

Tab 3a
May 2021



NOAA
FISHERIES

Science Enterprise Update: Fishery Surveys and MRIP Catch Estimates

Cisco Werner
Chief Science Advisor

Evan Howell
Director, Office of
Science & Technology

CCC (Virtual Meeting) May 2021

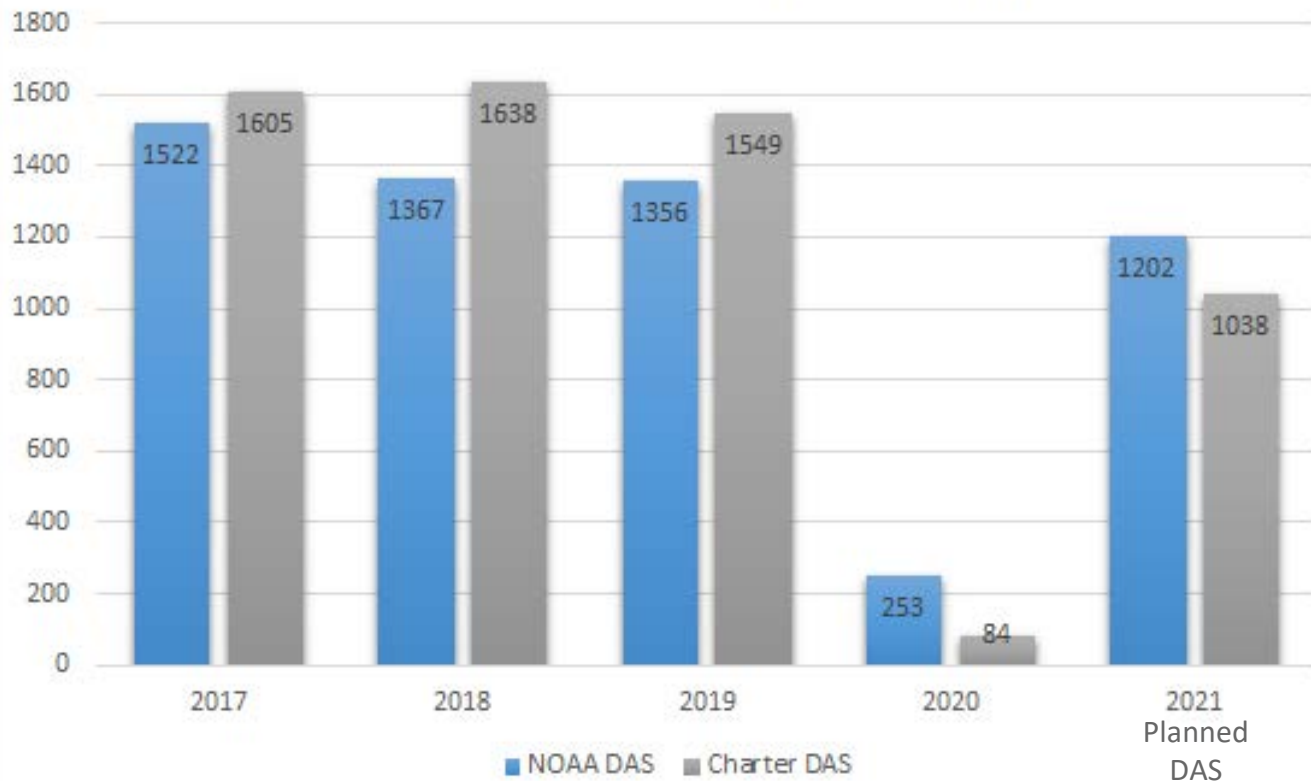
Status of Large Scale Fishery Surveys



Surveys

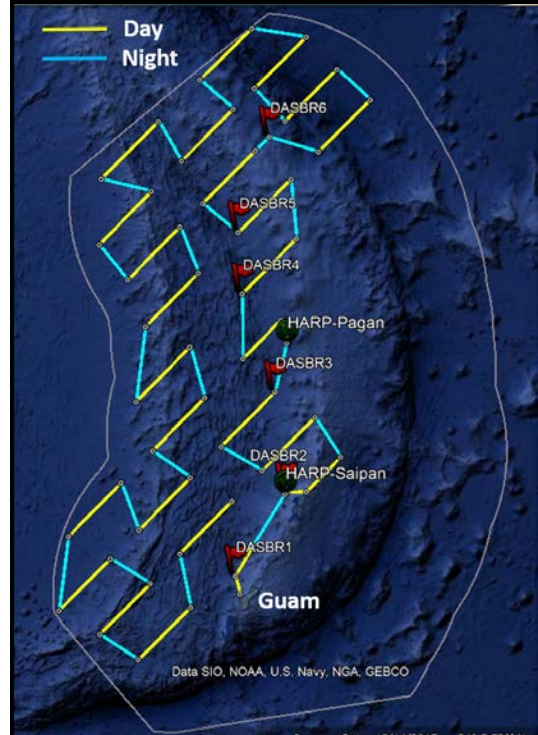


NOAA Fisheries DAS by Vessel Type



Surveys in FY21 - Back on the water

- Reduced DAS on NOAA ships - OMAO COVID protocols, 45DAS/16 days onshore cadence, ...
- Survey schedule balances data gaps, assessments' prioritization, and logistics
- Ongoing mitigation options:
 - Use of advanced tech (e.g., UxS, optical, AI/ML)
