Southeast Fisheries Science Center Sustainable Fisheries Division Caribbean Fisheries Branch

David Behringer, Rachel Eckley, Katherine Godwin (CIMAS)
Stephanie Martínez Rivera, Kevin McCarthy, Refik Orhun, Adyan Rios (NOAA)

August 15th and 16th, 2023
CFMC Meeting

Meet the Team

David Behringer
- Research Associate (CIMAS), Fishery-Dependent Survey Design and Data Analysis

Rachel Eckley
- Strategic Planning, Caribbean Research Inventory, CIMAS Liaison, Caribbean Seminar Series

Katherine Godwin
- Research Associate (CIMAS), Data Analysis

Stephanie Martínez Rivera
- Data analysis and provision, data management, research and development, data requests, and life history

Kevin McCarthy
- Branch Chief, Funding, Logistics, and other non-scientific stuff

Refik Orhun
- Data Analyst, Life History, Fish Ecology, Fisheries Oceanography, Marine Aquaculture

Adyan Rios
- Stock Assessment, Research, Outreach, Workflow Automation & Reproducibility

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

Strategic Planning Workshop

Background

- 35 people participated in a facilitated workshop to develop a collaborative strategic plan that improves regional data limitations to better inform stock assessment and EBFM of Puerto Rico, St. Thomas/St. John, and St. Croix
- May 22nd - 25th, 2023
- San Juan, Puerto Rico

Participating Agencies

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service
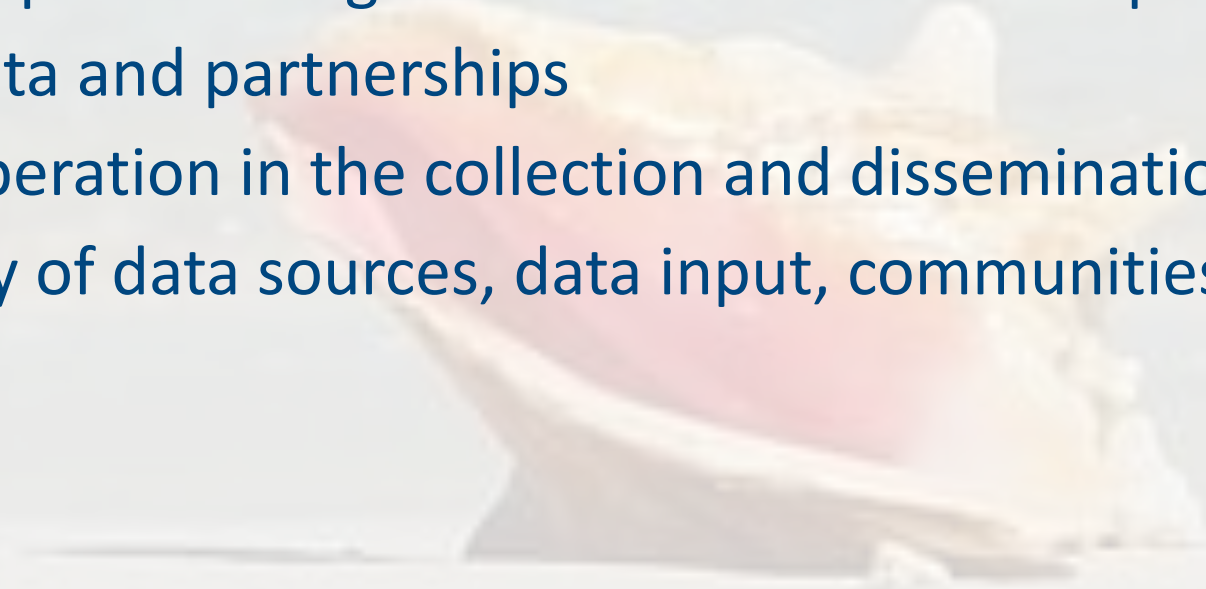
Strategic Planning Workshop

