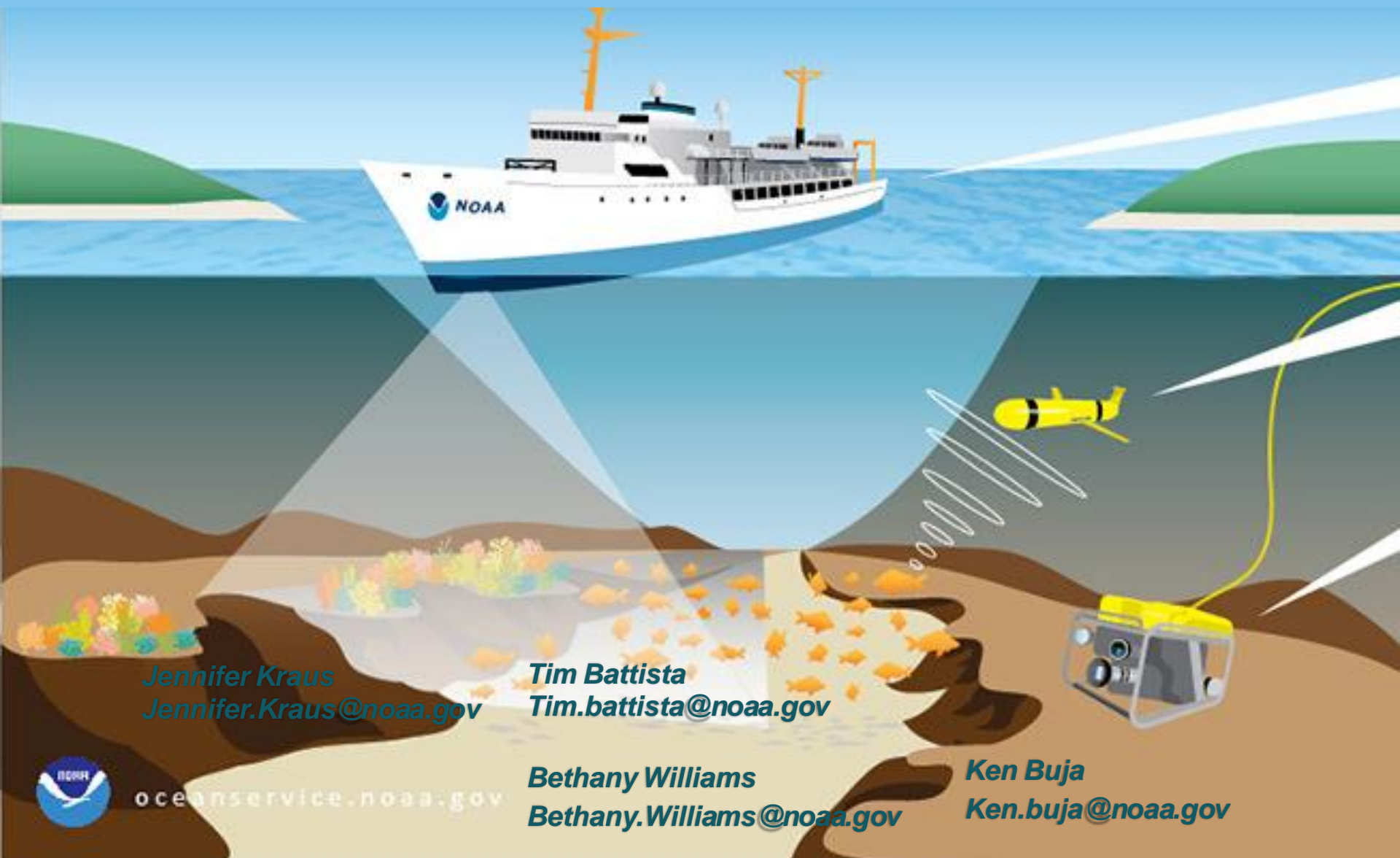# US Caribbean Prioritization: Results

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Agenda

1) Project Overview

2) Input and Analytical Methods

3) Results

4) Application of Results

5) Feedback Web Tool Demo

Project Overview

- Supported by NOAA's Coral Reef Conservation Program

- Objective to identify priority needs for seafloor mapping and visual surveys in the US Caribbean

- Supports strategic planning for local organizations and encourages collaboration

