style="list-style-type: none"> <li>1) SLR &amp; climate change - increased frequency and intensity of storms</li> <li>2) Interruption of sand transport by ship channel</li> <li>3) SLD prohibition of fill below MHW</li> <li>4) funding availability</li> <li>5) private property rights</li> <li>6) inadaguete definition of MHW/shorelines</li> <li>7) ADEM prohibition of sand retention structures</li> <li>8) current policies/regulations &amp; permitting</li> <li>9) maintenance/updating of shoreline inventory</li> <li>10) lack of available culch</li> <li>11) BP oil mats</li> </ul>	Research	continue research to evaluate past and future SL stabilization measures;	x
Status & Trends	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				ID long term beach sand resources	x
Status & Trends	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				make data available to researchers and other interests	x
Status & Trends	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				undertake research to define distribution of residual oil impacts	x
Restoration	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Ensure that dredged sand is restored to littoral sand transport system.	x
Building Capacity	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers			Tools	secure funding for shoreline restoration and maintenance	x
Building Capacity	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Change State regulations to allow for placement of fill seaward of MHW	x
Building Capacity	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Develop strategy for storm protection and restoration	x
Building Capacity	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Encourage collaboration between agencies and b/t agencies, academia, and stakeholders (community in practice/MBNEP)	x
Restoration	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers			Habitats	Pilot experients combining marsh creation with sand beach establishment in strategic locations	
Restoration	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers			Habitats	Retrofit armored bay shorelines with more natural shorelines using living shorelines and pocket beach technologies in bays & backwaters.	

Stewardship	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Identify, design and construct HIGHLY visible demonstration projects in different locations and conditions to natural shorelines.
Building Capacity	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers			training	Conduct workshops to educate property owners and contractors on benefits of sustainable shoreline management including use of living shoreline technologies (Coastal AL Living Shorelines initiative)
Stewardship	Coastlines	More "natural" shorelines on bays, backwaters, and rivers	More "natural" shorelines on bays, backwaters, and rivers				Establish steering group to meet biannually to recommend demonstration/pilot projects, regulatory revisions, etc.;
Building Capacity	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			technical assistance	Build coalition of Commercial and Recreational Fishermen to cooperatively address fishery issues of common interest (use Gulf States Marine Fisheries Commission as model)
Building Capacity	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			technical assistance	Pilot watershed consortiums in priority watersheds to plan for and maintain watersheds through collaboration across geopolitical boundaries
Building Capacity	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			tools	Use marine spatial planning techniques to more efficiently balance conservation, restoration and multi-uses of our fishery resources
Stewardship	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			Outreach	Engage recreational and commercial fishermen in collaborating for data gathering

x

x

Stewardship	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			Citizen Involvement	Engage Industry in participating in ongoing restoration and stewardship activities (Both Commercial Fishing and other)
Building Capacity	FISH	Peaceful coexistence	Coastal Alabama is a model for maintaining the peaceful coexistence of multi-users of our fisheries resources (commercial and recreational fishers) (From "Promote peaceful coexistence of commercial and recreational fishermen)			policy	Develop mechanism for increasing resources to support additional enforcement of fisheries regulations
Status & Trends	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)	<ul style="list-style-type: none"> <li>1) Diverse habitat</li> <li>2) F&amp;W Foundation funding and NRDA funding</li> <li>3) Communities including SLR in HMP</li> <li>4) More acceptance of SLR ideas</li> <li>5) Can envision the effects because we have seen them</li> <li>6) Poor economy can help you make the case</li> <li>7) BP funding for research</li> <li>8) RESTORE, Clean H2O, NRDA</li> <li>9) Current experience with disasters (natural and manmade)</li> <li>10) CRD report (board based)/ Presidential Commission Report/ DOT Regional transportation plan</li> <li>11) Local officials responsible for restore funds</li> <li>12) Existing tools: SLR viewer/GIS mapping to ID restoration areas</li> <li>13) Developers open to LID/New techniques</li> <li>14) Have baseline data for SLR</li> </ul>	<ul style="list-style-type: none"> <li>1) Need more awareness of climate issues</li> <li>2) Popular place to live and retire (development pressure)</li> <li>3) Federal disaster response might not be what the local community needs</li> <li>4) Lack of cause and effect (not responsible for actions)</li> <li>5) Post storm rebuilding not appropriate</li> <li>6) Disasters make localities more well known</li> <li>7) Growth in sensitive areas</li> <li>8) Lack of regulations to protect habitats</li> <li>9) No model ordinances</li> <li>10) Need for post-disaster redevelopment plan</li> <li>11) Political will (other voices not heard in the decision making process)</li> <li>12) Apathy</li> <li>13) Bad economy</li> <li>14) Lack of showing economic benefit (what is in it for me) to people using the resources</li> </ul>	Research	Consolidate hazard data (SLR, temperature, flood, climate) and forecast impacts to be used by planning bodies and elected officials.
Status & Trends	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)				Identify data and information gaps for each value and facilitate process to fill the gaps.
Restoration	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)				By 2016 protect, enhance or restore 1,000,000 acres of aquatic and upland habitations.
Building Capacity	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)			Tools	Develop/update aquatic and upland habitat inventory for restoration, protection and enhancement (Habitat Tool)