 - Expand collaboration with industry, stakeholders, and partners to collect data



Partnering opportunities

- *FSV Reuben Lasker*
 - 86 Days at Sea
 - 4 Legs, 3.5 Months
- *FV Lisa Marie*
 - off WA, OR, & No. CA
- *FV Long Beach Carnage*
 - off Central and So. CA
- Saildrones
- CDFW Aerial

Collaboration w/ Mexico

- *FSV Reuben Lasker*
 - to Pt. Eugenia
- *BIPO Carranza-Fraser*
 - Baja CA to G of CA

LASKER



W COAST

LISA MARIE



OR & WA

LB CARNAGE

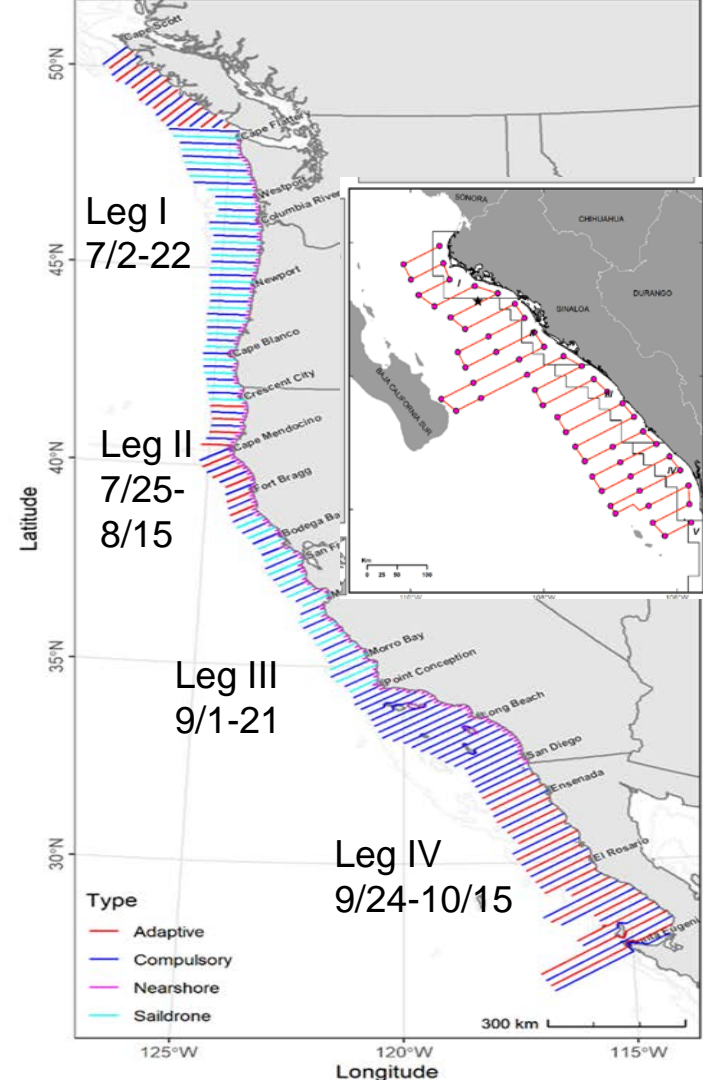


So CA Bight

Fraser



Baja CA



FY 21 Planned Surveys

Completed (NOAA/Charter)	8 (7/1)
Underway	6 (4/2)
Planned	42 (20/22)
Postponed or Cancelled	9 (4/5)



