



NOAA
FISHERIES

NOAA Fisheries 101



Leadership



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NOAA
Assistant
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for Fisheries



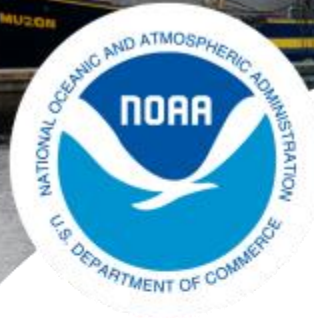
Paul Doremus
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Administrator for
Operations



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Director of Scientific
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Fisheries' Impact & Objectives

Economic Impact

- Commercial and recreational marine fisheries and aquaculture contribute more than \$89 billion annually to the national economy
- Generates \$195 billion in sales impact
- Supports over 1.7 million jobs economy-wide
- Over 70 million recreational fishing trip each year

Objectives

- Living marine resource protection and sustainability through ecosystem based management
- Protection and targeted restoration of marine habitat
- Scientific research to inform societal decision-making



**NOAA
FISHERIES**



Major Legislative Drivers

- Magnuson-Stevens Fishery Conservation and Management Act (MSA)
- Endangered Species Act (ESA)
- Marine Mammal Protection Act (MMPA)
- National Environmental Policy Act (NEPA)
- Oil Pollution Act (OPA) & RESTORE Act
- National Aquaculture Act

Major Program Areas

- Sustainable Fisheries
- Protected Resources
- Habitat Conservation
- Science and Technology
- Aquaculture
- Enforcement
- International Affairs



Where We Work

West Coast Region

- Regional Office: Seattle, WA
- Science Centers:
 - Seattle, WA
 - La Jolla, CA
- Laboratories:
 - Seattle, WA
 - Manchester, WA
 - Pasco, WA
 - Newport, OR
 - La Jolla, CA
 - Santa Cruz, CA

Greater Atlantic Region

- Regional Office: Gloucester, MA
- Science Center: Woods Hole, MA
- Laboratories:
 - Woods Hole, MA
 - Narragansett, RI
 - Milford, CT
 - Highlands, NJ
 - Washington, DC

★
NOAA Headquarters
Silver Spring, MD
Annapolis, MD

Alaska Region

- Regional Office: Juneau, AK
- Science Center:
 - Seattle, WA (Sand Point)
- Laboratories:
 - Lena Point, AK
 - Auke Bay, AK
 - Kodiak, AK
 - Seattle, WA

Southeast Region

- Regional Office: St. Petersburg, FL
- Science Center: Miami, FL
- Laboratories:
 - Miami, FL
 - Beaufort, NC (shared with NOS)
 - Panama City, FL
 - Pascagoula, MS
 - Galveston, TX

Pacific Islands Region

- Regional Office: Honolulu, HI
- Science Center: Honolulu, HI
- Laboratory: Honolulu, HI



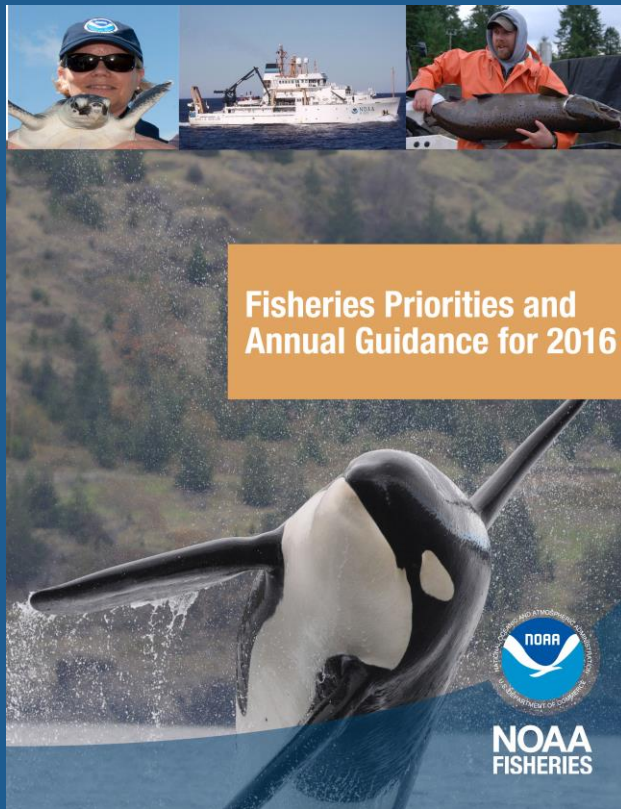
NOAA Fisheries Priorities: FY 2016

Primary NOAA Fisheries mandates for science-based living marine resource stewardship:

—*To prevent overfishing and rebuild stocks*

—*To recover and conserve protected resources*

All other NOAA Fisheries programs, projects, and activities support these core mission mandates.