Four Regions

- Inshore/Offshore PR & USVI
- Nearshore Boundary: 100 m isobath
- Offshore Boundary: 24 nm Maritime Limit
- Each respondent had access to all 4 regions
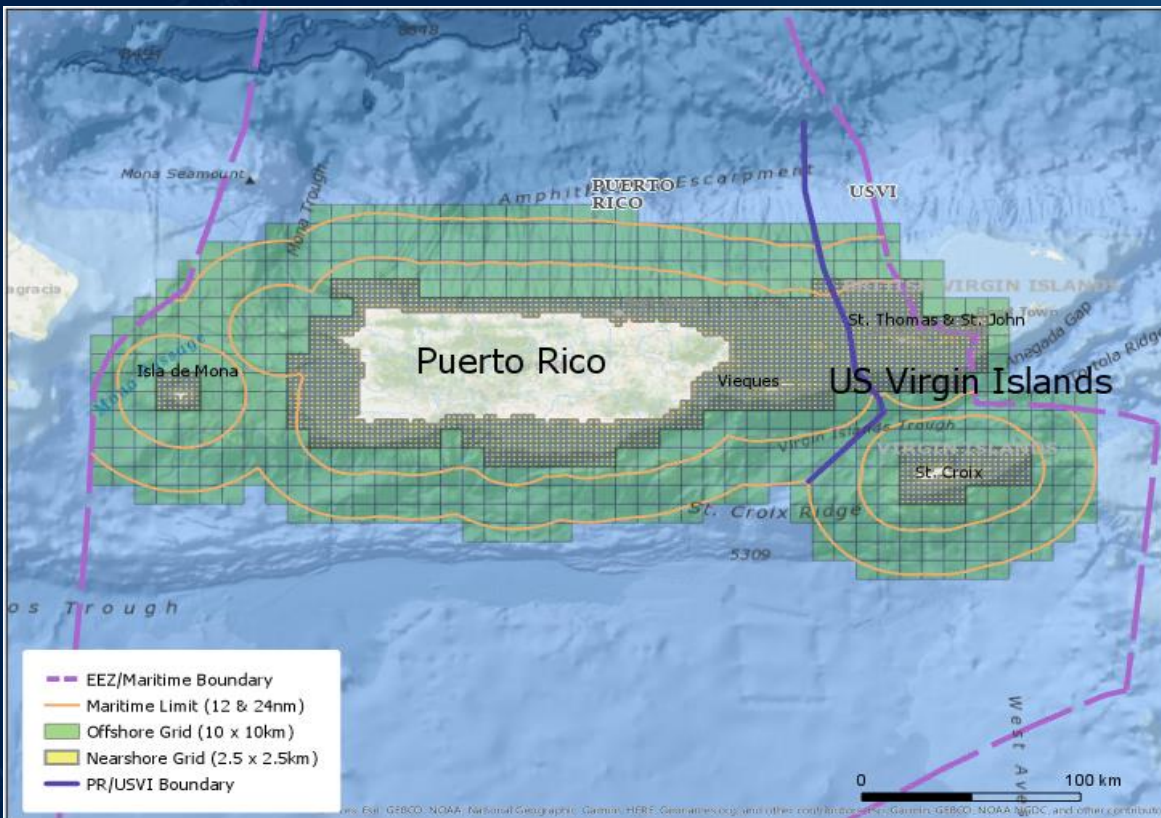
Participants given 4 weeks to input their 'coins' into cells using the web tool - Total of 15 organizations provided input
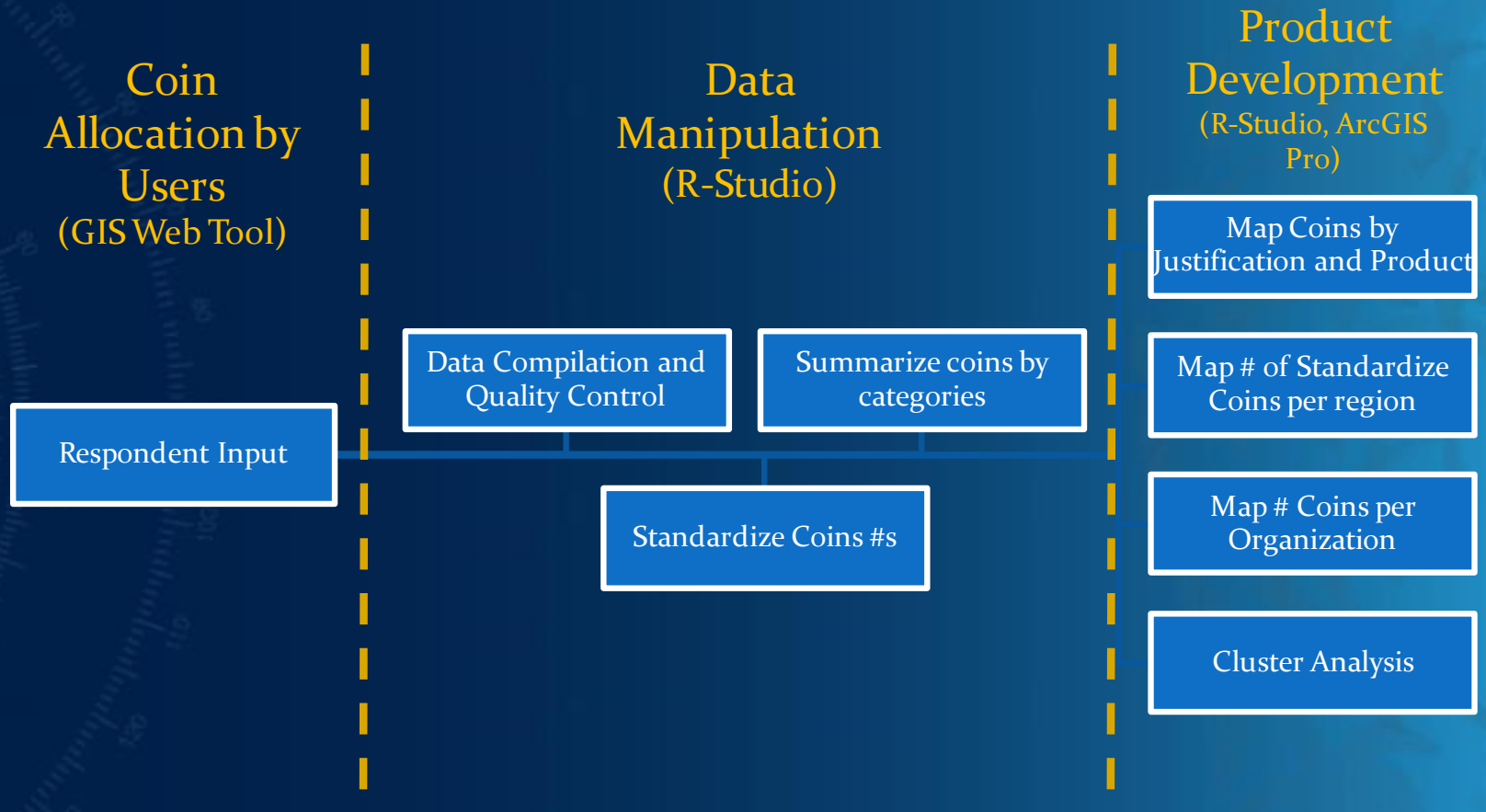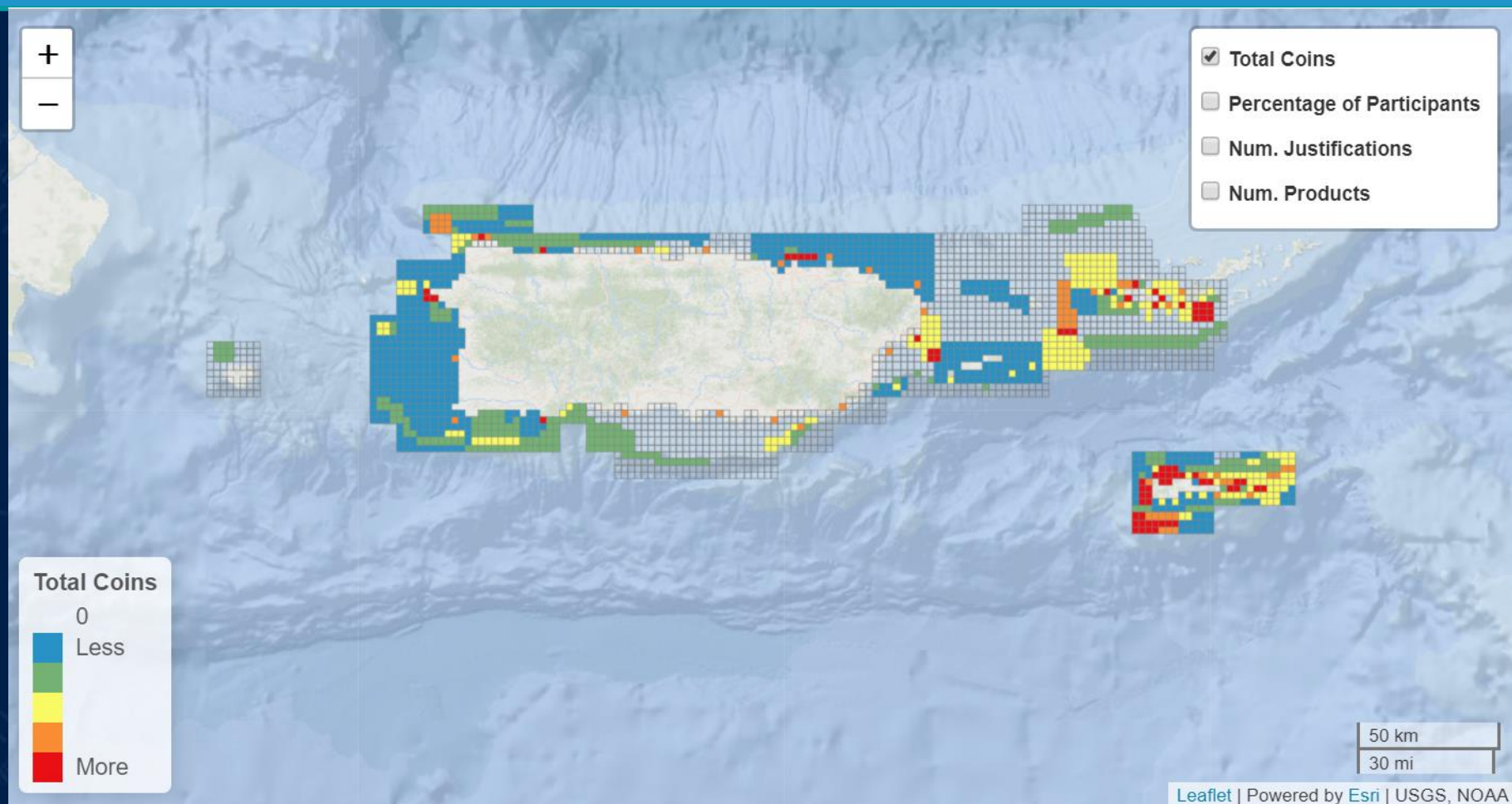
Total of 15 organizations provided input