Closing remarks

- COVID-19 created unique challenges in FY20 but, in FY21 we are on track to resume many of our at-sea survey operations
- Continue to work on advanced technologies, collaboration, and partnerships as short- and long-term strategies for data collection
- There are “thousands of moving parts” to getting a survey underway - which is difficult under normal circumstances. Under present conditions, challenges escalate geometrically. **A sincere thank you to everyone who has made it possible to get back on the water.**



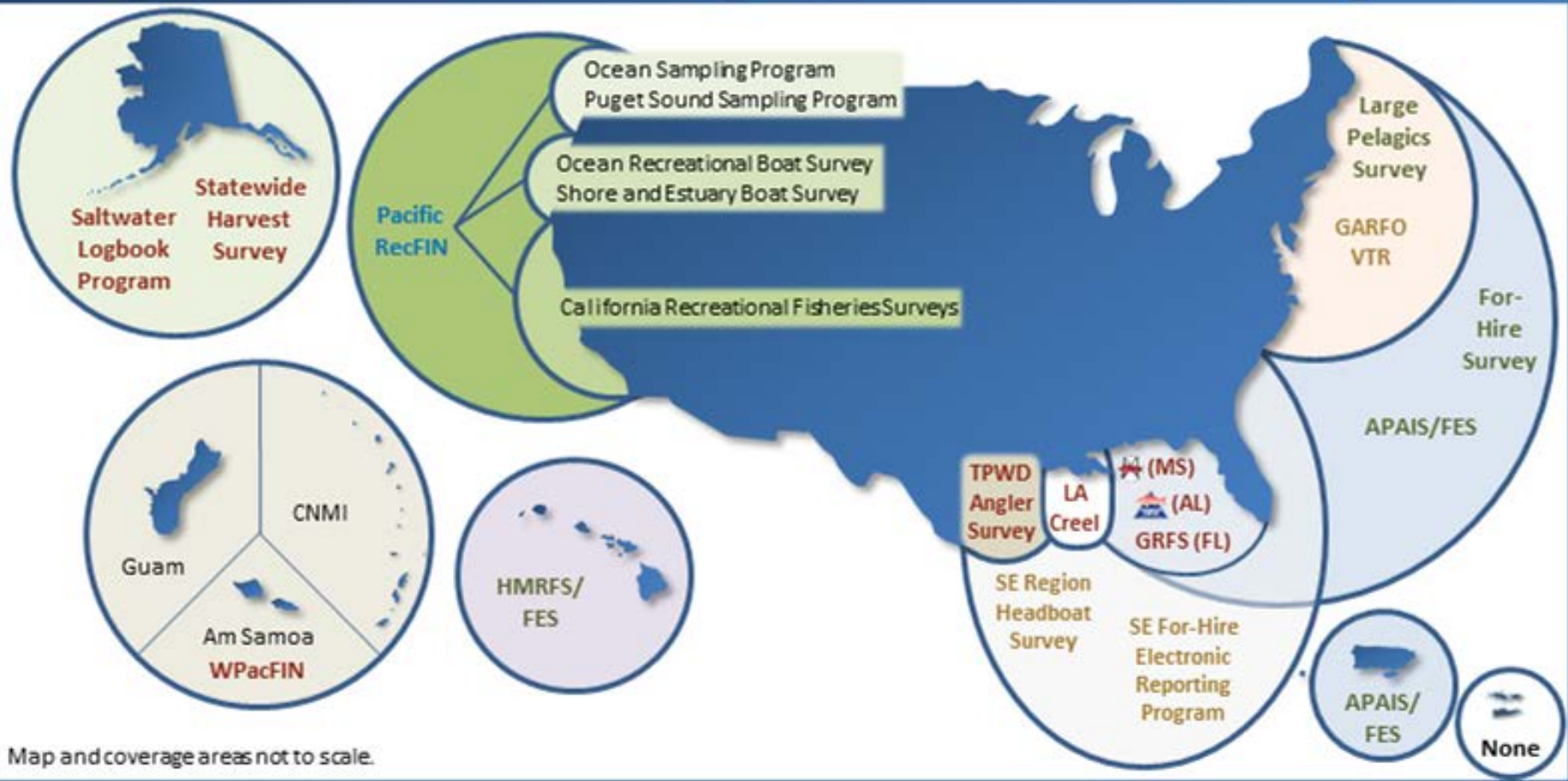
Thank You!