Sustainable Fisheries: Ending Overfishing & Rebuilding Stocks

- Maximizing the productivity and sustainability of fisheries, ending and preventing overfishing, rebuilding fish stocks, and reducing uncertainty and management complexity
- Providing economic opportunity, recreational access, and a safe and sustainable food source for the Nation
- Supporting 8 Regional Fishery Management Councils
- Partnering with 4 Interstate Commissions and coastal States
- 46 Fishery Management Plans and 449 regulated stocks/stock complexes



Sustainable Fisheries – High Priorities

- End Overfishing and Rebuild Stocks
 - ✓ National Standard 1 Revisions
- Flexible and Responsive Management
 - ✓ Meet biological objectives
 - ✓ Balance socio-economic needs
 - ✓ Integrate ecosystem considerations
- International efforts to end overfishing and combat illegal, unregulated, unreported fishing
- Reducing bycatch and discards
- Disaster program assistance
- Sustainable aquaculture development
- Magnuson-Stevens Act Reauthorization
- Expand the use of electronic monitoring and reporting



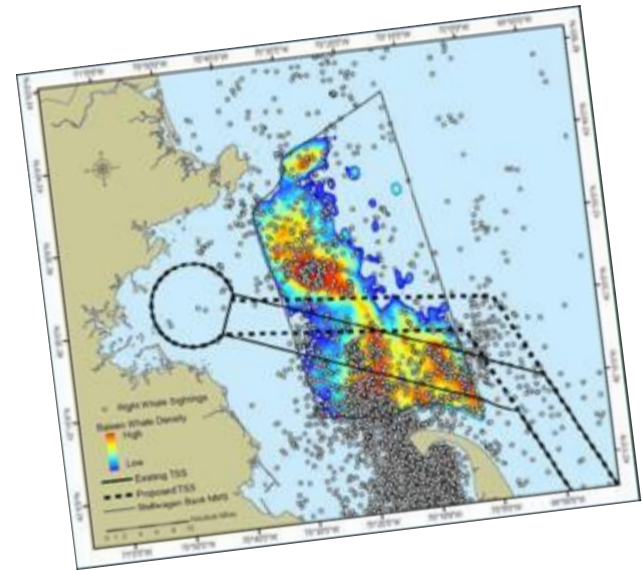
Protected Resources

- Mission to protect, recover, and conserve listed species, marine mammals and their habitats
 - ✓ Jurisdiction over 129 endangered and threatened marine species (includes 43 foreign species)
 - ✓ 117 marine mammal species protected by the MMPA (61 of those species are in U.S. waters)
- Tools for protection, recovery, and conservation
 - ✓ Listings
 - ✓ Critical Habitat
 - ✓ Conservation Plans and Research
 - ✓ Recovery Plans
 - ✓ Consultations and Permitting
 - ✓ Permits for Research and Enhancement
 - ✓ Grants – Prescott, Species Recovery
 - ✓ Conservation Regulations
- Strandings and entanglement response
 - ✓ Partnering with health and stranding networks on turtles and marine mammals



Protected Resources – High Priorities

- Implement Strategic Plan
- Numerous Listing Actions
- Recovery of Endangered Species
 - ✓ Species in the Spotlight Initiative
- Protection of Marine Mammals
 - ✓ Updating acoustic criteria
 - ✓ Unusual mortality events
- Partnerships (leveraging resources)
- Adaptation Management and Climate Change
- Agency Responsiveness
 - ✓ Take authorizations
 - ✓ Consultations
 - ✓ Responding to listing petitions
- Joint review of ESA regulations to improve implementation
- Implementing Deepwater Horizon Restoration Activities for Marine Mammals and Sea Turtles



Habitat Conservation

- **Conserve habitat for fisheries and protected resources**
 - ✓ On-the-ground habitat restoration projects
 - ✓ Protect essential fish habitat and build interagency partnerships
- **Increase resilience of coastal ecosystems, communities, and economies**
 - ✓ Landscape-scale habitat conservation
 - ✓ Leverage resources with broad network of partners