1. Caribbean Integrated Ocean Observing System (CARICOOS)
2. NOAA Caribbean Fishery Management Council (CFMC)
3. NOAA NMFS Southeast Regional Office (SERO)
4. Department of Natural Resources –PR (DNER)
5. Department of Natural Resources - USVI (DPNR)
6. NOAA National Geodetic Survey (NGS)
7. NOAA Office of Exploration and Research (OER)
8. NOAA Office of Protected Resources (OPR)
9. NOAA Office of Science and Technology (OST)
10. NOAA Southeast Fisheries Science Center (SEFSC)
11. The Nature Conservancy (TNC)
12. University of Puerto Rico (UPR)
13. US Fish and Wildlife (USFW)
14. US Geologic Survey (USGS)
15. University of Virgin Islands (UVI)

Analytical Methods

Coin Allocation by Users
(GIS Web Tool)

Data Manipulation
(R-Studio)

Product Development
(R-Studio, ArcGIS Pro)

Map Coins by Justification and Product

Data Compilation and Quality Control

Summarize coins by categories

Map # of Standardize Coins per region

Respondent Input

Standardize Coins #s

Map # Coins per Organization

Cluster Analysis

Results: # Coins Inshore PR & USVI
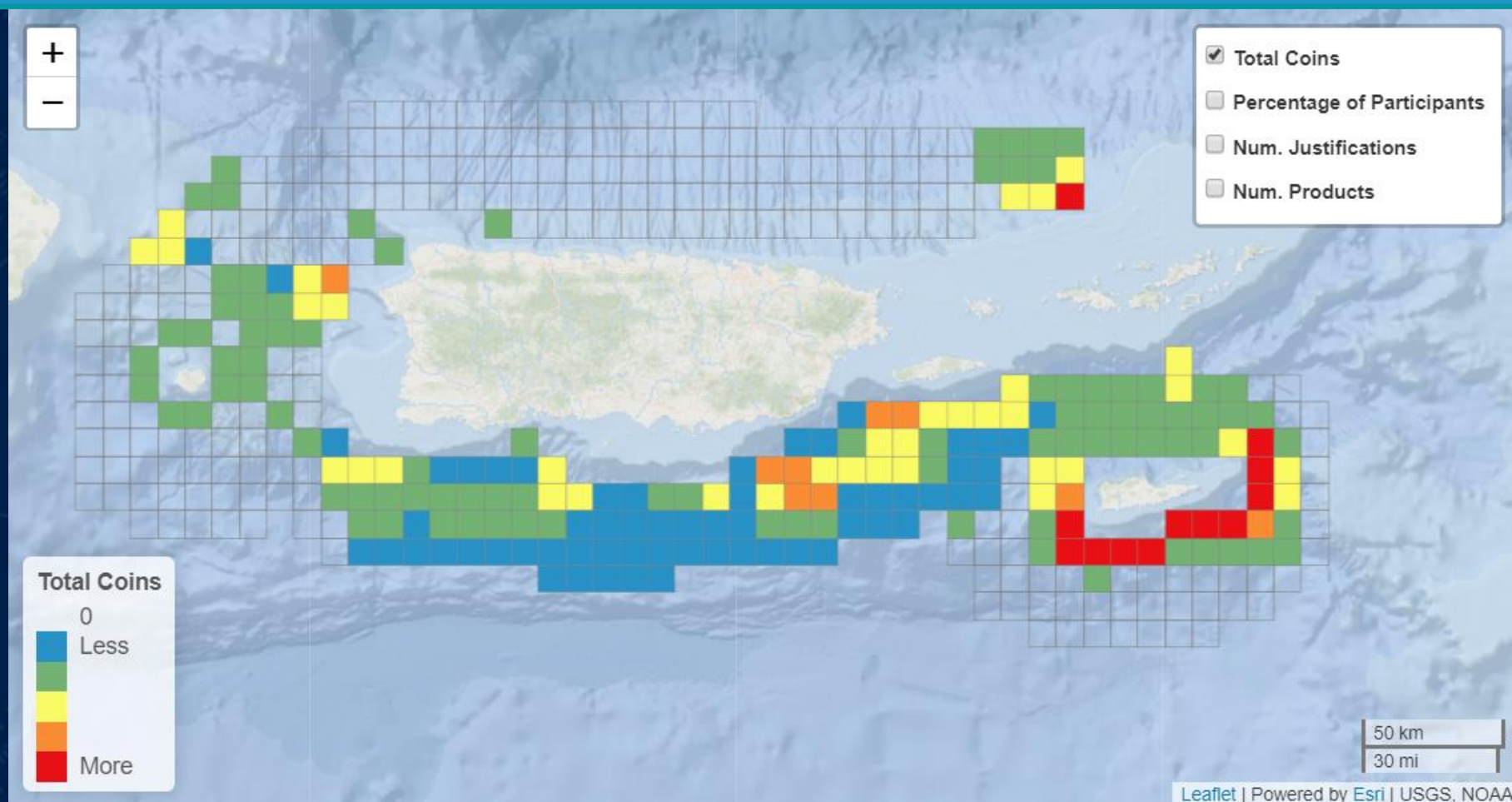

Which areas had the highest # coins?
(PR) Centro Puntas (west), San Juan, Vieques Channel?
(USV) Various spots around St. Thomas, Southeast St. John (Concordia), & St. Croix (MSSAA)
Red = Top 5% of cells (with most coins)

Which areas had the highest # coins?
(PR) Southest PR, offshore Centro Puntas
(USVI) South, southeast, eastern St. Croix, north of St. Thomas
Red = Top 5% of cells (with most coins)

