NOAA Restoration Projects and Priorities

Dionne Hoskins-Brown, Ph.D.
Fishery Biologist, SEFSC
Director, NOAA Programs, SSU
## REFERENCES

### NOAA AND U.S. DEPARTMENT OF COMMERCE FY22-26 STRATEGIC PLAN CROSSWALK

<table>
<thead>
<tr>
<th>NOAA STRATEGIC GOALS</th>
<th>DOC STRATEGIC GOALS</th>
<th>DOC STRATEGIC PLAN OBJECTIVES (Commerce lead bureau is in parentheses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1 - Build a Climate Ready Nation</strong></td>
<td><strong>Goal 3 - Address the Climate Crisis through Mitigation, Adaptation and Resilience Efforts</strong></td>
<td>3.1 - (NOAA) Increase the impact of climate data and services for decision makers through enhanced service delivery and improved weather and climate forecasts.</td>
</tr>
<tr>
<td><strong>Goal 2 - Make Equity Central to NOAA’s Mission</strong></td>
<td><strong>Goal 5 - Provide 21st Century Service with 21st Century Capabilities</strong></td>
<td>5.2 - (NOAA) Strengthen coastal resilience and recreation of lands and waters for current and future generations. [5.2]</td>
</tr>
<tr>
<td><strong>Operational Excellence</strong></td>
<td><strong>Goal 4 - Foster an Information Based Blue Economy</strong></td>
<td>4.1 - (OCEANIA, All bureaus) Implement evidence-based decision making within the Department of Commerce to increase program and policy impact.</td>
</tr>
<tr>
<td><strong>Goal 3 - Foster an Information Based Blue Economy</strong></td>
<td><strong>Goal 2 - Foster Inclusive Capitalism and Equitable Economic Growth</strong></td>
<td>2.1 - (EDA) Drive equitable, resilient, place-based economic development and job growth. [2.1]</td>
</tr>
<tr>
<td><strong>Operational Excellence</strong></td>
<td><strong>Goal 1 - Drive U.S. Innovation and Global Competitiveness</strong></td>
<td>1.2 - (NIST) Accelerate the development, commercialization and deployment of critical and emerging technologies. [1.2]</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>Goal 4 - Expand Opportunity and Discovery through Data</strong></td>
<td>4.3 - (O/SEA, All bureaus) Improve Commerce data usability and advance ethical, responsible and equitable data practices. [4.3]</td>
</tr>
</tbody>
</table>
Through 2026, evidence of progress toward the Protect and Restore Marine Life and Ocean, Coastal and Great Lakes Ecosystems objective will include:

- Restoration results in ecological change and community resilience through habitat-based approaches to rebuild productive and sustainable fisheries, contribute to the recovery and conservation of protected resources and promote resilient ecosystems and communities.
- Communities are engaged in strengthening coastal resilience and economic vitality through the conservation and restoration of coastal ecosystems by pursuing locally-led and collaborative stewardship efforts.

NOAA FY22-26 STRATEGIC PLAN
Strategic Goal 1: Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability

1.1 Manage stocks for optimum yield

Work with federal, state, and other partners to address priority habitat and ecosystem restoration needs related to increasing diadromous fish access to spawning and nursery habitat.

2.1 Stabilize highest priority protected species
(All FL and Gulf related)
Current NOAA Restoration Center Programs

Transformational Habitat Restoration and Coastal Resilience Grants and Coastal Habitat Restoration and Resilience Grants for Underserved Communities

Priorities:
1) sustaining productive fisheries and strengthening ecosystem resilience;
2) fostering regionally important habitat restoration
3) enhancing community resilience to climate hazards and providing other co-benefits; and
4) providing benefit to underserved communities, including through partnerships with tribes.
1. Sustaining Productive Fisheries and Strengthening Ecosystem Resilience.

- Contribute to the recovery of threatened and endangered species listed under the Endangered Species Act (ESA) Listed Species;
- Sustain or help rebuild managed species which includes benefits to Essential Fish Habitat (EFH);
- Enhance the sustainability of saltwater recreational fisheries by the restoration of habitat that supports the National Saltwater Recreational Fisheries Policy and Implementation Plans;
- Improve habitat to support native fish species of the Great Lakes.

2. Fostering Regionally Important Habitat Restoration.

3. Enhancing Community Resilience to Climate Hazards and Providing Other Co-benefits.

4. Providing Benefit to Underserved Communities
Evaluating the Use of a Biodegradable Hardscape for Oyster Reef Habitat Restoration Application in Georgia Estuaries (CIG Cycle 23)

Oyster Reef Restoration & Monitoring
Benthic Ecology Lab at Savannah State University

Restoration Highlights
- Historic decline of oyster reefs has emphasized the need for successful restoration projects
- Researchers at Savannah State University have restored oyster reef habitat using bagged oyster shell and a plant-based material called Oyster Catcher to study which substrate is most successful in Georgia's estuaries
- 2 reef restorations (1 bagged shell & 1 Oyster Catcher) were completed in June 2022 along the shoreline of the Skidaway Island State Park and are actively being monitored

Monitoring
Oyster Reef Growth & Development:
- Oyster Density - number of oysters per square meter
- Oyster Length - most common size oysters are measured in mm
- Density - number of oysters per square meter
- Aerial Surveys - survey of restored areas to monitor the growth of reefs over time

Use of Biodegradable Oyster Reef Hardscape:
- Gill Nets, Mackerel Traps, & Crab Pots - survey of the fish, crabs, and shrimp to establish the successful restoration
- Abundance of Invertebrates - underwater visual surveys of crabs, mussels, and other hardy invertebrates
- Volunteer Staghopper Surveys - engaging local residents to monitor the recovery of the reef by counting pop-up staghopper species

Habitat Restoration to Support Resilience in the Gullah Geechee Corridor National Heritage Area
Strategic Goal 2: Conserve and recover protected species while supporting responsible fishing and resource development

2.1 Stabilize highest priority protected species

- Invest in research to improve and guide ESA consultations, recovery plans, and habitat restoration.
- Focus limited resources for Gulf of Mexico Bryde’s whale conservation on high-priority areas, such as early engagement in Gulf restoration, advising on the siting of offshore activities that could impact the species, and recovery planning.
- Collaborate to respond to and research the major disease outbreak affecting corals in the Caribbean and along the Florida reef tract; support coral nursery genetic management; collaborate with partners to implement reef-scale coral restoration initiatives that build on recent restoration successes; and research other new interventions, review their policy implications, and develop decision-making frameworks for their use as recommended by the National Academies of Science.
- Support efforts to compensate the public for injuries to protected resources by collaborating with the Office of Habitat Conservation to inform injury assessments and determine appropriate restoration measures.
5.10.2. **Action:** Develop a National Goal of *increasing wetlands* and other protective coastal ecosystems in endangered areas (suffering wetland and marsh losses) and identify partners to support this effort.

Lead Office: NOS Office for Coastal Management  
Supporting Offices: National Centers for Coastal and Ocean Science, NOAA Restoration Center, with support from external partners including US Army Corps of Engineers and the National Fish and Wildlife Foundation  
Due Date: FY21
Result: A total of 5 active GA sites predicted to be inundated with just 1 foot of sea level rise.