Tab 5
October 2021

Science Update

NOAA FISHERIES

- Status of Surveys
- Next-Gen Data Acquisition Plan (NG-DAP)

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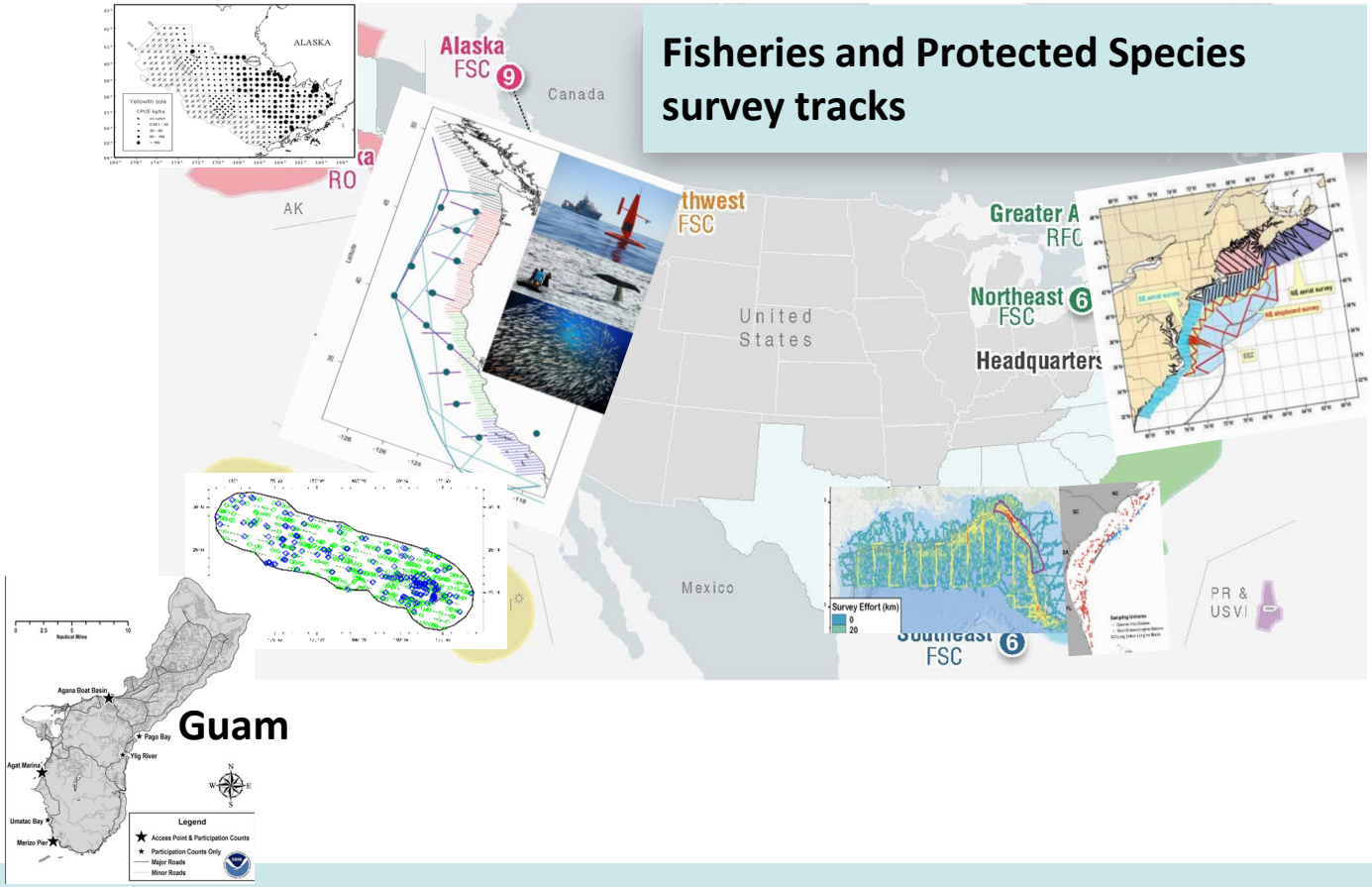
CCC (Virtual Meeting)
October 2021

FY 21 Survey Overview

Status 9/30/2021

- ~48 surveys (some are multiple-leg)
  - 28 OMAO
  - 20 Charter
- 1761 DAS
- Six surveys are currently underway (additional 458 DAS)
- Currently finalizing the **FY22** FAP (Fleet Allocation Plan)