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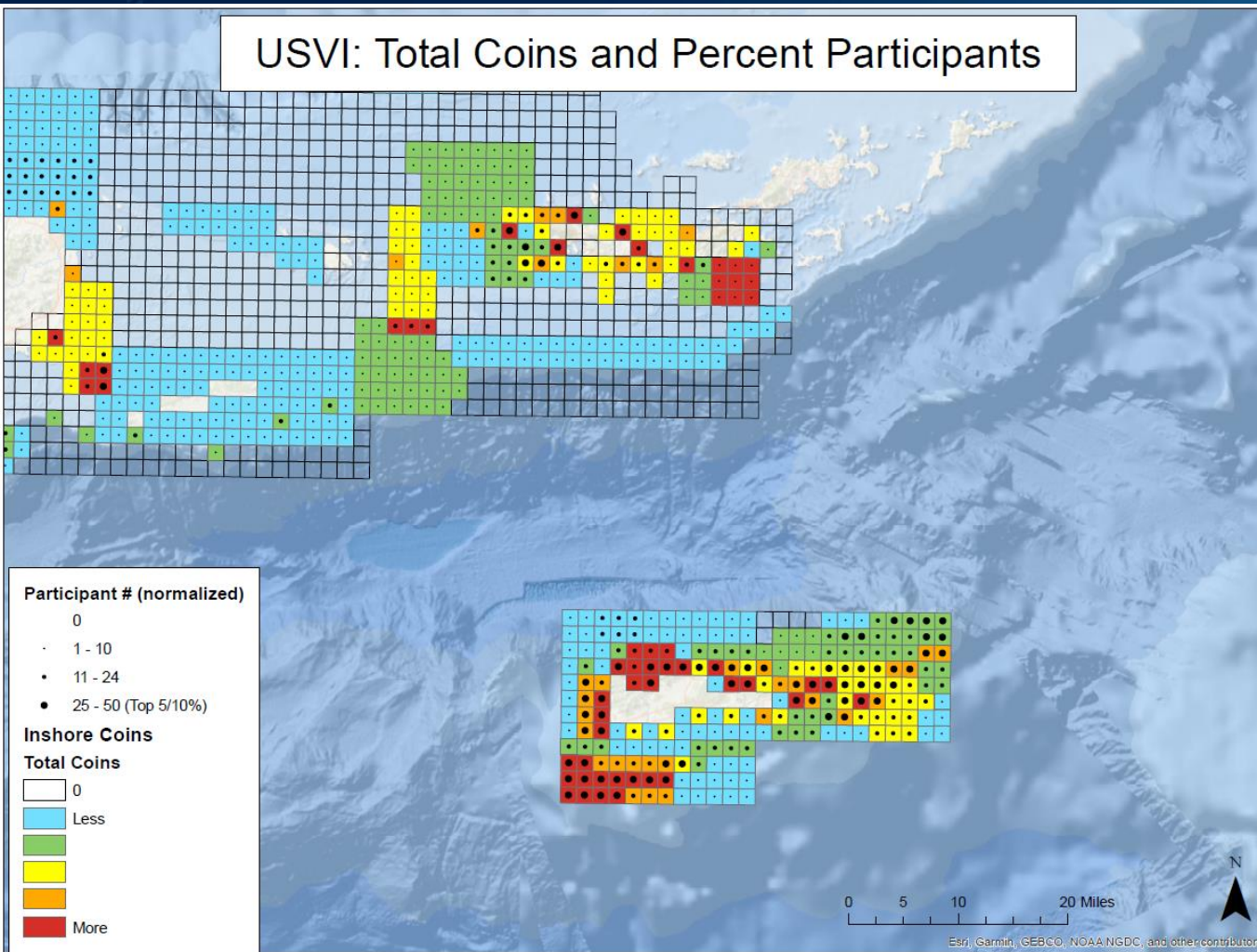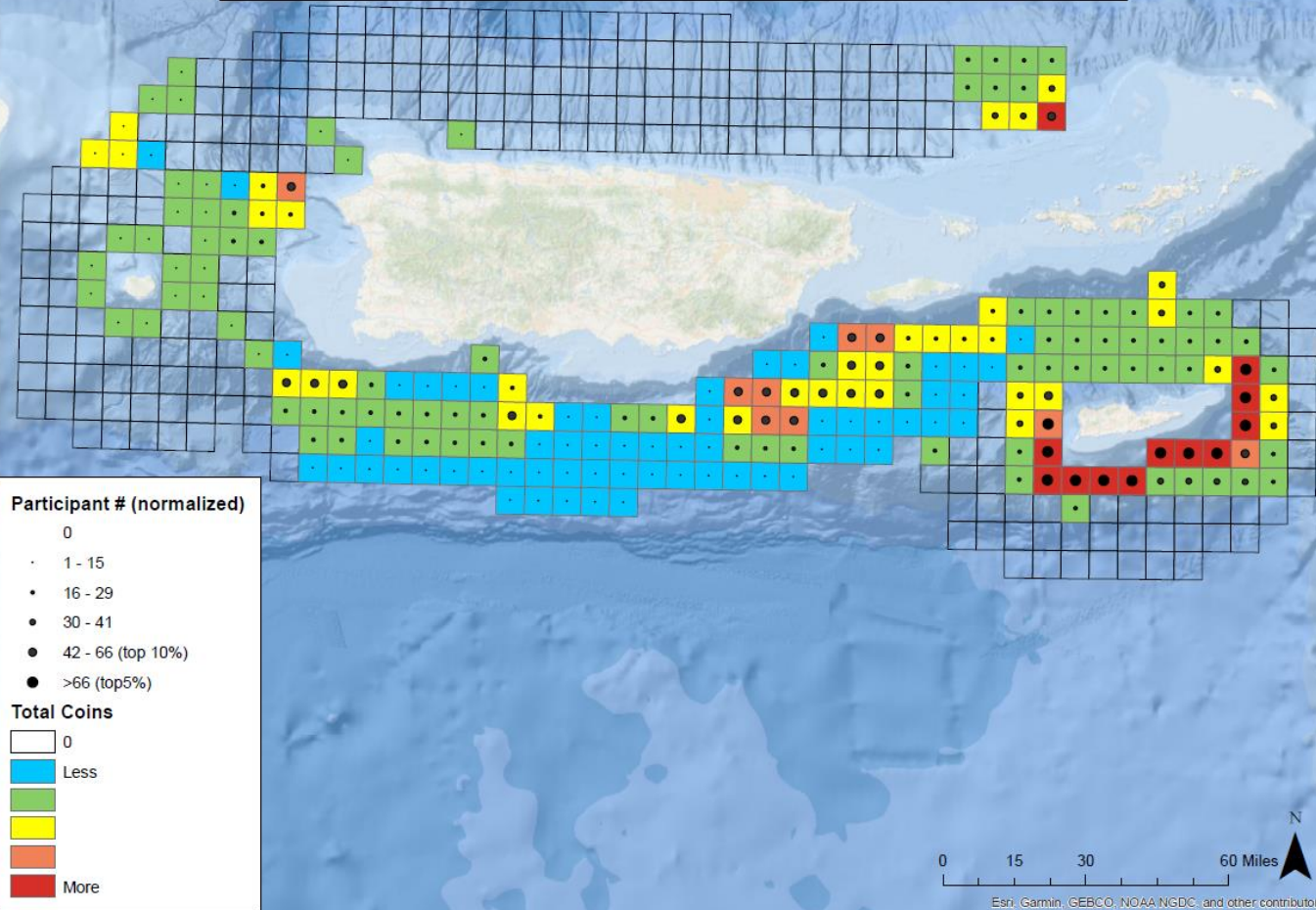Inshore: Total Coins and Percent Participants

Where and Who:

- concentration of participants who allocated coins into that cell

- Not always same as highest # coins

- Some areas have more people interested, but don't have high number of coins allocated

- **Tells us where we can satisfy the needs of several organizations**

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USVI: Total Coins and Percent Participants

Where and Who:

- concentration of participants who allocated coins into that cell

- Not always same as highest # coins

- Some areas have more people interested, but don't have high number of coins allocated