- **Restore resources impacted by oil and other hazardous substance releases**

- ✓ Innovate and expedite on-the-ground restoration



Habitat Conservation – High Priorities

- **Target key habitat types**
 - ✓ Coastal wetlands
 - ✓ Corals (shallow and deep sea)
 - ✓ Rivers
 - ✓ Natural hard-bottom (e.g., oyster reefs)
 - ✓ Submerged aquatic vegetation
- **NOAA Habitat Blueprint**
 - ✓ Strategic protection and focused restoration efforts in 10 Habitat Focus Areas
 - ✓ Emphasis on ecosystem-level outcomes
- **Gulf of Mexico Restoration**
 - ✓ *Deepwater Horizon* oil spill - Natural Resource Damage Assessment
 - ✓ RESTORE Act implementation
- **Protect and restore the Chesapeake Bay**
 - ✓ 2009 Chesapeake Bay Executive Order
 - ✓ 2014 Chesapeake Bay Watershed Agreement



Science and Technology

- High-quality, timely applied scientific information for conservation and management decision-making
 - Fisheries Information and Statistics
 - Living Marine Resource Assessments
 - Economic and Social Analysis
 - Marine Ecosystems Research
 - Habitat Assessment and Research
 - Monitoring and Analysis
- 6 regional science centers and HQ Office of Science & Technology
 - Broad range of disciplines
 - Academic and international collaborations and obligations



High Priority Scientific Research

- Living Marine Resource Surveys
 - Fish, Protected Resource & Habitat Assessments
 - Develop new and improved methods for assessing abundance and distribution of trust species
- Fishery-dependent Data Collection
 - Observers and electronic monitoring
 - Landings statistics and economic information
 - Cooperative research
- Ecosystem Approaches to Management
 - Incorporate ecosystem information into living marine resource assessments
 - Ecosystem and human responses to climate change
 - Economic and social analysis
- Advanced Sampling Technology
 - Advanced acoustic/video methods, unmanned vehicle systems and signal processing technologies
 - Implement improvements and efficiencies to inform management



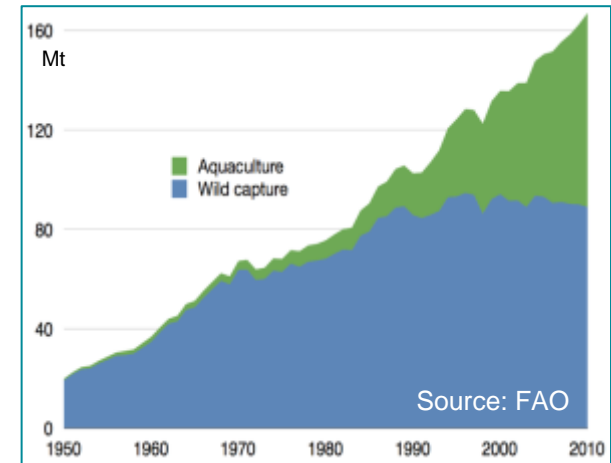
Aquaculture

- Foster U.S. marine aquaculture
 - ✓ Creates employment and business opportunities in coastal communities
 - ✓ Provides safe, sustainable seafood
 - ✓ Supports healthy ocean populations and ecosystems
 - ✓ Supports commercial and recreational fisheries
- Potential for U.S. marine aquaculture
 - ✓ Seafood industry leaders calling for action to develop aquaculture
 - ✓ Aquaculture already provides half of all global seafood, and is projected to provide nearly 2/3 by 2030
 - ✓ Domestic aquaculture industry is small but regionally critical. It is the third most valuable fishery in northeast, more than double the value of groundfish fisheries.
 - ✓ U.S. has largest potential for offshore aquaculture in the world
- Trade and food security considerations
 - ✓ US seafood imports - greater than 90% and rising; more than half from aquaculture
 - ✓ Seafood trade deficit - \$12 billion and rising
 - ✓ No ability to substantially increase seafood supply from wild fisheries. Any new production will be from aquaculture



