UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center
7600 Sand Point Way N.E.
Seattle, WA 98115-6349

February 2019 North Pacific Fisheries Management Council meeting

Agenda B3: AFSC Report

2018-19 Government Shutdown update

Most of the Alaska Fisheries Science Center (AFSC) staff were furloughed from December 22 to January 25. This past week, all AFSC staff returned to work with much enthusiasm and anticipation to reconstitute mission critical operations. Administrative, survey, research, and meeting obligations are being identified and prioritized with our stakeholders to lessen the impact as much as possible. It will take some time for AFSC operations to get back to normal and there will likely be functions that will not be completed in their entirety. January is an important month, not only to support active fisheries, but also to establish contracts to support laboratory, field research, contract staffing, fisheries and protected resources surveys, and observer operations. Important and innovative research and analysis is also conducted during the winter months in our laboratories and in support of future surveys and assessments. AFSC leadership is developing contingencies for the loss of important functions and planning for the remainder of FY19 and FY20.

Based on guidance from NOAA headquarters, critical operations supporting core property and safety requirements to the AFSC mission were identified to function at a reduced level during the shutdown. Overall, AFSC staff performed admirably during the shutdown to serve the people and communities in Alaska, Washington, and Oregon who depend on us to complete our mission.

Facility infrastructure support

AFSC staff at each of our main campuses (Seattle, Juneau, Kodiak, and Newport) maintained and monitored each facility to ensure that property was secure and laboratories would be functional upon return.

Observer support

AFSC staff in the Fisheries Monitoring and Analysis program conducted important safety training to serve over 190 observers who were deployed to numerous fisheries that opened in January. In addition to multi-week training this included health and safety support and assurance that IT infrastructure was available for data to be submitted during the fisheries. However, we were not able to conduct observer debriefings during the shutdown so staff are working diligently to provide needed support to the observers and address data quality.

GOA acoustic pollock survey
A partial Gulf of Alaska winter pre-spawning pollock acoustics survey will be conducted in March. The NOAA Ship *Oscar Dyson* is in drydock for major repairs so the NOAA Ship *Bell M. Shimada* will conduct the survey. NOAA Fisheries and Office of Marine and Aviation Operations (OMAO) are working to reconstitute the Shimada operations and prepare the acoustic and fisheries equipment to conduct the survey. Unfortunately, due to the delay in starting the survey, the first two legs (in the Shumagin Islands and outer Kenai regions) will not be conducted (see Figure 1). The survey will focus on the largest portion of the pollock stock in Shelikof Strait. Acknowledging the expected early timing of pollock spawning aggregations due to warming conditions, the survey will commence earlier in March than in previous years.

Other surveys
AFSC staff are diligently planning for the following spring and summer surveys. It is unknown if there will be additional delays as support functions (contracting, procurement, etc.) are brought back on line.

- International Year of the Salmon survey in the Gulf of Alaska (February)
- Biennial Gulf of Alaska larval pollock & cod survey (spring)
- Aleutian Island Pacific cod tagging study (NPRB) to address continuity between survey and fishery biological data
- Annual sablefish longline survey (May)
- Annual Bering Sea multi-species bottom trawl survey (May)
- Biennial Gulf of Alaska multi-species bottom trawl survey (May)
- Biennial Gulf of Alaska acoustic survey for pollock, rockfish, and forage fish (depends on NOAA Ship Oscar Dyson status) (summer)
- Bowhead whale abundance survey (summer)
- Annual eastern Bering Sea ecosystem & early life history recruitment surveys (summer)
- Biennial northern Bering Sea bottom trawl survey (August)