- **Tells us where we can satisfy the needs of several organizations**

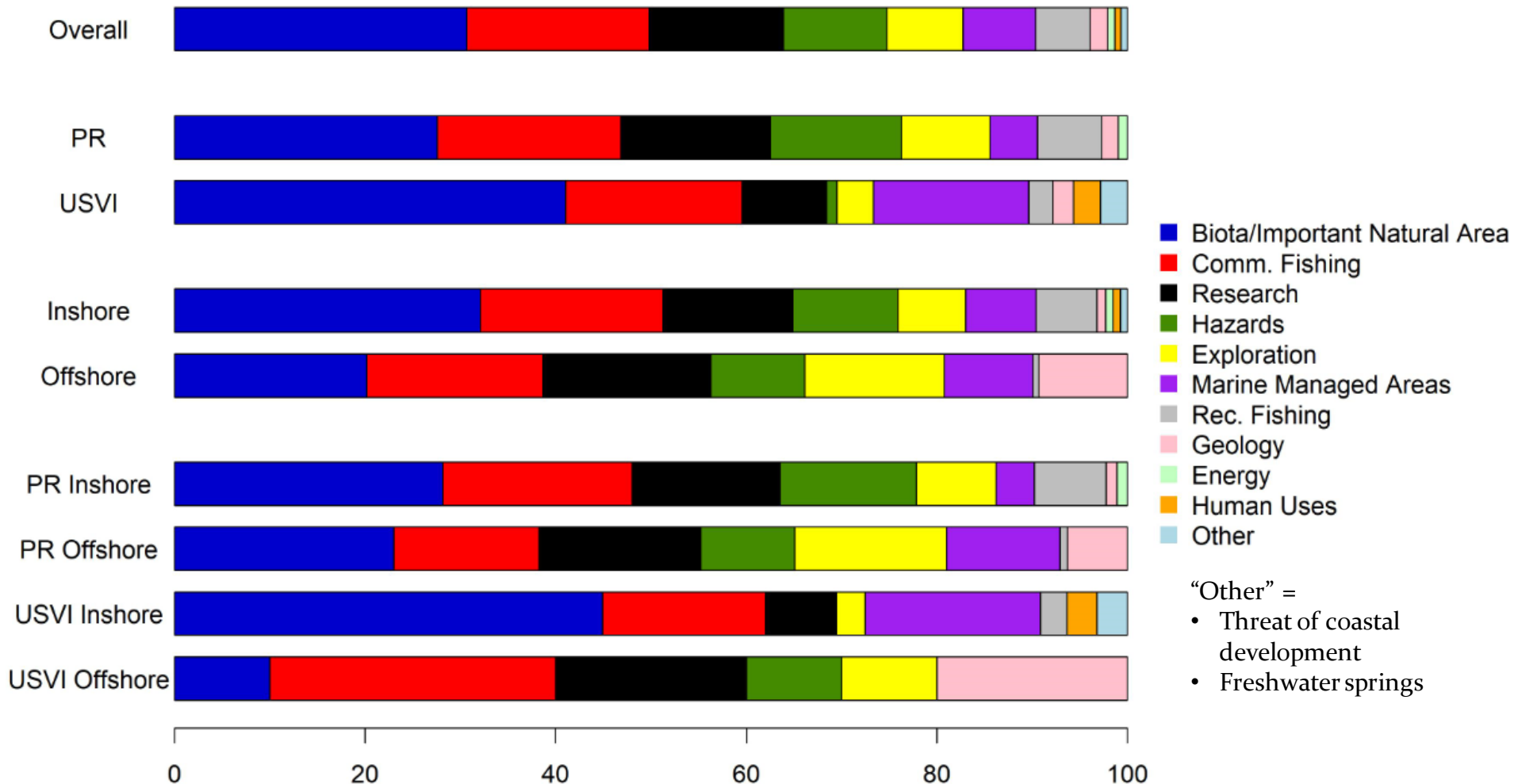Offshore: Total Coins and Percent Participants

Where and Who:

- concentration of participants who allocated coins into that cell

- Higher correlation between # coins and % participants

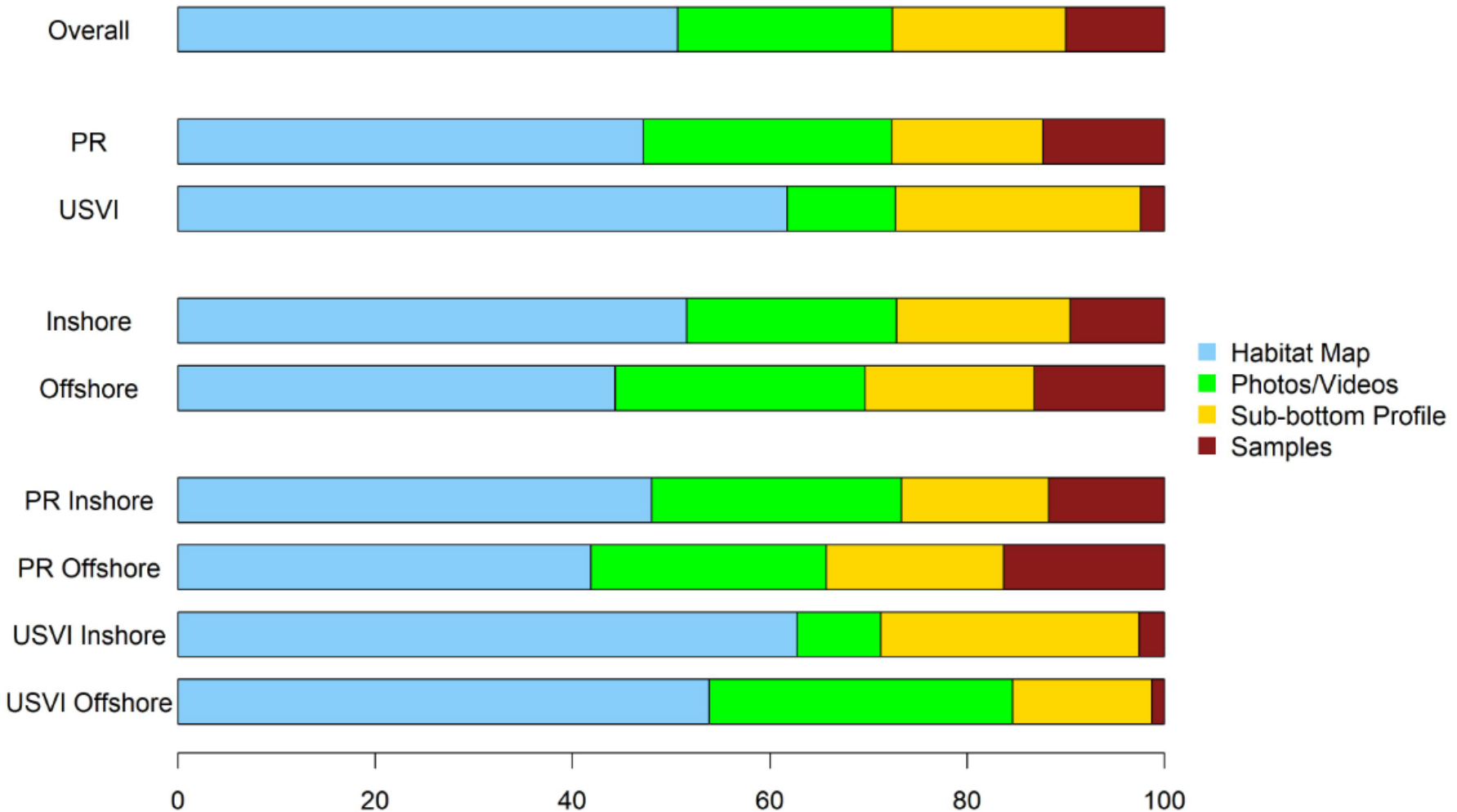- **Tells us where we can satisfy the needs of several organizations**

Participant # (normalized)
- 0
- · 1 - 15
- · 16 - 29
- • 30 - 41
- ● 42 - 66 (top 10%)
- ● >66 (top5%)

Total Coins
- 0
- Less
- (green)
- (yellow)
- (orange)
- More

0   15   30   60 Miles

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Results: Justifications

Which Justifications were chosen most frequently?