Aquaculture – High Priorities

- Gulf of Mexico Fishery Management Plan for Aquaculture
 - ✓ Final rulemaking issued in January 2016 to establish permitting process that will enable aquaculture to develop in Gulf
 - ✓ Working with federal partners to implement a coordinated federal permitting process
- ✓ National Shellfish Initiative
 - Increase populations of bivalve shellfish in coastal waters
 - Streamline permitting and facilitate restoration
 - State initiatives in WA, CA; interest in CT, HI, OR, MS and Gulf of Mexico
- Science based “tools for rules” to inform management and decision-making
 - ✓ Feeds, siting, genetics, environmental impacts, etc.
- Technology transfer to fishermen to create jobs
 - ✓ Aquaculture can supplement fishermen's incomes
 - ✓ Example: fishermen farming mussels in New England



Law Enforcement

- Domestic
 - ✓ National Priorities – support sustainable fisheries and seafood and recovered and healthy marine and coastal species
 - ✓ Patrols
 - ✓ Investigations
 - ✓ 28 State Cooperative Enforcement Partnerships
 - ✓ Coordination with U.S. Coast Guard and other Federal Agencies
 - ✓ Compliance Assistance & Education
 - ✓ Nationwide Satellite Vessel Monitoring System
- International
 - ✓ Investigations of illegal, unreported and unregulated (IUU) fishing activity and trafficking in IUU fish and fish products
 - ✓ Technical assistance to combat IUU fishing
 - ✓ Engagement in bilateral and multilateral arrangements to combat IUU fishing
 - ✓ Port State Measures and other IUU fishing-related agreements and legislation
 - ✓ Coordination with international organizations (e.g., INTERPOL, International MCS Network)
 - ✓ Presidential Task Force on Wildlife Trafficking



*NOAA Enforcement monitors **4,500 vessels** to ensure compliance and provides data to the U.S. Coast Guard, NOAA scientists, and fisheries managers.*

International Activities

- Advance U.S. interests at international fisheries management and science organizations and other fora
- Develop international science and research partnerships
- Technical assistance to help other countries improve their stewardship of living marine resources



High Priorities

- Level the playing field for U.S. fishermen (combat illegal, unreported and unregulated fishing, reduce bycatch of protected species in foreign fisheries, improve shark conservation)
- Drive the international fisheries agenda
- Improve the monitoring of seafood imports into the United States

Fisheries and Protected Resource Issues Vary by Region

West Coast Region

- Salmon & Hydropower
- Salmon & Central Valley Water Operations
- Killer Whales
- Salmon Recovery
- California Sea Lions
- Catch Shares
- Habitat Recovery
- Pacific Highly Migratory Species
- Forage Fish

Greater Atlantic Region

- Groundfish (cod)
- River Herring
- Harbor Porpoise
- Atlantic Sturgeon
- Atlantic Sea Scallops
- Atlantic Herring
- Sea Turtles
- Right Whales
- Atlantic Highly Migratory Species

Alaska Region

- Steller Sea Lions
- Ringed and Bearded Seals
- Charter Halibut
- Declining Halibut Stock
- Cook Inlet Beluga Whales
- Salmon Bycatch
- Pebble Mine
- Observer Program Restructuring
- Unusual Mortality Event
- Arctic (Oil & Gas Development, Climate Change)

Pacific Islands Region

- Sea Turtles
- Longline Fisheries
- Hawaiian Monk Seals
- Corals (listing)
- Coral Reefs/Marine National Monuments

