Alaska Fisheries Science Center

Ecosystem Science Program Review

AFSC Overview

Doug DeMaster
Director for Science and Research
AFSC Mission

The mission of the Alaska Fisheries Science Center is to plan, develop, and manage scientific research programs which generate the best scientific data available for understanding, managing, and conserving Alaska’s living marine resources and the environmental quality essential for their existence.
Alaska Fisheries Science Center

- Employment: ~ 450 people (Federal and Contract)
- Locations:
  - Seattle, WA
  - Juneau, Kodiak, Dutch Harbor, Anchorage, Little Port Walter, and the Pribilof Islands, AK
  - Newport, OR
- 2016 Funding: ~ $61.2M initial federal allocation and $8M reimbursable; additional federal funds are often provided for project-specific purposes
AFSC Studies 5 Large Marine Ecosystems

- Gulf of Alaska
- East Bering Sea
- Aleutian Islands
- Northern Bering & Chukchi Seas
- Beaufort Sea

http://www.plosone.org/article/info:doi/10.1371/journal.pone.0011914
AFSC Partnership with the Pacific Marine Environmental Laboratory

- Decades long collaboration
- Joint cruises
- Collaborative oceanographic and biological models
- Hundreds of jointly authored publications
Setting Priorities – AFSC’s Strategic Science Plan: A Model for the Nation

• The “science side” of NOAA Fisheries has adopted the AFSC’s model of the Science Plan and Implementation Process to set research and funding priorities annually

• Each Science Center and the Office of Science and Technology now have Strategic Science Plans

• An Annual Guidance Memorandum starts the process each year
AFSC Director’s Guidance for FY16

• Emphasized two core research foci:
  • Support assessments required for federal management of fish, crab, and marine mammal stocks
  • Provide information to the North Pacific Fishery Management Council and Alaska Regional Office for management decisions, to support quota monitoring, and for legal and regulatory analyses
AFSC Director’s Guidance for FY16

Identified eight funding priorities:

1. Continued success of our observer programs and progress with electronic monitoring capabilities

2. Sustained stock assessments of groundfish, shellfish, and protected species

3. Research on process studies linking recruitment of commercially important species to environmental change

4. Research on the western population of Steller sea lions
AFSC Director’s Guidance for FY15

Funding priorities continued:

5. High-Arctic research on marine mammals, fish, and shellfish
6. Producing 20-year climate forecasts for commercially important fish and shellfish species, including the development of a Regional Action Plan to address species vulnerability to climate change
7. Research responding to FY13, FY14, and FY15 Science Program Reviews
8. Fulfilling commitments to the Bureau of Ocean Energy Management and the Gulf of Alaska Project research program funded by the North Pacific Research Board
Rating Criteria for FY2016:

**Characterize Mission Attributes**

- If AFSC did not execute this Activity, to what degree would other organizations NOT be able to provide similar capabilities?
- Is the Activity central to AFSC’s ability to achieve its strategic plan’s goals and objectives?
- How are the outputs of this Activity used? (Use in stock assessment or fishery/protected species management are rated most highly.)
- Is the Activity one of the emphasis areas in the current Annual Guidance memorandum?
Rating Criteria for FY2016:

Risk Assessment of Potential Impacts

• If AFSC did not execute this Activity, what would be the scale of the impact on local communities, stakeholders and the regional economy, i.e., what would be the degree of impact for those segments that are impacted?

• If AFSC did not execute this Activity, how severe would the risks be to the core scientific, technical and organizational competencies required to execute AFSC’s mission functions today and in the future?

• If AFSC did not execute this Activity, the political risk to NOAA/NMFS would be: (very high to none)
## AFSC Resource Status
### FY16 Permanent Allocation

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td>$12,633,566</td>
</tr>
<tr>
<td>Fish</td>
<td>$35,860,534</td>
</tr>
<tr>
<td>Enforcement / Observers</td>
<td>$7,739,814</td>
</tr>
<tr>
<td>Habitat Conservation and Restoration</td>
<td>$197,285</td>
</tr>
<tr>
<td>Other Activities Supporting Fisheries</td>
<td>$4,762,631</td>
</tr>
<tr>
<td><strong>AFSC Allocation:</strong></td>
<td><strong>$61,193,830</strong></td>
</tr>
</tbody>
</table>
Investing in Ecosystem Science

• Approximately 15% of AFSC staff focus on climate and ecosystem science
• Investment, now including operations, of about $9M
AFSC and National Mission and Resources Compared

**AFSC Mission**
- 50% MMPA Assessments (AFSC value expressed as percent of National value)
- 50% NOAA Arctic Research
- 50% NMFS Fishery Observers
- 46% FSSI Stock Assessments
- 66% Continental Shelf
- 45% U.S. LMEs
- 50% Landed Fishery Catch

**AFSC Resources**
- 10% NMFS Labor (FTE FY15)
- 12% NOAA Vessel Time
- Between FY11-15: Level Labor Costs = 12% reduction in staffing (~ 40 FTEs)
- Level to decreasing budget allocations
AFSC Science Supports Commerce

• More than half of the over 9 billion pounds of fishery landings in 2012 were from Alaska

• More than a third of the over 5 billion dollars of fishery landings in 2012 were from Alaska
Questions?