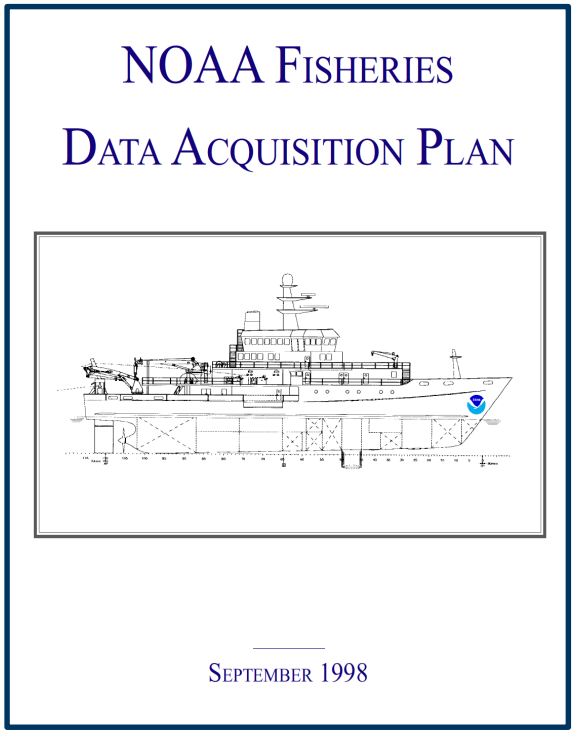


Completed FY21 Days at Sea (DAS) by Center

Center	Charters & Select Small Boats (DAS)	White Ships (DAS)	Totals (DAS)
AFSC	602	94	696
NEFSC	142	173	315
NWFSC	0	73	110
SEFSC	80	314	430
SWFSC	0	101	101
PIFSC	60	122	182
Total	**884**	**877**	**1761**

In addition to the DAS completed by "NOAA White Ships" and Charter vessels, an additional 73 DAS were completed by small boats and uncrewed systems (e.g., Saildrones).

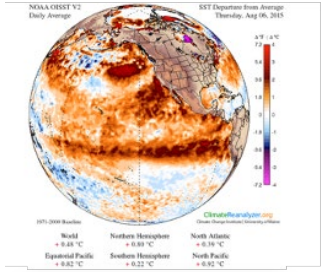
DAP (1998)



The 1998 Plan (DAP) determined (among others):

- … that a **new generation of FRVs** was needed; thus the need to construct a core fleet of purpose-built, dedicated FRVs, and integrate them with chartered vessels from the academic and private industry fleets.
- **Acoustic quieting** will reduce behavioral responses of species targeted in surveys and minimize noise interference to hydroacoustic signals.
- The ships must have adequate berthing to support a full scientific complement, and be configured to support **laboratories, computers and multi-gear** (e.g., trawl, longline, oceanographic) capabilities.

Next Generation Data Acquisition Plan (NG-DAP)



Rationale: We are at a pivotal point in ocean and fisheries science. Driven by

- **climate change**, the oceans' physics and biogeochemistry are changing at unprecedented rates, as are its ecosystems
- similarly rapid **changes are taking place in traditional and emerging ocean use-sectors** (e.g., development of offshore wind energy, aquaculture, among others, and
- data, and the information they provide are an essential component of the **New Blue Economy** *"... a knowledge-based economy, looking to the sea not for extraction of material goods but for data and information to address societal challenges and inspire their solutions"* (Spinrad, 2016).

https://eos.org/opinions/the-new-blue-economy-a-vast-oceanic-frontier

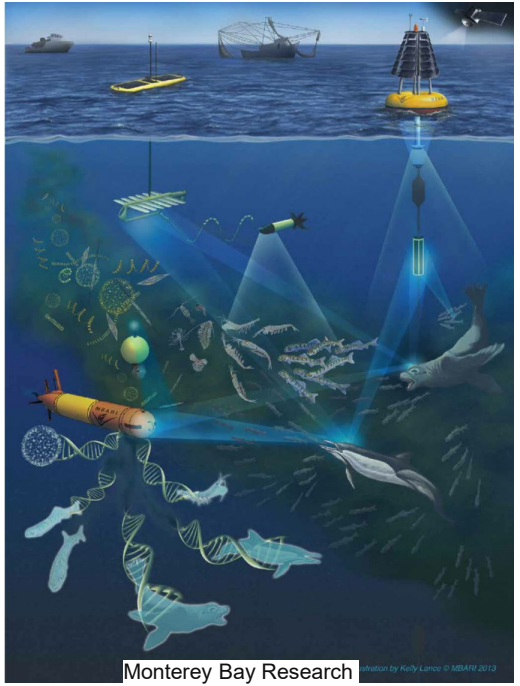
Next Generation Data Acquisition Plan (NG-DAP)

Since ~2015, NMFS has updated a number of its mission components:

- Stock Assessment Improvement Plan
- NMFS Climate Science Strategy and associated Regional Action Plans
- Ecosystem Based Fisheries Management (EBFM) Policy and Roadmap
- Climate & Fisheries Initiative
- Review of Reviews of its core science programs

These and related plans and reviews outline gaps in our understanding that necessitate new and/or different data acquisition strategies. **However, NMFS has not updated its Data Acquisition Plan (DAP) since 1998**.

A high-level *prospectus* document that looks forward to data needs in the next 10-20 years is needed to define the elements of an NG-DAP.