Southeast Region

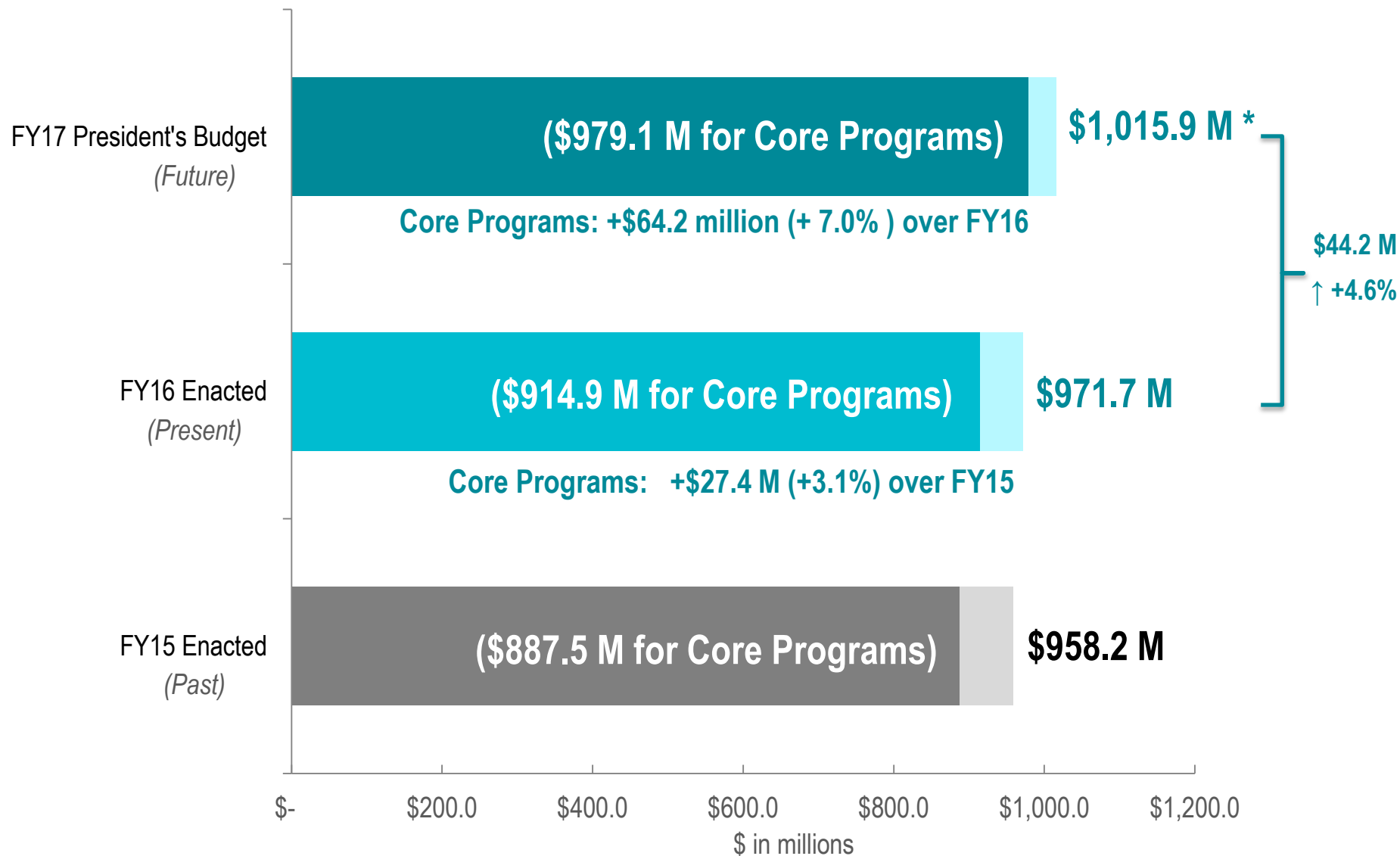
- Shrimp/Turtles
- Red Snapper, Grouper, Greater Amberjack
- Restoration & Recovery Post-Deepwater Horizon
- Corals (listing)
- Bottlenose Dolphins
- Sturgeon/Hydropower/Fish Passage
- Port Development

Emerging Issues

- Magnuson-Stevens Act reauthorization
- Supporting Gulf of Mexico restoration
- Supporting the White House's Agenda for the Arctic
- Responding to the impacts of climate change on trust resources and coastal communities
- Keeping up with the requests for listing new species
- Responding to increasing industry calls for aggressive development of marine aquaculture
- Open Data Policy per Executive Order
 - Increasing access to the results of federally-funded scientific research