Values

- Integrity, reproducibility, transparency, and communication of data

- Innovation through adaptive management and continuous improvement

- Respect and trust in data and partnerships

- Collaboration and cooperation in the collection and dissemination of data

- Diversity and inclusivity of data sources, data input, communities, and stakeholder ideas

Strategic Planning Workshop

Mission Statement

- To develop and continuously improve collaborative data collection programs to support stock assessments and implementation of EBFM, integrating the region's inherent cultural and ecological diversity for the benefit of the US Caribbean

Vision Statement

- To have effective, efficient, and innovative, continuous data collection processes and partnerships to inform on progress towards fisheries and ecosystem management objectives in the US Caribbean

NOAA
FISHERIES

Strategic Planning Workshop

Breakthrough Objectives - Projects Ongoing in Working Groups

- Expand the toolbox to inform fisheries management

  - Determine appropriate methods and approaches to inform management given available data

- Reduce gaps in datasets used to inform management

  - Establish a prioritized list of data needs utilizing existing lists for the following data types: fishery-independent, fishery-dependent, life history, socioeconomic, habitat and environmental

- Improve communication of knowledge to better engage stakeholders in fisheries management processes

  - Identify current communicators, mechanisms, and methods

- Establish funding governance structures that are equitable for fishers, contractors, agencies, and islands and allow for the collection of necessary data to inform fisheries management

  - Define the governance needs then identify the mechanisms to streamline the process for establishing a funding governance structure

Life History Projects

- CRP life history project ongoing in Puerto Rico

- Collaboration with HJR Reefscaping

- Fishery-dependent sampling off the west coast by trained observers

- Filling the gaps in sample sizes for federally managed reef fish

- Funded until December 2024

- Collaborators: Noemí Peña and Kate Overly

For additional information: stephanie.martinez@noaa.gov

NOAA
FISHERIES

Port sampling Projects

- Port sampling project ongoing the the US Virgin Islands
  - Commercial and Recreational Sectors
  - Effort survey completed, pilot survey to begin soon
- Commercial Port Sampling Survey in Puerto Rico ongoing
  - Directed towards Yellowtail Snappers, Deep Water Snappers, and Vieques fishery
- Supporting DRNA Recreational Survey
  - Tablet computers and software
  - Port samplers training
  - Sampling stations

NOAA
FISHERIES

Fishery Independent and Fishery Dependent Sampling Projects

- Fishery Independent lobster trap survey - Puerto Rico
  - Goal is to sample lobsters that will recruit into the fishery at their next molt
  - Collecting catch rate and size composition data
  - Will inform gear selectivity and serve as a recruit index
- Fishery Dependent lobster trap survey - Puerto Rico
  - Collecting catch rate and size composition data
  - Will inform gear selectivity and serve as a recruit index
- Seeking additional funding to expand the surveys to the US Virgin Islands

TIP extraction/automation Project

- Develop data exploration, visualization, filtering and binning processes and analysis ready format to be programed.
  - Reporting QA/QC:
    - Identify trends in reporting consistency across variables.
    - Revisit specific flags from existing work and document new flags.
  - Historical review:
    - Compare historical record archives to data in current database.
    - Flag common errors and automate how to catch them in the future.

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

e-Reporting Data Update

- Electronic reporting of commercial fishing data in Puerto Rico

- Data are stored in the vendor's (Shellcatch) cloud based database

- Access to this database is limited and cannot be directly merged with existing CCL data for use in fisheries management

- Accessibility and data compatibility issues will be resolved when the data are loaded into the ACCSP database

- DRNA, Shellcatch, ACCSP, and SEFSC staff have been working on the data transfer

- The work has involved resolving many technical obstacles and that work continues

Online Dataset Manager (ODM)

Management History

- Comprehensive collection of federal regulations for Southeast FMPs
- SEFSC/SERO currently inputting 2022 & 2023
- SEFSC Processing Views → present to Councils

Morphometrics

- Compilation of SEDAR-related morphometric conversions for the Southeast region
- Searchable
- Future work will seek to ID best available conversions for individual data products

Caribbean Research Inventory

- Inventory of federally funded research in the Caribbean region with emphasis on data necessary for stock assessment
- Search fields
- Testing & public access

