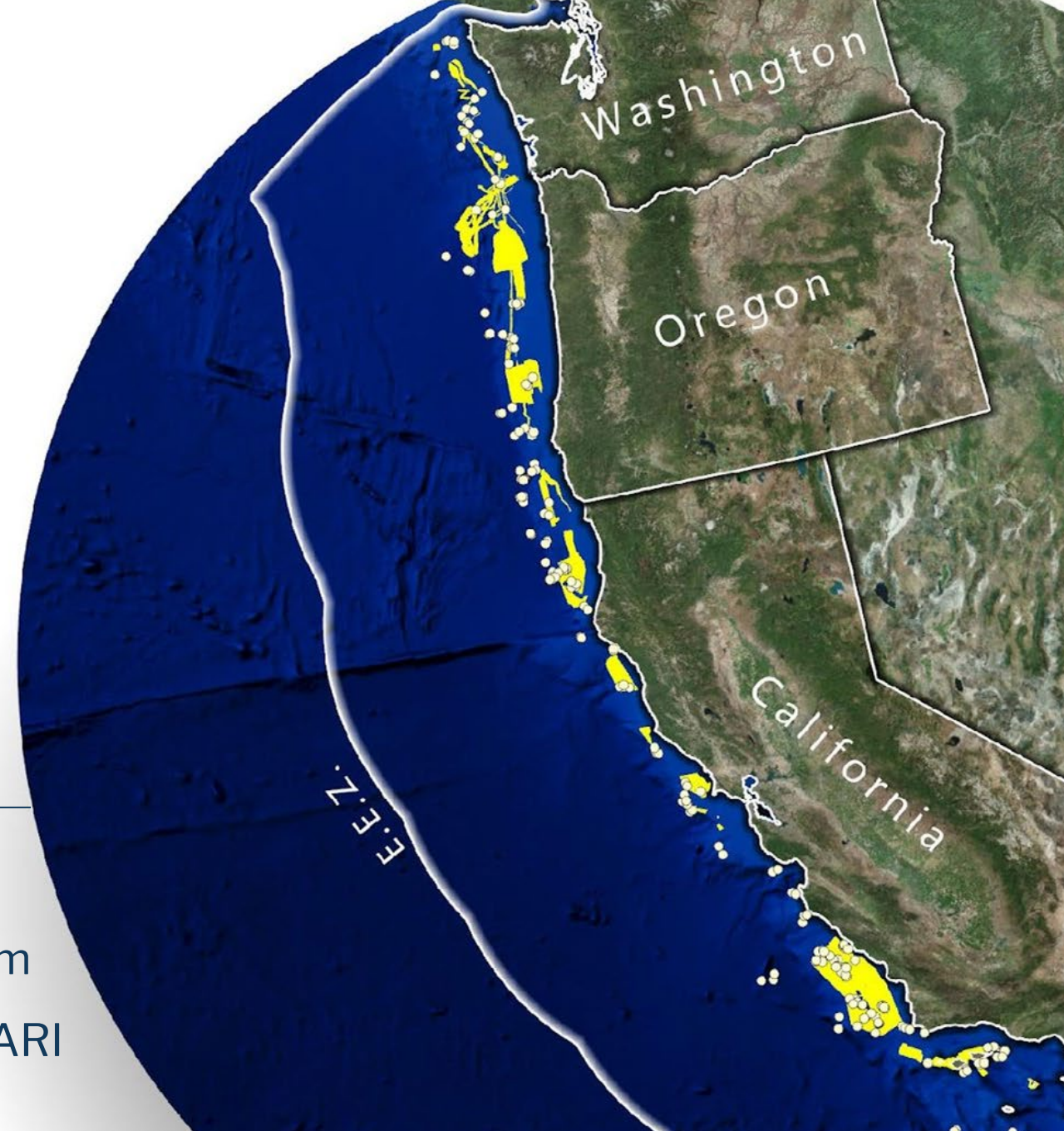


EXPRESS

*(EXpanding Pacific Research and
Exploration of Submerged Systems)*

Heather Coleman,
Deep Sea Coral Research and Technology Program
On behalf of partners at NOAA, USGS, BOEM, MBARI