AFSC bottom trawl surveys and cooperative research
At this time, the AFSC will charter four of the five vessels required to conduct the annual eastern Bering Sea and biennial Gulf of Alaska bottom trawl surveys. In addition to decreasing base funds from previous years, inflationary labor costs to maintain staffing and unexpected facility costs have risen. To support the FY19 surveys, AFSC will fund two vessels with annual base funds, one vessel with funds unspent in FY18 (due to no EBS slope survey in FY18), and one vessel with temporary funds from the NMFS Office of Science and Technology program. To determine which regions would be covered by the four vessels in FY19, AFSC considered the priorities from the SSC sub-committee that met in September 2018 to discuss trawl survey options. Specifically,

I. Prioritize the regions surveyed: 1) eastern Bering Sea shelf, 2) Gulf of Alaska, 3) Aleutian Islands, 4) northern Bering Sea, and 5) Bering Sea slope. The four vessels in FY19 will focus on the eastern Bering Sea (2 vessels) and the Gulf of Alaska (2 vessels) (Figure 2).
II. If we can only fund four vessels and additional funds are available, the Northern Bering Sea survey should be a priority. The full northern Bering Sea area will be sampled at 20 nautical mile station spacing similar to 2017.

In the October 18, 2018 letter to NOAA Fisheries Assistant Administrator Oliver, the Council suggested that the AFSC explore a programmatic review of all field and laboratory activities to possibly restructure spending so at least four vessels are funded to conduct the bottom trawl surveys. The AFSC has a rigorous prioritization process to ensure it funds its highest priority activities, particularly stock assessments and the surveys needed to support them (Figure 3).

FY19 budget

We are evaluating FY19 budget scenarios to ensure our core priorities (including four chartered survey vessels) are covered. Of the activities identified by AFSC leadership as important to meet the mission in 2019 (including facilities and administrative support), about 32% will be funded with base funds. In recent years, the breakdown of the total AFSC budget (base and discretionary) has been 82.8% labor and fixed costs (Figure 4) while staff numbers have decreased 17%. The fish surveys are mostly funded from the fish operations portion of the budget (~10.8%). Once FY19 budgets are clearer, AFSC staff will provide a more detailed "State of the Alaska Fisheries Science Center" presentation to the Council.

FY20 budget outlook

The outlook for the FY20 budget and expectation for survey vessels is unknown, but we anticipate challenges similar to FY19. We will likely have funding for two vessels if our base allocations remain flat. We are working with NOAA Fisheries Headquarters and have engaged in discussions with industry sectors regarding the future of the surveys and cooperative research opportunities.

Other survey considerations

In addition to exploring additional funding options and realigning research priorities, AFSC staff are considering possible modifications to existing surveys that provide efficiencies while maintaining a reasonable expectation in uncertainty in the assessment and management process. Several analyses are being considered to understand the relative value of different surveys to our stock assessments, increase efficiencies, and optimize the impact of survey data on stock assessments. This effort is being conducted with our agency and academic partners nationally and internationally. The International Council for Exploration of the Sea (ICES) workshop on Unavoidable Survey Effort Reduction, originally scheduled for January, was postponed because of the shutdown and will be rescheduled. Results from this workshop will be relevant to future surveys in Alaska. Future discussions with the NPFMC should include how we might respond to any further reductions in survey vessel support. In particular, risk assessments need to be conducted that include the effects of changing survey frequency or decreasing sample density in time or space (as we are doing in 2019 in the Gulf of Alaska).