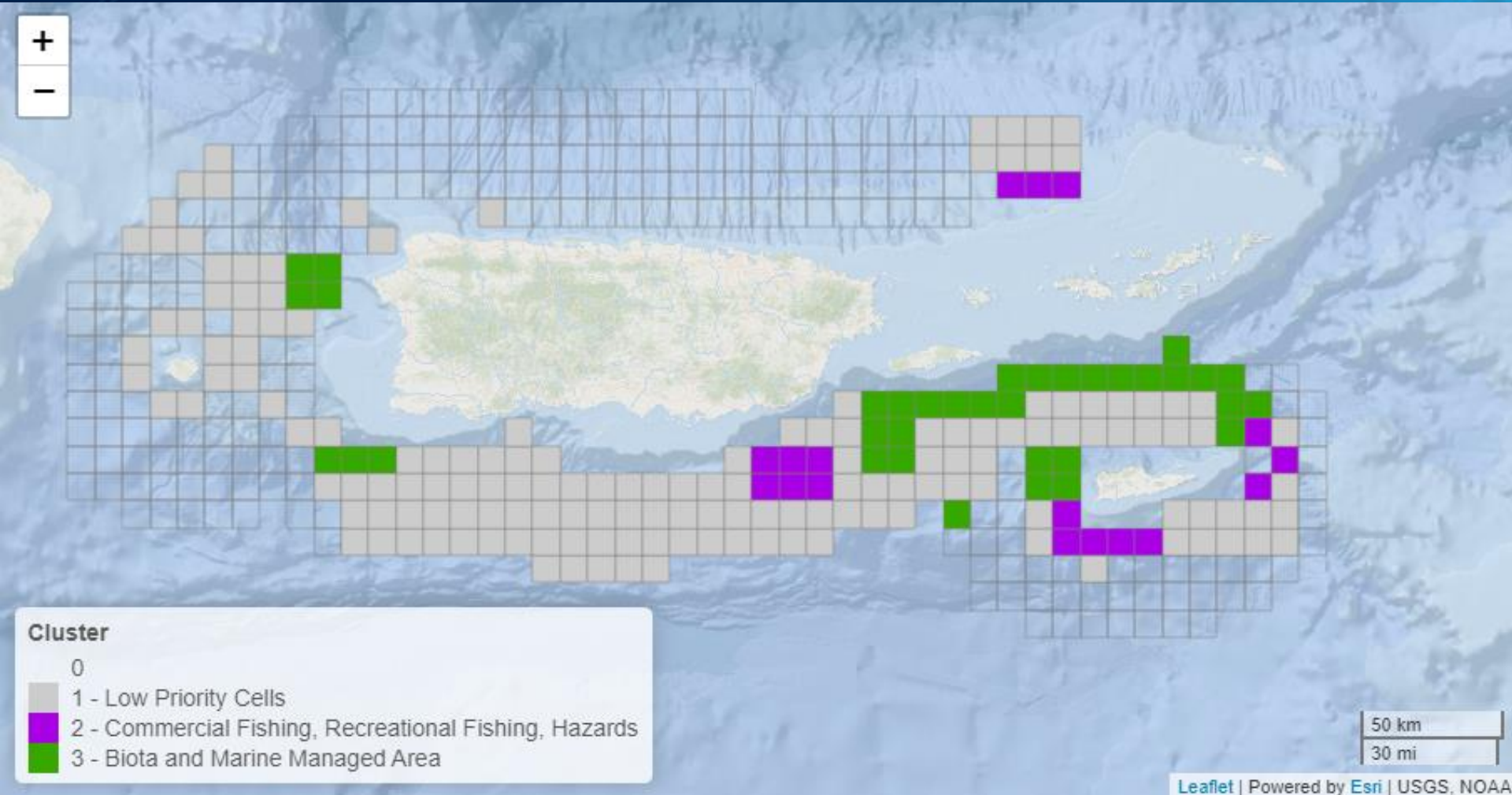# Results: Products

Which Products were chosen most frequently?

Results: Cluster Analysis Inshore

Combining Where?, Why?, When? and What? using Cluster Analysis

Cluster

0

1 - Low Priority Cells

2 - Commercial Fishing, Recreational Fishing, Hazards

3 - Biota and Marine Managed Area

50 km

30 mi

Leaflet | Powered by Esri | USGS, NOAA

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How Can Maps Be Used to Plan Missions?

Prioritization answered 4 questions important for planning:

(1) (**Where**) What locations are important?

(2) (**Why**) Why they are important?

(3) (**When**) How quickly is data needed?

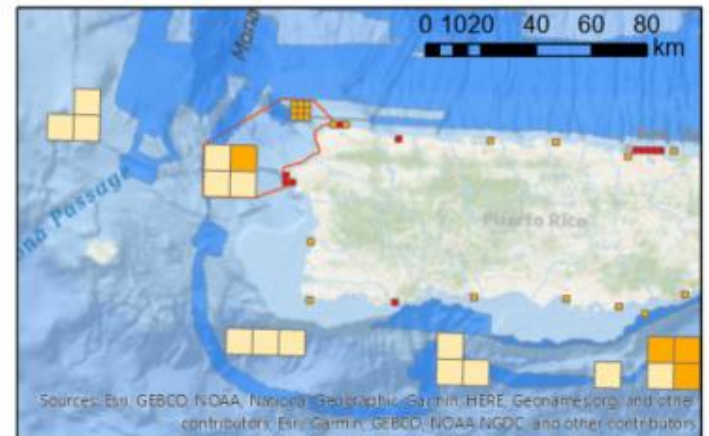(4) (**What**) What data products are needed most?