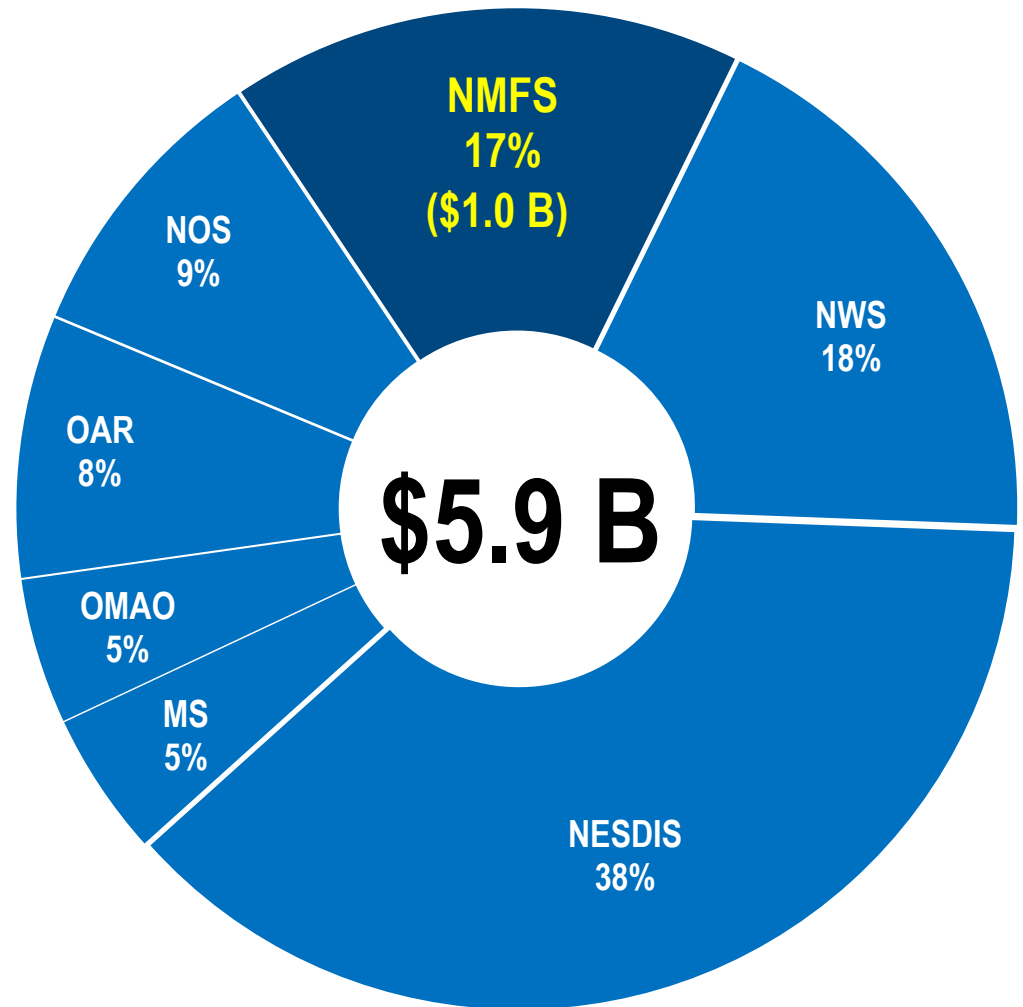
NOAA Fisheries Budget: Past, Present, & Future



FY 2016 Funding Highlights

FY 2016 Initiatives	Amount (\$ in millions)	Total Program
Species Recovery Grants	+\$1.0	\$6.0
Electronic Monitoring and Reporting	+\$7.0	\$7.0
Expand Annual Stock Assessments for Gulf of Mexico Reef Fish	+\$5.0	\$75.0
Aquaculture – Off-bottom oyster research	+\$0.6	\$6.3
Enforcement – Combatting IUU	+\$3.0	\$69.0
Salmon Management Activities	+\$1.1	\$31.5
Fisheries Habitat Restoration – Coastal Ecosystem Resiliency Grants	+\$5.0	\$10.0
Atlantic Salmon	+\$0.7	\$6.0
Interjurisdictional Fisheries Grants	+\$0.5	\$3.0
Regional Councils and Commissions	+\$0.7	\$33.5

**NOAA's proposed
FY17 budget
increased by
\$77.1 million
(1.3%) over FY
2016 Enacted
Budget**



FY 2017 President's Budget Approach

**Core Capacity
Investments**

**Advances in
Fisheries
Science and
Management**

**Strategic
Programmatic
Investments**

**Consolidated
Funding**

FY 2017 President's Budget Detail

Core Capacity Investments:

- **ESA/MMPA Section 7 Consultations** **+\$13.5M**
- **EFH Consultations** **+\$ 6.5M**
- **Pacific Salmon** **+\$ 2.3M**
- **Species Recovery Grants** **+\$16.0M**
- **NOAA Facilities Mukilteo** **+\$ 4.6M**

Advances in Fisheries Science and Management:

- **Ecosystem Based Solutions for Fisheries Mgmt** **+\$ 5.9M**
- **Aquaculture** **+\$ 1.5M**
- **Environmental and Economic Resilience** **+\$ 9.0M**
- **Observers and Training** **+\$ 1.1M**
- **National Catch Share Program** **+\$ 2.5M**
- **Distributed Biological Observatory (Arctic)** **+\$ 0.9M**