EXPRESS

TOTALS: 2018-2022

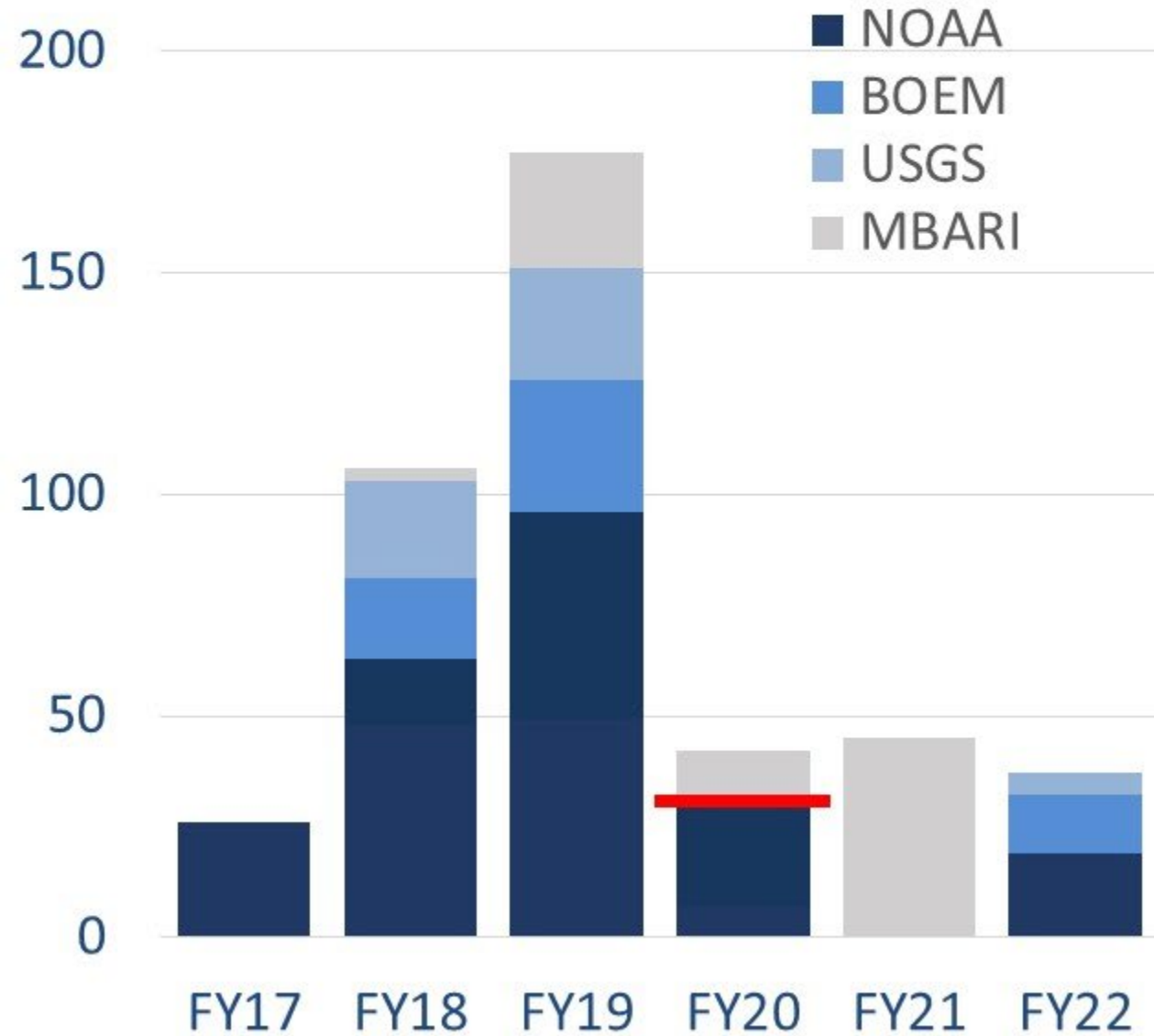
Days at sea	575
Km ² mapped	>40,000
ROV and AUV dives	257
Cores	>1500