Nancy Foster 2020 Mission
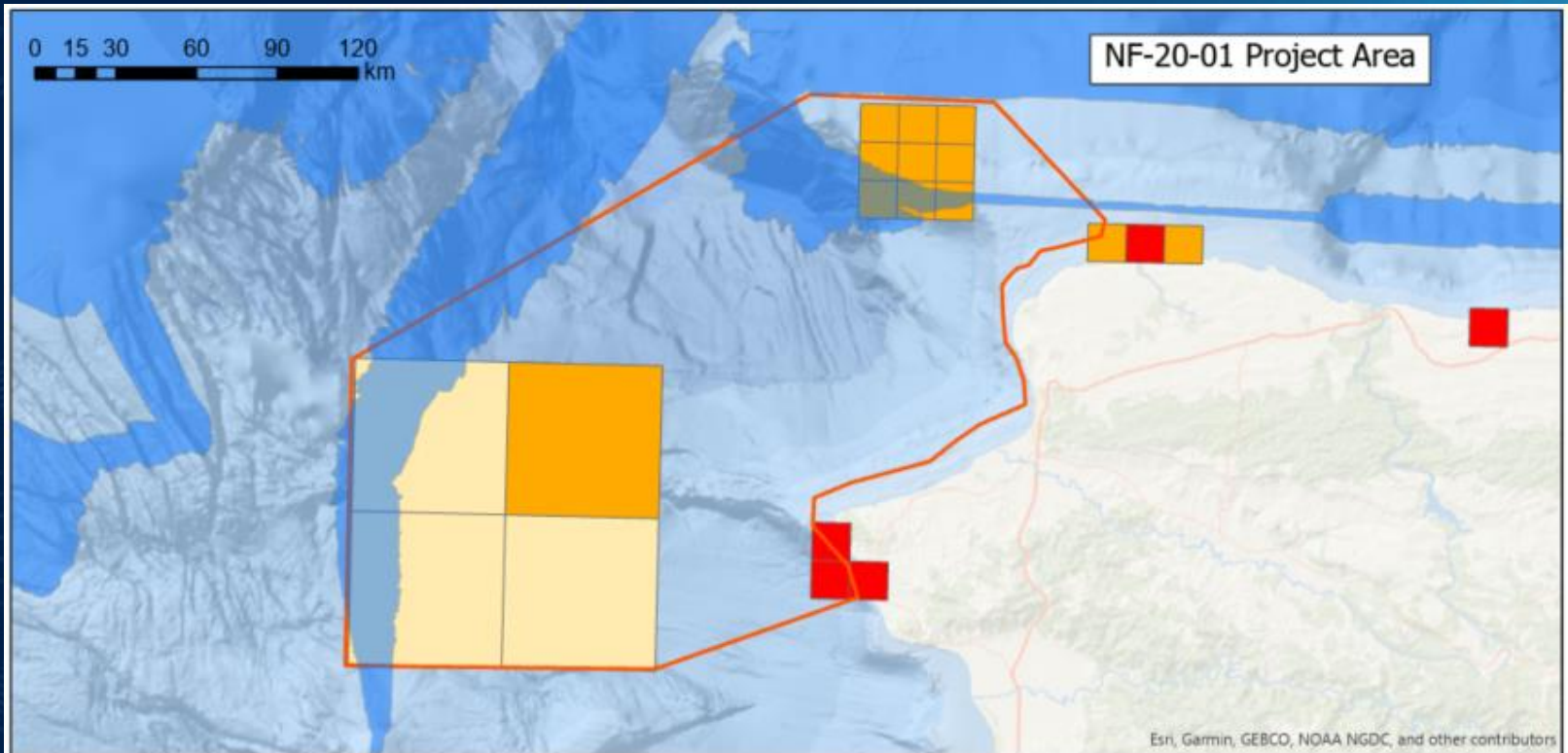
Demo: Feedback Web Tool

- All respondents who input prioritization coins will have access

- Please have all feedback completed by January 24, 2020
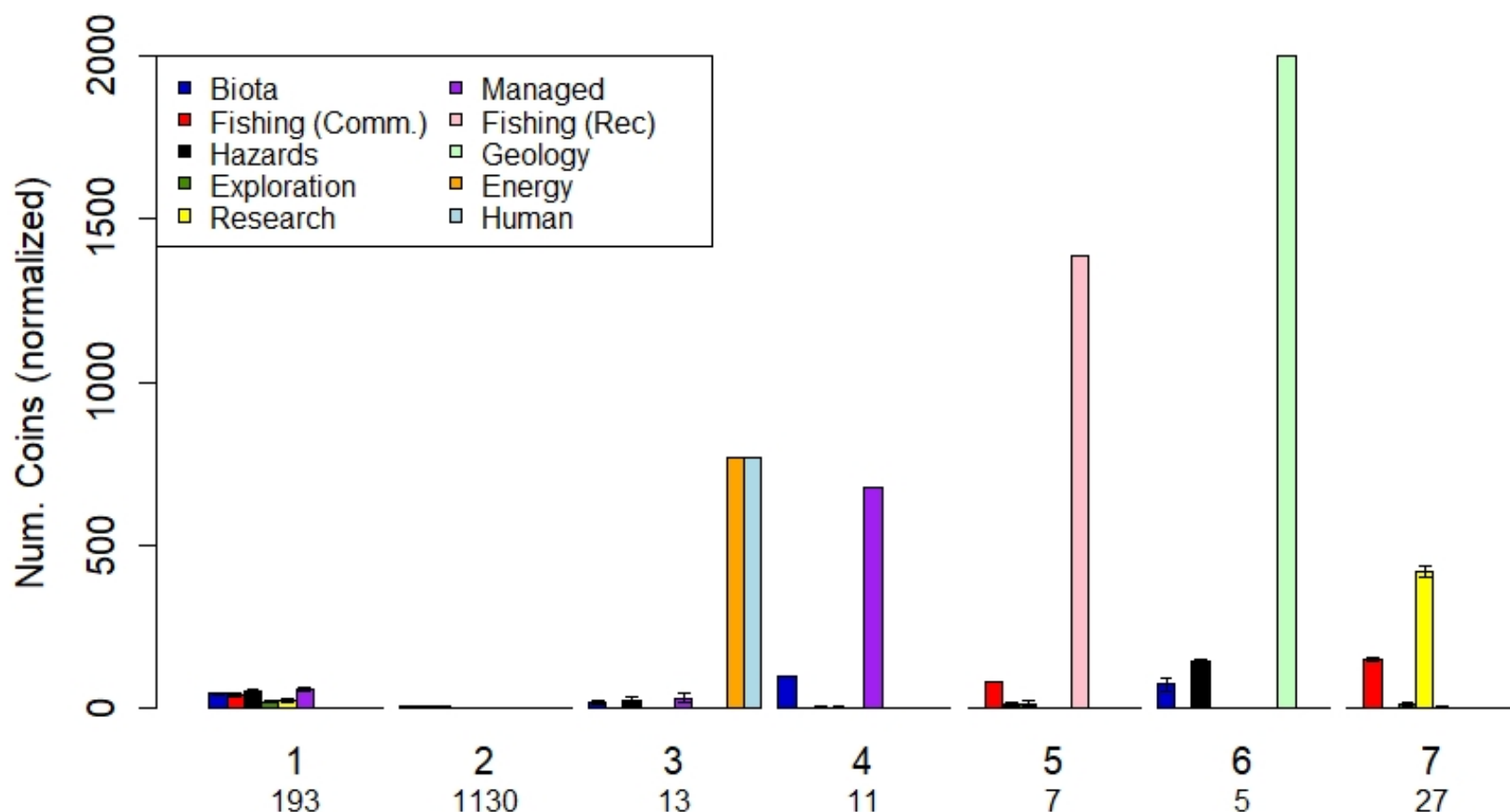
- Demo Web Tool

Questions?