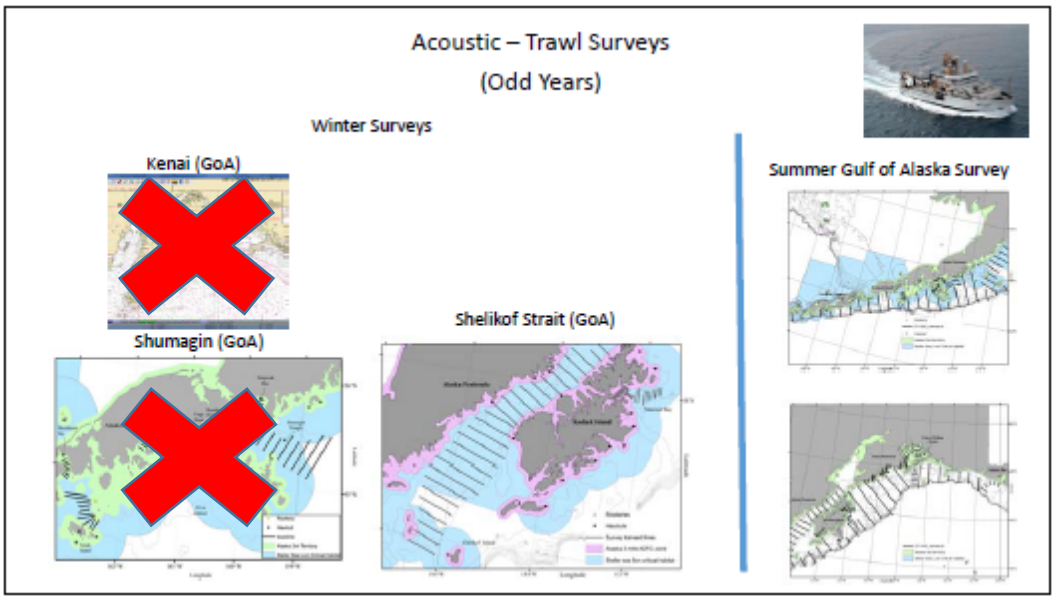

Figure 1. Acoustic trawl surveys expected to be conducted in 2019. The Kenai and Shumagin Islands portions of the Gulf of Alaska winter survey will not be conducted.

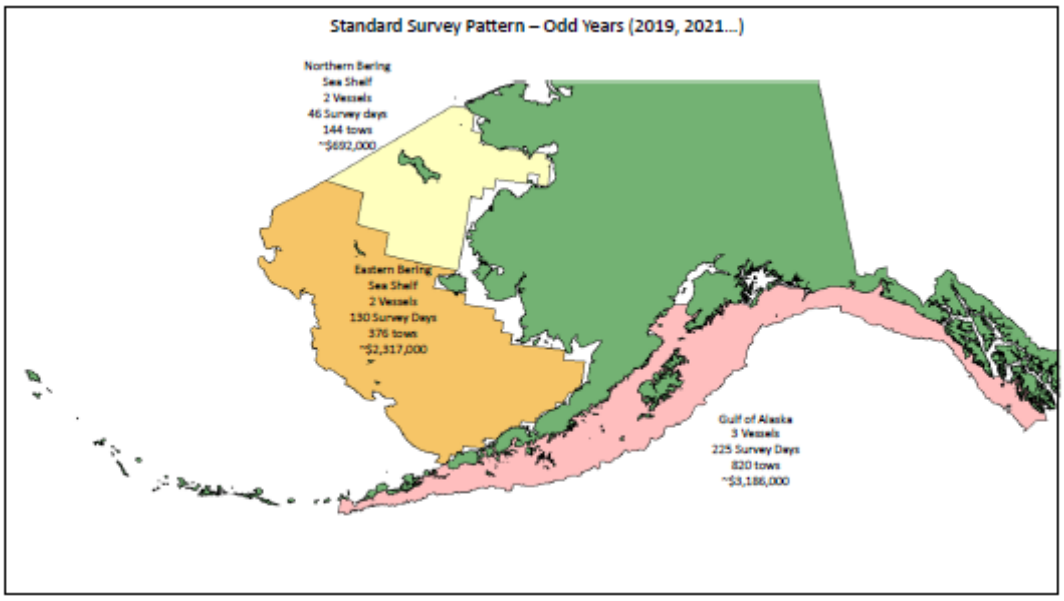

Figure 2. Bottom trawl surveys expected to be conducted in 2019 include a full eastern Bering Sea, full northern Bering Sea, and partial Gulf of Alaska survey.