Monterey Bay Research Institute/MBARI

NG-DAP structure

1. **Introduction** of data collection and usage within NMFS
2. Overview of data collection **goals, gaps, and priorities** as described in existing NMFS strategic documents/initiatives
3. Description of the **methodology for information gathering**, analysis, etc., and recommendations for improvements
4. Summary of **recommendations** with a general characterization of near-, mid- and long-term priorities
5. Discussion of how the **implementation of recommendations** directly improve the outputs of the science advisory process

IBSS Corp

Dr. Laurie K. Allen, VP Oceans and Coasts, **Dr. Marie Colton**, VP Water, Weather, and Climate
Behzad Hadaegh, IBSS COO, **Liz Tarquin,** VP Strategic Growth-West Coast/Pacific
Kevin Jeffery, Program Manager, East Coast, **Dr. Josh Nowlis,** Senior Fisheries Socioeconomist

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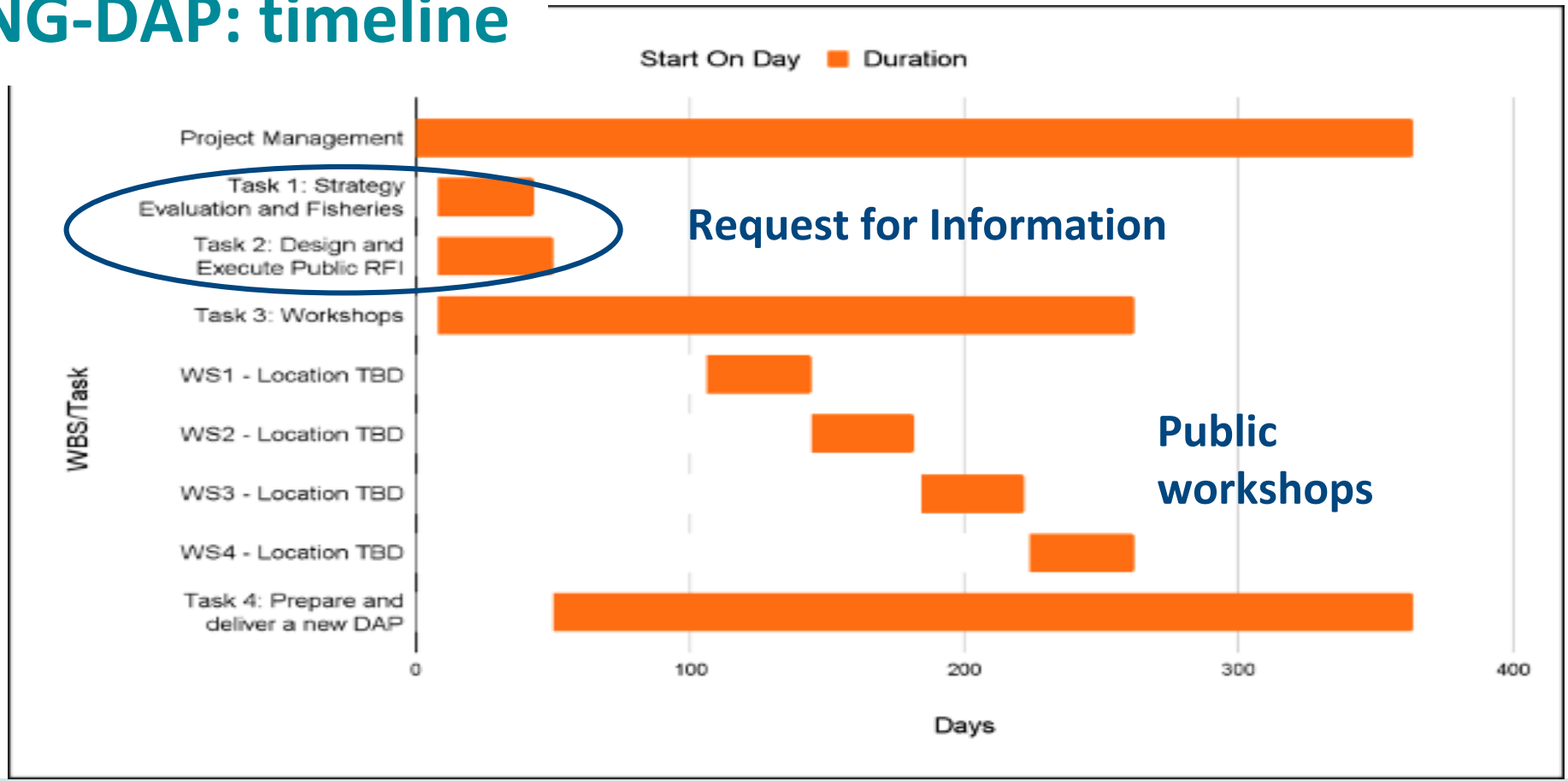
NG-DAP: timeline



Thank you

Comments or questions?