Not a respondent and want to provide feedback? No worries! Just email Jennifer.Kraus@noaa.gov with your feedback (screen captures will be helpful).
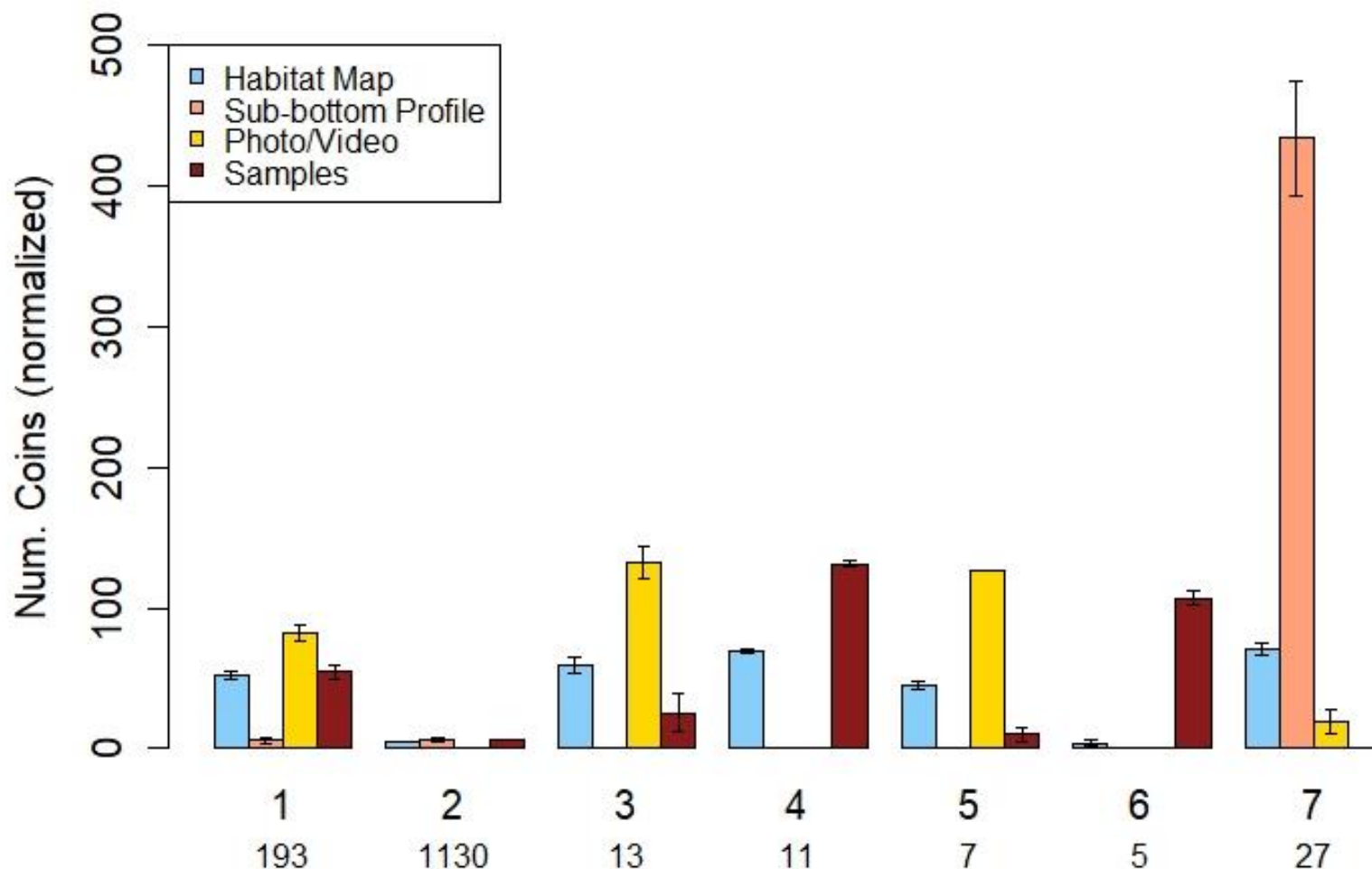
Which # Coins & Justifications were commonly clustered together?

Which # Coins & Data Products were commonly clustered together?
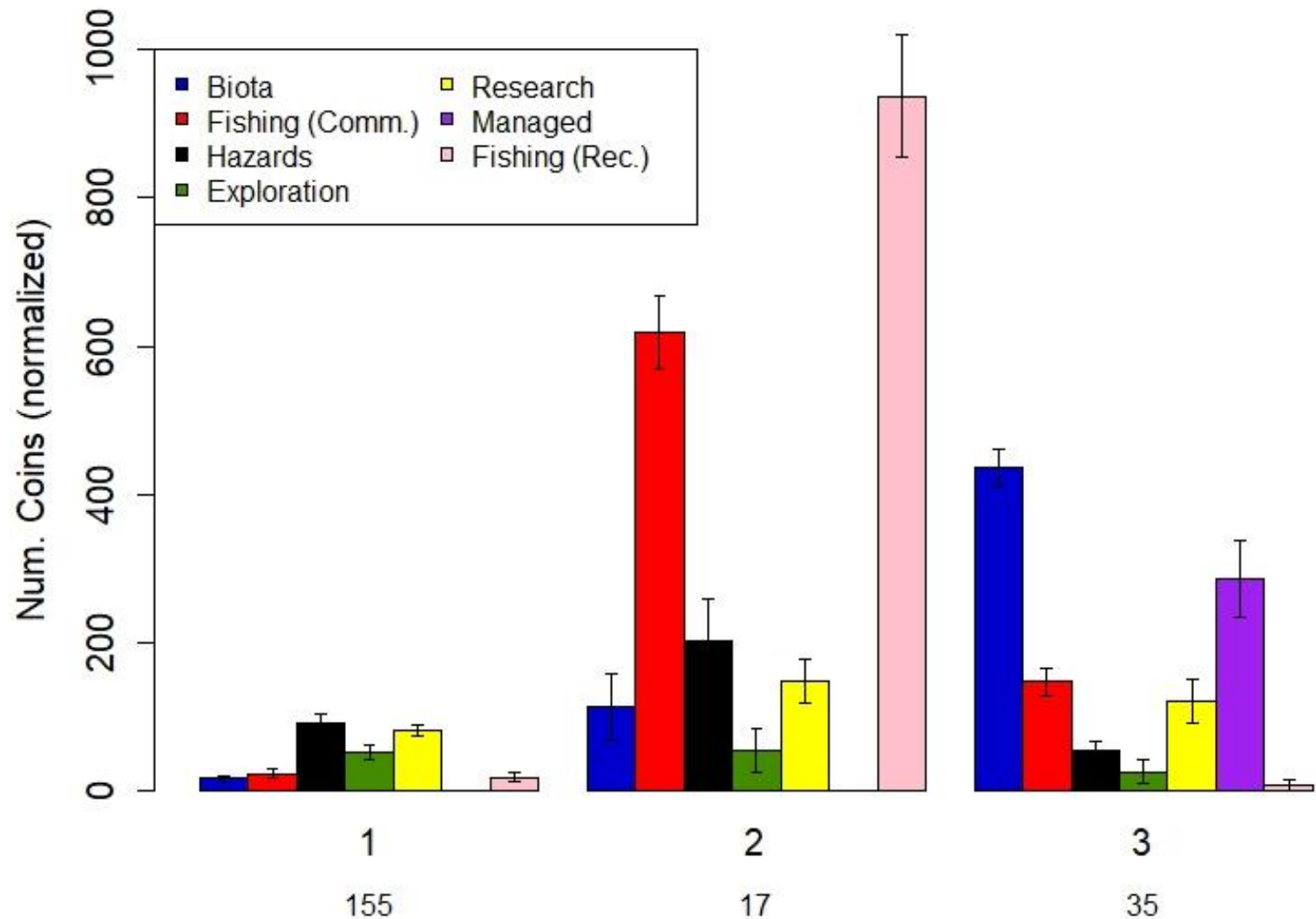
Which # Coins & Justifications were commonly clustered together?

Which # Coins & Data Products were commonly clustered together?