New projects and functionality are being added to ODM

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

NOAA FISHERIES

Stock Assessments

- **Southeast Data Assessment and Review (SEDAR)**
- SEDAR 80 - completion anticipated in December 2023
  - Puerto Rico assessment complete, finalizing US Virgin Islands models, need SSC review
  - USVI model explorations incorporating fishery-independent indices
- SEDAR 84 Yellowtail Snapper and Stoplight Parrotfish
  - Delay due to hotel scheduling, in person data workshop likely in late January 2024
- SEDAR 91 Spiny Lobster
  - To begin in spring 2024, ToRs reviewed at SSC spring meeting
- SEDAR in 2025 Hogfish and Red Hind
  - To begin in Fall 2024/Winter 2025

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

NOAA Fisheries Staff Involved in Caribbean Projects

- Outreach (MREP and OEAP) - *Adyan Rios*

- NOAA Fisheries staff on the SSC – *Erik Williams, Jason Cope*

- EEJ – *Brent Stoffle, Heather Blough*

- Conch survey – *Jennifer Doerr*

- NCRMP survey – *Jay Grove, Jeremiah Blondeau, Jerry Ault (UM)*

- DW snapper survey – *Katherine Overly*

- SEAMAP-C – *Christian Jones, Walt Ingram, Eric Hoffmayer*

- Life History work – *Beverly Barnette, Ron Hill, Robert Allman*

- Data Management - *Kim Johnson*
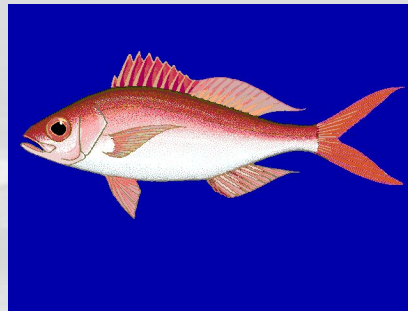
- Database development - *Yanet Jimenez*

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

NEW NOAA FUNDED PROJECTS

- [Saltonstall-Kennedy (SK) Grant](#) is a yearly grant competition which funds projects that lead to the promotion, development and marketing of U.S. fisheries. Combined, the 2023 SK projects in the Caribbean Region are receiving close to 900,000. Congrats to the 2023 Caribbean SK Applicants! Project Topics:
    - Dulce del Rio-Pineda - Artisanal native oyster mariculture supply chain
    - Florida Atlantic University - Community-Based Queen Conch Aquaculture
    - University of South Carolina - Information Gaps for Queen and Silk Snappers

US Caribbean Marine Spatial Planning Workshops

August 28 - August 29, 2023:
The Buccaneer Resort, St. Croix, US Virgin Islands

August 31 - September 1, 2023:
Courtyard Marriott Isla Verde, San Juan, Puerto Rico