2020 Recreational Catch Estimates



Regional Recreational Angler Data Collection Programs



Map and coverage areas not to scale.

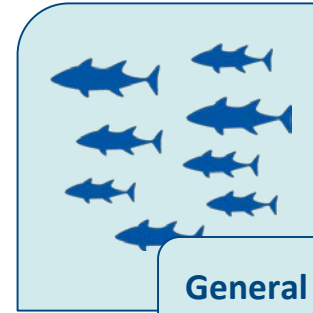
Recreational Fishing Data Collection Programs



Access Point Angler Intercept Survey
ME to MS



Fishing Effort Survey
ME to MS and HI



General State Surveys
LA, AK, CA, OR, WA



For-Hire Surveys
ME to TX



Large Pelagics Survey
ME to VA



Specialized State Surveys
MS, AL, FL

Introduction

- The pandemic has had **minimal impacts** on the **mail and telephone surveys** used to estimate recreational fishing effort.
- The pandemic **has impacted shoreside and at-sea sampling** along the Atlantic, Gulf, and Pacific coasts, creating **significant gaps in the data used to estimate recreational catch**.



Status of Data Collection

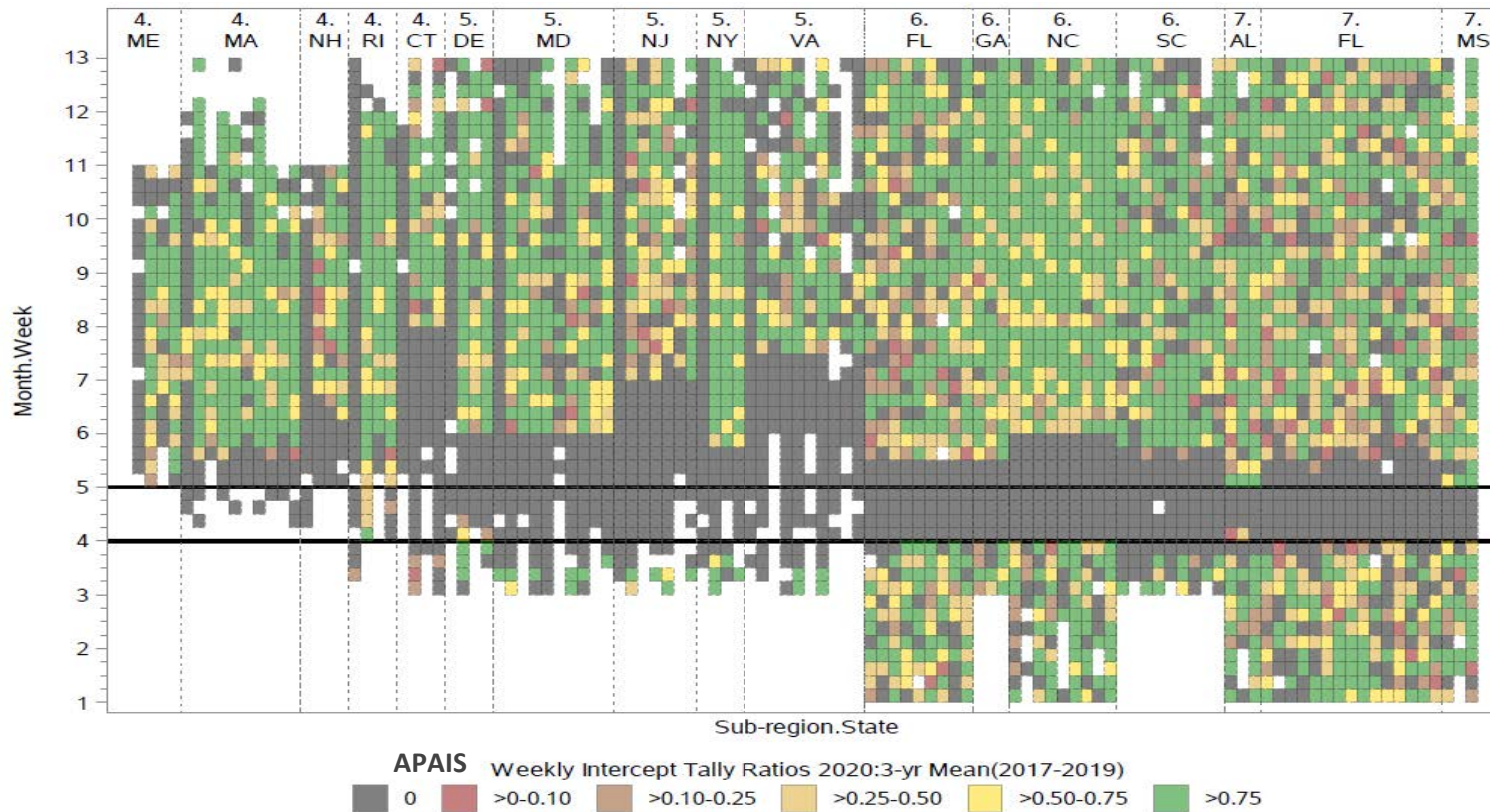


Access Point Angler Intercept Survey (ME-MS)

- Survey decisions suspend, modify, resume made at the **state level**
 - March - August 2020, 17 states suspended, reduced, or modified their conduct of the APAIS
 - As of August 1, 2020, all state partners had resumed shoreside angler sampling.
 - As of April 1, 2021, at-sea headboat sampling remained suspended
 - The conduct of the APAIS **continues to be impacted by social distancing guidelines and sampler safety protocols**



2020 APAIS Intercepts vs. 2017-2019 Average



Large Pelagics Surveys (ME-VA)

- Vessel operators continue to report trips via telephone.
- Collection of 2020 LPS catch rate and effort data was conducted with minimal disruptions
- Field samplers are validating reported effort, but biological sampling remains suspended

Southeast Region Headboat Survey (NC-TX)

- Suspended

State Creel Surveys (LA, TX, Pacific RecFIN)

- State intercept surveys experienced similar disruptions and modifications to standard sampling procedures