Building Capacity	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)			Policy	Develop plans to protect sensitive habitats through regulation and incentives, including an evaluation plan for tracking progress/success.	
Building Capacity	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)			Tools	Better utilize the habitat prioritization tool	
Building Capacity	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)			Policy	Develop and facilitate implementation of model ordinances and incentive packages that institutionalize the use of low impact development practices in communities.	
Building Capacity	Resiliency	Planning	Improve planning and implementation - Develop plans with an environmental aspect (i.e. transportation)			Direct Assistance	Secure funding to implement actions to improve resilience that have been identified by communities that have completed the Community Resiliency Index. Work with Regional Planning Commissions and others to identify funding alternative and agency coordination opportunities	
Status & Trends	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s				emphasize WQ in State planning document	x
Status & Trends	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s				Healthy Watersheds Initiative	x
Status & Trends	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s	MBNEP leadership in watershed planning efforts	No State funding dedicated to water quality monitoring, strong University network		WMPs are developed to include assessment and monitoring programs	x
Building Capacity	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s			Tools	Create prioritized list of Watersheds for planning efforts	
Building Capacity	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s			Tools	Establish procedure for/prepare Comprehensive Watershed Management Plans at the Hydrologic Unit Code (HUC) 12 scale that are based on quantitative data on impairments/health, address EPA's nine key elements, and include a multi year monitoring plan	
Restoration	Water Quality	planning-WMP Coastal HUC 12s	Watershed Plans are developed for coastal HUC 12s			Habitats	Develop fresh/brackish water SAV restoration program that coordinates activities with the development and implementation of watershed management plans in Coastal HUC 12s	
Status & Trends	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Research	Compare historical fishing sites to historical shoreline with that of today's shoreline and fish production	

Status & Trends	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Research	Conduct socioeconomic research on attitudes, perceptions and beliefs related to fisheries (include assessment of business losses both commercial fishing and support services)
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			technical assistance	Identify ways to mitigate the rising cost of insurance for commercial fishermen
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Policy	Create Fisheries Industry Parks that provide land/water/access for lease and new support business development
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			policy	Create oyster farm enterprize zones to provide alternative livelihood for traditional fishing families
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Direct Assistance	Develop safe harbor in Bayou La Batre and Bon Secour River
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Direct Assistance	Modernize and Improve Fishery infrastructure including boats, processing and packaging equipment and training to build a more resilient industry
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			policy	Develop/ Adopt oyster Aquaculture Policy/Legislation to reduce barriers to develop industry/entry
Building Capacity	FISH	Preserve Fishing Communities/Access	Conserve and improve working waterfronts and preserve fishing communities			Direct Assistance	Pilot a "model working waterfront" initiative- Include microfinance Program (modeled after Grameen Bank) to provide low interest loans to new or existing fishermen that incorporates comprehensive support such as education of basic biology, fisheries management, licensing, business management/financing and other services to professionalize fishermen
Status & Trends	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)	1) Planning groups 2) Well established stakeholders 3) Established organizations for management of sites 4) Establishment of historical societies	1) Diversity of communities and counties 2) Lack of funding 3) Tension between developers and preservers 4) industrialization of Mobile 5) Government involvement	Research	Research best practices for protecting arechaeological and historical resources adapting best practices from elsewhere to protect cultural resources.