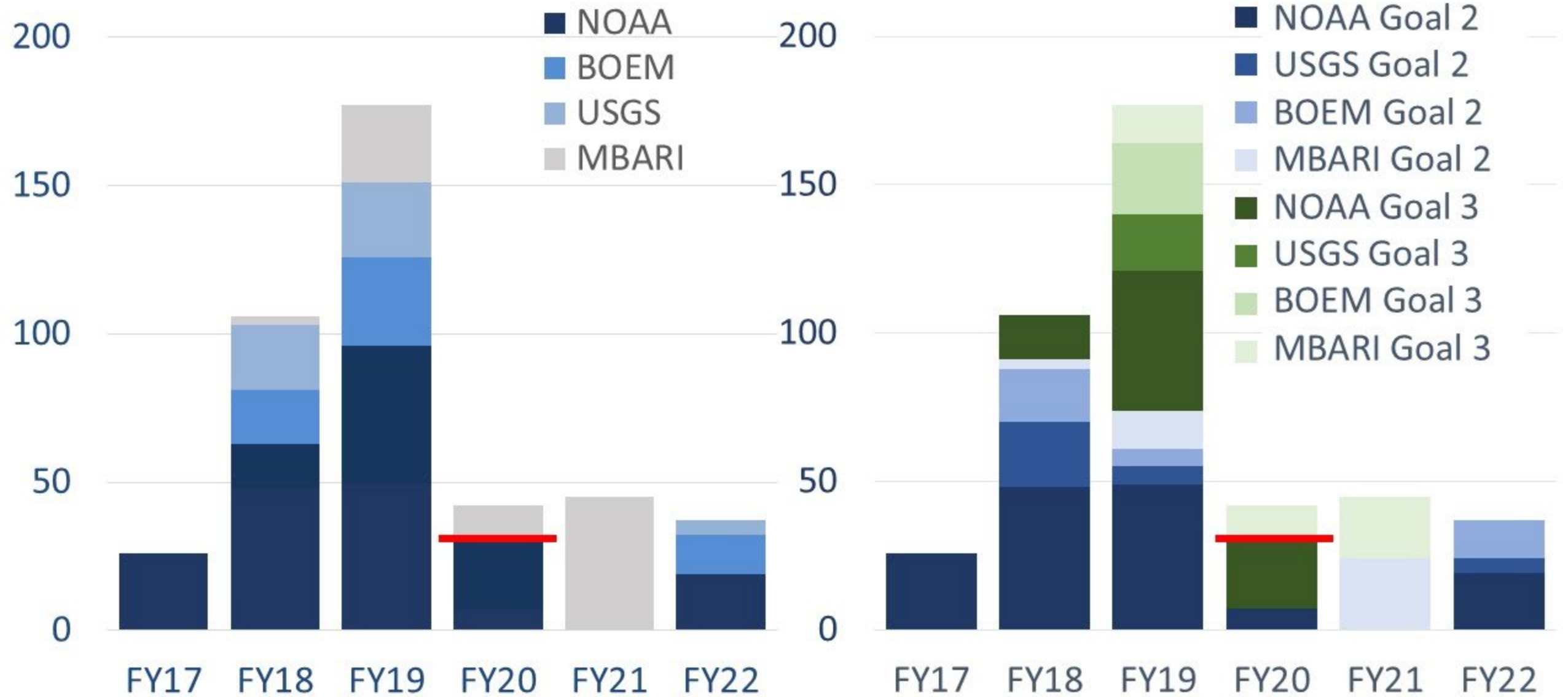
EXpanding Pacific Research and Exploration of Submerged Systems