FY19 Fish Science Priorities for Alaska Fisheries Science Center

Research Activity
Science Administration
Core Fish Surveys for Stock Assessments
Stock Assessments
Improvement to Stock Assessments
Process Studies that Inform Stock Assessments
Ecosystem Modeling
Socioeconomics
Arctic Fish and Ecosystem Research
Process Studies Informing Ecosystem Understandings
Survey Improvements (e.g., availability studies)
Habitat

Figure 3. General prioritization of FY19 AFSC research proposals.

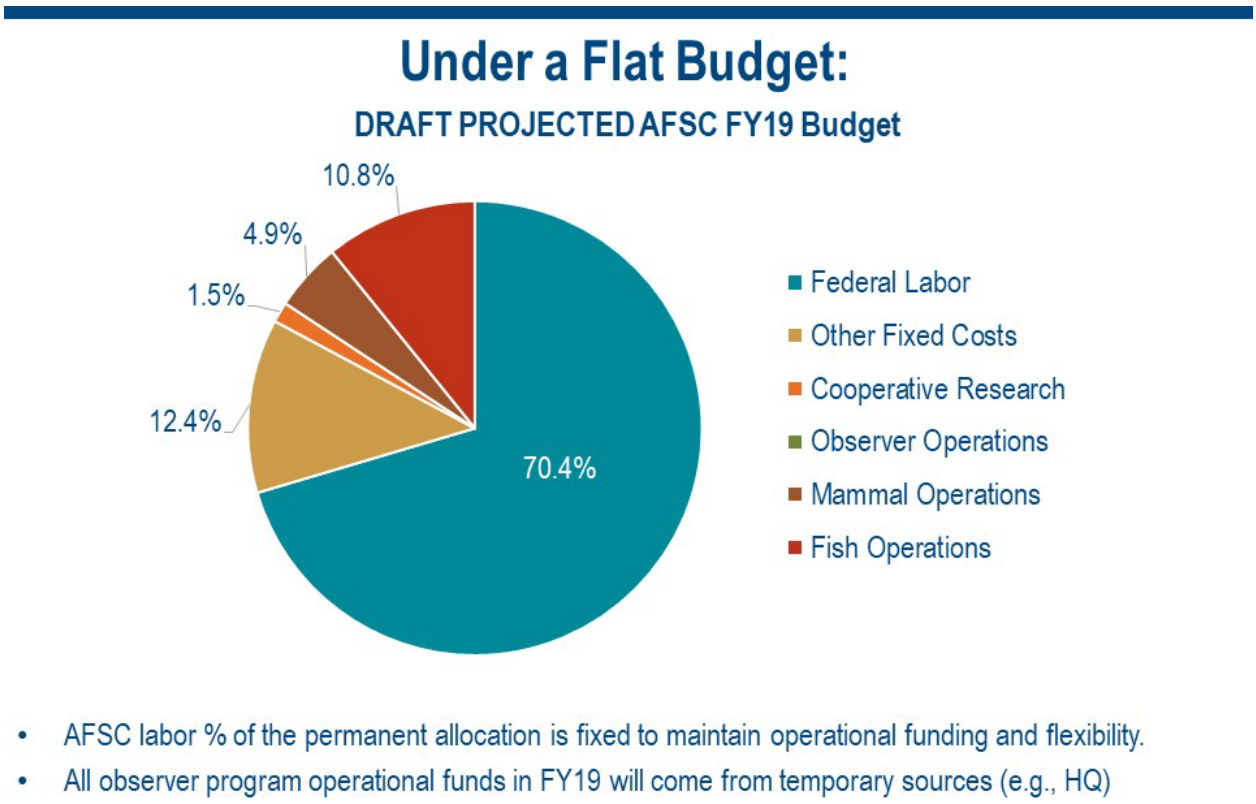

Figure 4. DRAFT projected FY19 budget breakdown.