Building Capacity	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)			Direct Assistance	Find opportunities for partnerships and collaborations between existing agencies to promote preservation and protection.
Building Capacity	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)			Policy	Investigate alternatives for mitigation for Section 106 (National Historic Preservation Act) issues
Building Capacity	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)			Policy	Incorporate cultural impacts in local planning and policy decision making.
Building Capacity	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)			Direct Assistance	Develop economic incentives for protection of cultural resources including use of conservation easements and community recognition programs
Stewardship	Heritage	Protect archaeological and historical resources	Protect archaeological and historical resources through planning and policy that considers cultural impacts. Offer legislative, regulatory, economic incentives and personal responsibility (easement and good stewardship)				Create and promote recognition program that showcases use of easements and donations and make the public aware of these opportunities.
Building Capacity	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	A dedicated funding mechanism for management of stormwater is established	Tourism tied to the environment, educational programs, RESTORE/NRDA funds, NEP leadership	Lack of understanding of connection to the Watershed, lack of political will, No overarching masterplan, we don't identify and celebrate our successes	Direct Assistance	Develop alternatives for financing stormwater management activities on an ongoing basis and pilot in conjunction with watershed management planning efforts

Same as Line 58 and Line 143...

Status & Trends	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Reduced occurrence of hypoxic events in Mobile Bay	Long term monitoring through NRDA/NOAA	No State funding dedicated to water quality monitoring. Lack of understanding/synthesis of data for the Bay	Research	Characterize nutrients in terms of their sources, transport, fate and effects on the estuary to develop an understanding of the relationships between freshwater inflow, sediments, nutrients, physical processes, and biological communities with the goal of developing nutrient criteria for the State of Alabama
Building Capacity	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced	Tourism tied to the environment, educational programs	Lack of understanding of connection to the Watershed		Better Enforcement
Building Capacity	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced				_____ to strengthen coastal MS4 programs
Restoration	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced			water quality	Restore priority watersheds in urban areas through development and implementation of comprehensive watershed management plans that target reductions in non-point source pollutants
Stewardship	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced			Outreach	Promote Alabama Smart Yards/Smart Yard Healthy Gulf
Stewardship	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced			Outreach	Create an outreach campaign that brands our coastal quality of life w/ water quality
Stewardship	Water Quality	Reduce Non-Point Sources-SW,Nutrients,other	Trash and litter entering area waterways is reduced			Citizen Involvement	Stormdrain marking, working with retailers/municipalities to increase trash collection and recycling opportunities; reduce use of single-use plastic bags; Encourage & create volunteer opportunities
Building Capacity	Resiliency	Resiliency	Build a Resilient Habitat through increased education - Public awareness/Engagement/Understanding and Action	1) Sea Level Rise data, tools, and outreach 2) More acceptance of Sea Level Rise ideas 3) Many education groups (opportunity to expand networks) 4)Existing tools: SLR viewer/GIS mapping to ID restoration areas	1) Apathy 2) Need more awareness of climate issues 3) Need education about repetitive loss 4) No unified voice- unified message - going to the public 5) Education campaigns are expensive 6) Many demands on time/resources 7) Uncoordinated efforts of education groups (working in silos) 8) Not aware of existing tools - tools need to be shared more broadly 9)Lack of funding	training	Organize annual forum to address how residents are utilizing natural resources (Book: Tragedy of the Commons) and how to use them responsibly.