FY 2017 President's Budget Detail

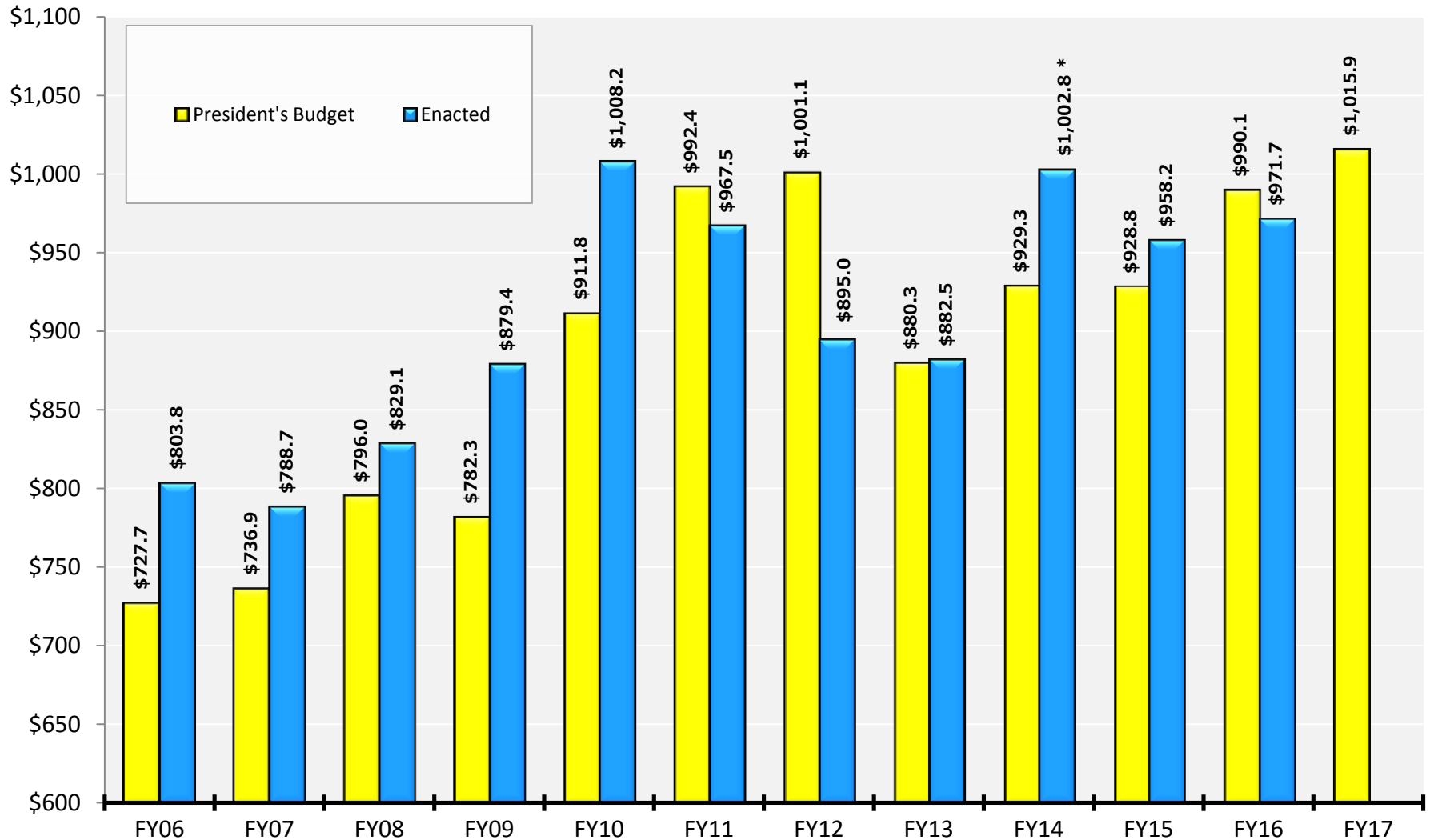
Strategic Programmatic Investments:

- **Management of Fair Trade** +\$ 1.6M
- **Cooperative Enforcement Program** +\$ 1.0M

Consolidated Funding

- **Coastal Resiliency Ecosystem Grants** -\$10.0M

NOAA Fisheries Budget Trends



*FY 2014 Spend Plan includes \$75M for the Fisheries Disaster Mitigation Fund.