Fishing Effort Survey (ME-MS & HI) and For-Hire Survey (ME-MS)

- Offsite mail and telephone surveys that measure fishing effort continued with minimal disruptions
- Preliminary wave-level effort estimates were published throughout the year
- Effort estimate components normally derived from the APAIS were monitored as we evaluated estimation options



Impacts on 2020 Catch and Effort Estimates



Impacts on 2020 Effort Estimates

- We continued to publish **preliminary** shore, private boat, and for-hire effort estimates throughout 2020
- These estimates were produced using our **standard methodology**, but some lacked the components normally derived from the APAIS
- 2020 estimates **are** available at the two-month wave level



Impacts on 2020 Catch Estimates

- Due to **significant data gaps**, we did **not** publish **preliminary** catch estimates for Waves 2-6, 2020
- Final annual and wave-level catch estimates were produced in April, 2021, and are available on our website
- A number of options to address data gaps were evaluated, and a **simple imputation approach** was selected
- We will revisit 2020 estimates once 2021 data become available
- 2020 estimates **are** available at the two-month wave level



What We Expect for 2021

- States have put a great deal of effort into developing **effective sampler safety protocols**, but we anticipate some **impact to samplers' ability to collect lengths, weights, counts**
- State **budgets** may affect their ability to conduct the survey (e.g., furloughs, hiring restrictions)
- **We are optimistic that data collection will be much improved compared to 2020**
- When complete APAIS data from 2021 are available in 2022, we will evaluate the effects of including 2021 data in the imputation



Thank you