x

x

Status & Trends	Heritage	Resiliency	Encourage community resiliency by recognizing and promoting ties between people and their coastal environment	1) Well established stakeholders 2) Current Values of our counties 3) Local residents to provide a historical perspective of our area	1) Diversity of communities and counties 2) Lack of funding 3) Rapid loss of water access and quality		Ethnographic study to identify the users (stakeholders), non-profit groups, historical societies, etc., and articulate the significance of each water body/watersheds (hydrologic codes) in the area.
Status & Trends	FISH	Resiliency	Increase resiliency of fishery stocks			Monitoring	Develop ecosystem based monitoring program and a centralized location for sharing monitoring data
Status & Trends	FISH	Resiliency	Increase resiliency of fishery stocks			Monitoring	Improve baseline data on fishery populations including seasonal and spatial occurrence/use by zooplankton/ichthyoplankton
Status & Trends	FISH	Resiliency	Increase resiliency of fishery stocks	Restoration effort in place and active; citizens have a vested interest; substantial fishery exists; management practices; healthy recruitment; funding and current research to increase understanding	Limited access to habitat; limited habitats; funding; all of above	Research	Conduct a metaanalysis, or systematic review, of historic data, bathymetry, water quality change and other research results to develop a status and trends baseline for fishery
Status & Trends	FISH	Resiliency	Increase resiliency of fishery stocks			Research	Develop appropriate ecosystem health indicators for use in analyzing monitoring data
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Direct Assistance	Develop consistent funding streams for research and monitoring of fisheries
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Direct Assistance	Improve access to streams for better monitoring
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Policy	Adopt AL Aquatic Nuisance Species plan
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Policy	Improve management of catches and creel limits on game fish
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Policy	Adopt slot limits on Speckled trout to build larger average fish stocks
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Tools	Conduct outreach to local governments and resource managers to inform about Sea Level Rise scenarios and adaptation planning for local fishery resources
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Policy	Support additional State capacity for fishery stock assessments and monitoring (ADCNR-MRD and ALDPH)
Building Capacity	FISH	Resiliency	Increase resiliency of fishery stocks			Direct Assistance	Support and expand Alabama Rivers and Streams Network- A statewide partnership including USFWS, CWP, TNC, GSA, ADCNR, NRCS
Stewardship	FISH	Resiliency	Increase resiliency of fishery stocks			Citizen Involvement	Engage citizens in collecting biological and water quality data for monitoring and research purposes

Status & Trends	Heritage	Resiliency	Increase resiliency of fishery stocks			Data Gathering	Conduct a Heritage Landscapes Inventory for each county to determine the value of each landscape and to identify issues relating to its preservation.
Stewardship	Heritage	Resiliency	Increase resiliency of fishery stocks			Outreach	Encourage and coordinate festivals and other public activities on the waterways of the area that celebrate the cultural/natural connection.
Stewardship	Resiliency	Resiliency	Increase resiliency of fishery stocks			Outreach	Develop three messaging and marketing campaigns that will increase better public definitions of stewardship
Stewardship	Resiliency	Resiliency	Increase resiliency of fishery stocks			Policy	Increase amount of local taxes designated for environmental stewardship programs
Stewardship	Resiliency	Resiliency	Increase resiliency of fishery stocks			Outreach	Educate the public about "what is in it for me" to make good decisions about environmental impacts. Educate to increase stewardship, definition of resilience, what are stresses, drivers, increase awareness, increase knowledge
Stewardship	Heritage	Resiliency	Increase resiliency of fishery stocks				Convene annual forum to convey information and progress to the interested public/citizenry, community meetings.
Status & Trends	Water Quality	Restore Hydrology	Hydrologic function of the estuary and Mobile Bay is improved	RESTORE/NRDA funds	Lack of understanding of connection to the Watershed	Research	Study impacts of causeway/ship channel on hydrologic function of the estuary
Status & Trends	Water Quality	Restore Hydrology	Hydrologic function of the estuary and Mobile Bay is improved			Research	Develop a better understanding of water quantity and withdrawal on the overall WQ of Mobile Bay
restoration	FISH	Restore landscape	Restore the nearshore landscape				Restore Shorelines to 1950's acreage
Status & Trends	FISH	Restore landscape	Restore the nearshore landscape			Monitoring	Develop regular SAV mapping program to better understand fluctuations in SAV coverage
Status & Trends	FISH	Restore landscape	Restore the nearshore landscape			Research	Use vigorous valuation methods to measure ecosystem services provided by fisheries habitats
Status & Trends	FISH	Restore landscape	Restore the nearshore landscape			Research	Validate Hydrogeomorphic Approach for Assessing Wetland Functions Model (HGM) with on the ground research on pristine and impacted areas
Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Develop fresh/brackish water SAV restoration program

Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Expand useage of dredge material in restoring nearshore and intertidal marshes and flats
restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Protect critical habitats that contribute to the health of fishery and water quality through acquisition, conservation easement, or other method
Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Restore hydrology to Chocolatta Bay/ John's Bend/Justins Bay by opening up the Causeway
Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Restore oyster productivity through the construction of living shorelines and planting of juvenile oysters on historic/existing reefs.
Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Restore priority intertidal marshes and flats with a combination of habitat for nursery sustainability, commercial fishing, recreational fishing, and oyster farming (Kumbaya)
Restoration	FISH	Restore landscape	Restore the nearshore landscape			Habitats	Restore priority saltmarshes (net gain of 100 acres)
Building Capacity	FISH	Restore landscape	Restore the nearshore landscape			Policy	Develop comprehensive sediment management plan
Building Capacity	FISH	Restore landscape	Restore the nearshore landscape			Tools	Develop accurate maps of existing critical habitat distributions
Building Capacity	FISH	Restore landscape	Restore the nearshore landscape			Tools	Develop/update aquatic and upland habitat inventory with identification of potential sites for restoration, protection and enhancement (Habitat Tool)
Building Capacity	FISH	Restore landscape	Restore the nearshore landscape			tools	Improve Mississippi Alabama Habitats Tool for use in making restoration decisions including but not limited to improve functionality, increase data layers, continue and expand documentation of activities
Building Capacity	FISH	Restore landscape	Restore the nearshore landscape			Tools	Promote the use of decision support tools to local governments and planners to improve coastal resource management actions, including but not limited to TNC's coastal resilience tool, NOAA's Digital Coast, MS AL Habitats Tool
Status & Trends	FISH	Species of Concern	Re-establishment of Healthy Populations of Species of Concern			Research	Conduct research to prove estuary's significance to Tarpon population health and sustainability

x

building capacity	FISH	Species of Concern	Re-establishment of Healthy Populations of Species of Concern			policy	Develop management plan for Blackmouth shiner	x
building capacity	FISH	Species of Concern	Re-establishment of Healthy Populations of Species of Concern			policy	Develop management Plan for Brighteye darter	x
building capacity	FISH	Species of Concern	Re-establishment of Healthy Populations of Species of Concern			policy	Develop restoration plan for Gulf sturgeon	x
Status & Trends	FISH	Species of Concern	Re-establishment of Healthy Populations of Species of Concern			Research	Conduct research for aquatic species of concern, including Tarpon (the State Fish) to identify key habitats, role of estuarine environment in species health, etc.	
Building Capacity	Water Quality	WQ Ed. Enhancements K12 and Elected	Increase WQ educational opportunities for residents, K-12 students, elected officials	Strong University network, educational programs, NEP leadership	Lack of understanding of connection to the Watershed, We don't identify and celebrate our successes	training	Expand stormwater management training opportunities (Green infrastructure, LID, cost of LID v. traditional development) through the use of electronic media	
Stewardship	Water Quality	WQ Ed. Enhancements K12 and Elected	Increase WQ educational opportunities for residents, K-12 students, elected officials			Citizen Involvement	Expand opportunities for community members to participate in protecting water quality (ex. Muddy WW, Estuary Corps, AWW, NEMO)	
Status & Trends	Water Quality	WQ Ed. Enhancements K12 and Elected	Increase WQ educational opportunities for residents, K-12 students, elected officials			Community Reporting	Develop a "Scorecard of Estuary Health" to improve dissemination of status and trends information related to water quality/estuary health. Provide annual updates and publish a comprehensive State of the Bay every 3 years	
Stewardship	Water Quality	WQ Ed. Enhancements K12 and Elected	Increase WQ educational opportunities for residents, K-12 students, elected officials			education	Identify and evaluate current educational programs related to water quality, identify the gaps, and create new programs to address those gaps	