National Centers for Coastal and Ocean Science
National Marine Fisheries Service

Purpose

Data development to inform marine spatial planning in Puerto Rico and the US Virgin Islands (USVI), with an emphasis on data needs for offshore wind and aquaculture development
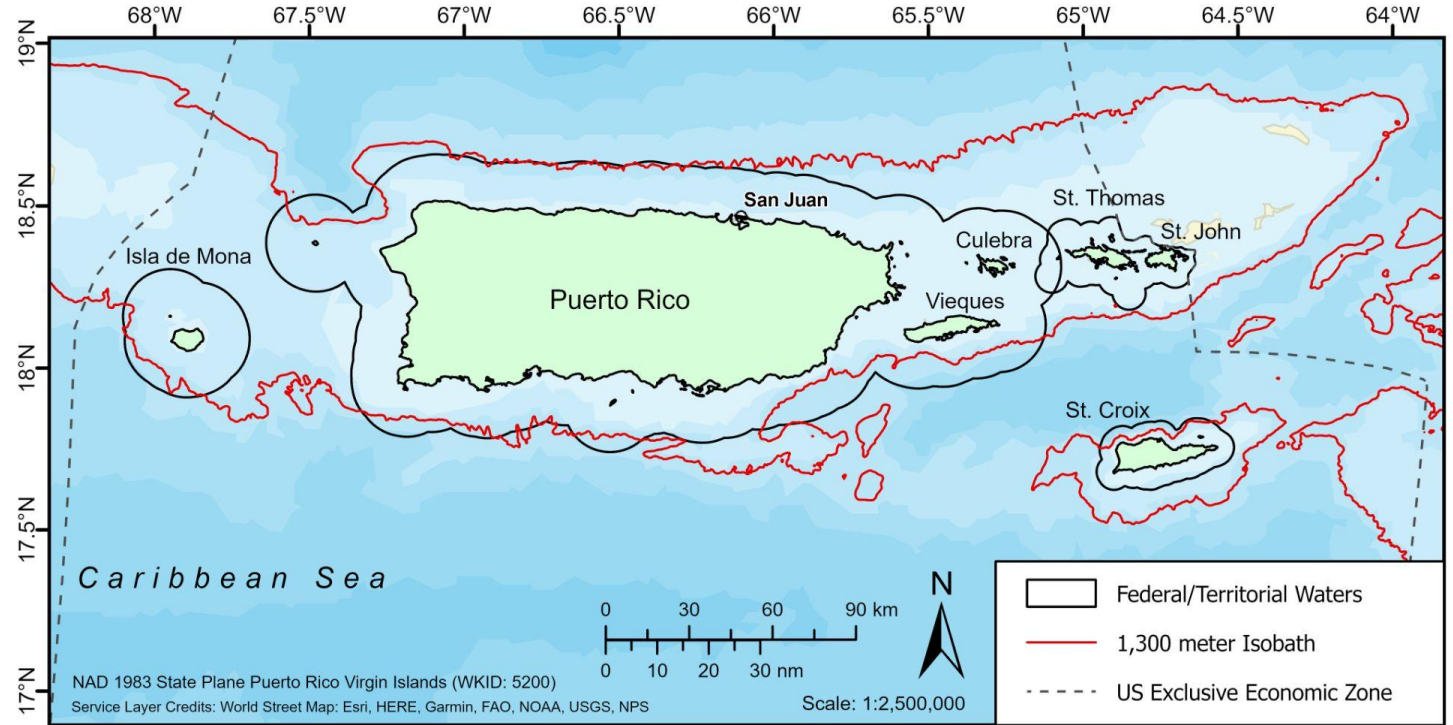
Workshop Goals

- Learn more about NOAA's marine spatial planning approaches and activities
- Inventory available spatial data for the US Caribbean
- Document data shortcomings and gaps
- Increase local capacity and resources for regional ocean spatial planning
- Develop a community of stakeholders to inform future marine planning efforts

Geographic Area of Interest:

From the shoreline (PR and USVI) to the EEZ, prioritizing data within a depth of 1,300 m

National Centers for Coastal and Ocean Science
National Marine Fisheries Service

Ocean Sectors

- National Security
- Industries
- Fisheries
- Natural Resources
- Cultural Resources
- Metocean and Other
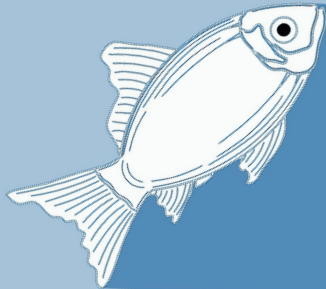
Core Data Questions

1. What are your concerns or questions, if any, about the data layers presented?
2. Are you aware of any data that are missing from the list but available? If so, can you provide a lead to acquire the data?
3. What data gaps exist? For each identified gap, would you rank the importance level as low, medium, or high?

Outputs

- Comprehensive list of available data
- Leads to acquire additional data
- List of identified and prioritized data gaps

Questions?
¿Preguntas?

david.behringer@noaa.gov

rachel.eckley@noaa.gov

katherine.godwin@noaa.gov

stephanie.martinez@noaa.gov

kevin.j.mccarthy@noaa.gov

refik.orhun@noaa.gov

adyan.rios@noaa.gov