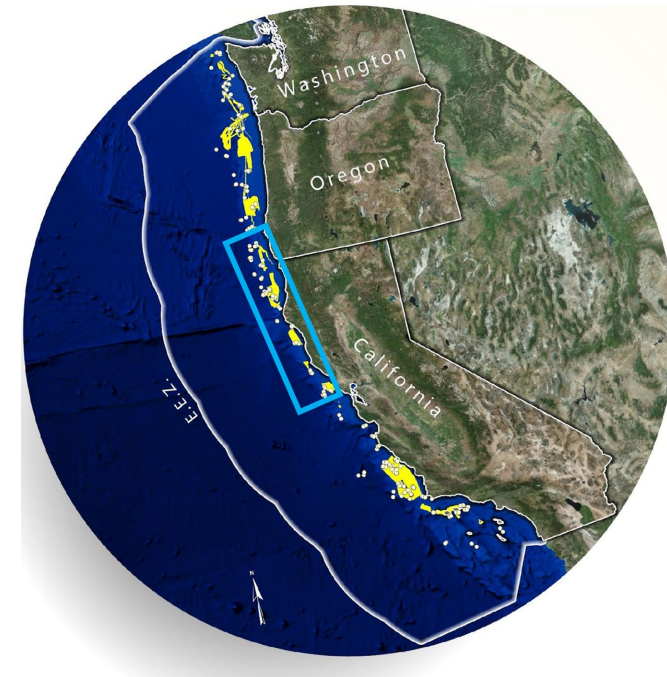
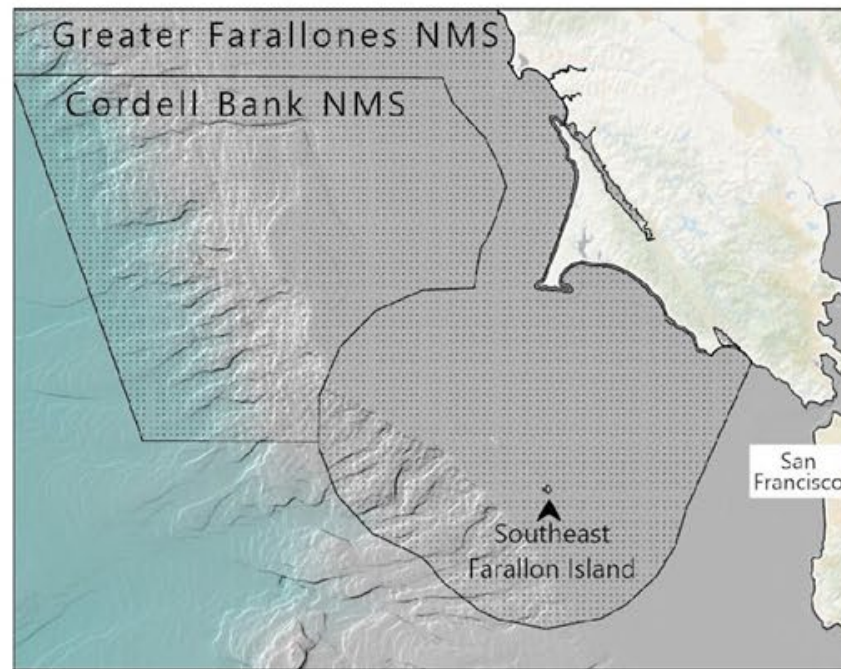
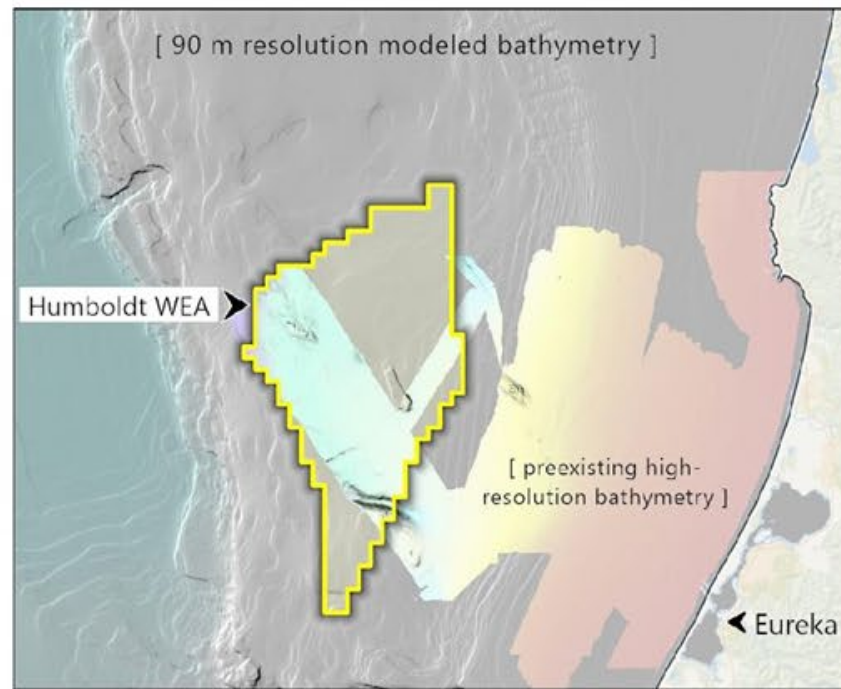
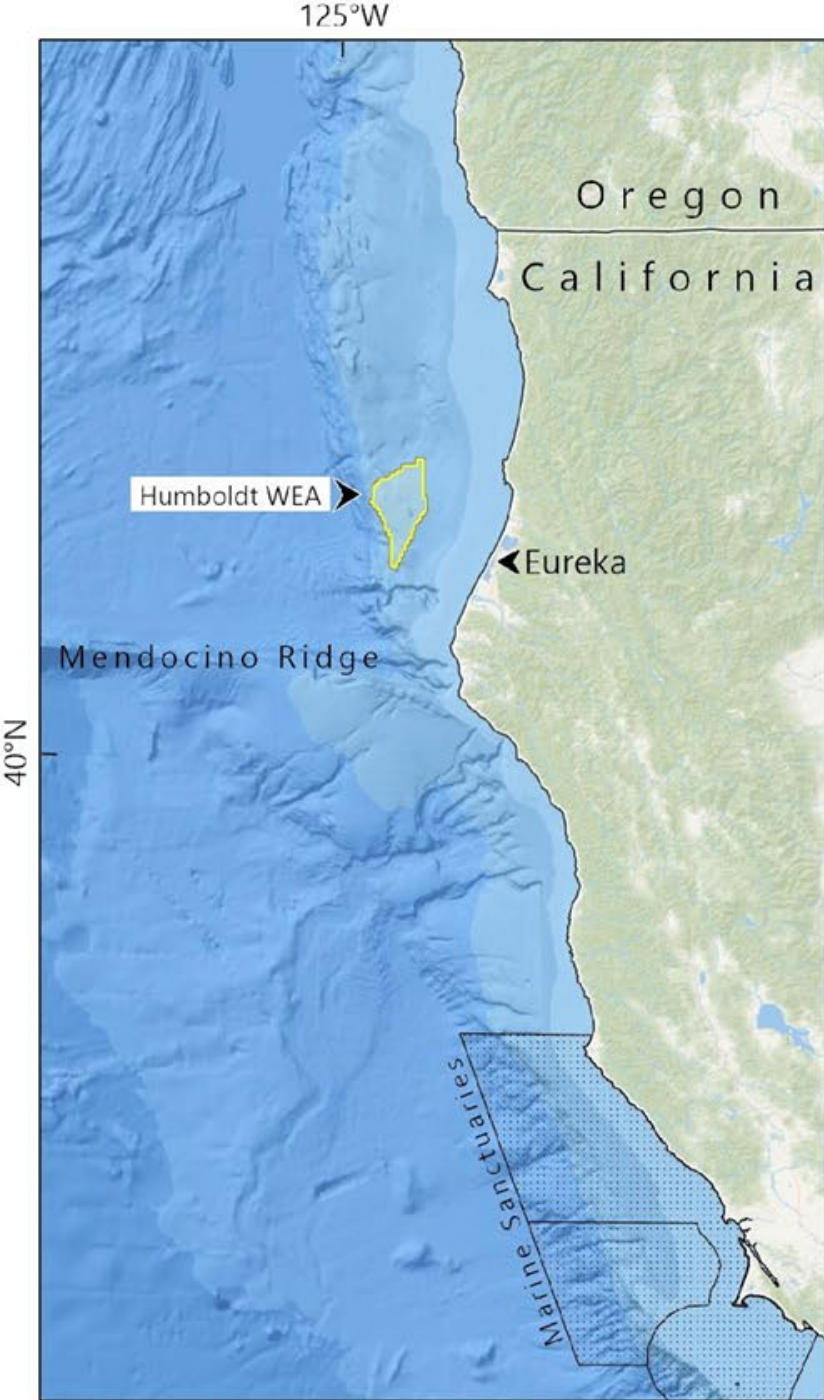
- Initial science and management drivers:
 - Improved understanding of living marine resources
 - Potential offshore energy and mineral resource development
 - Coastal/submerged hazard mapping and assessment
- Motivation:
 - Limited resources (e.g., ships and funding)
 - Recognized need for better regional coordination
 - Overlapping data and information needs
 - Nothing to lose

Ship Days-At-Sea by Agency and...

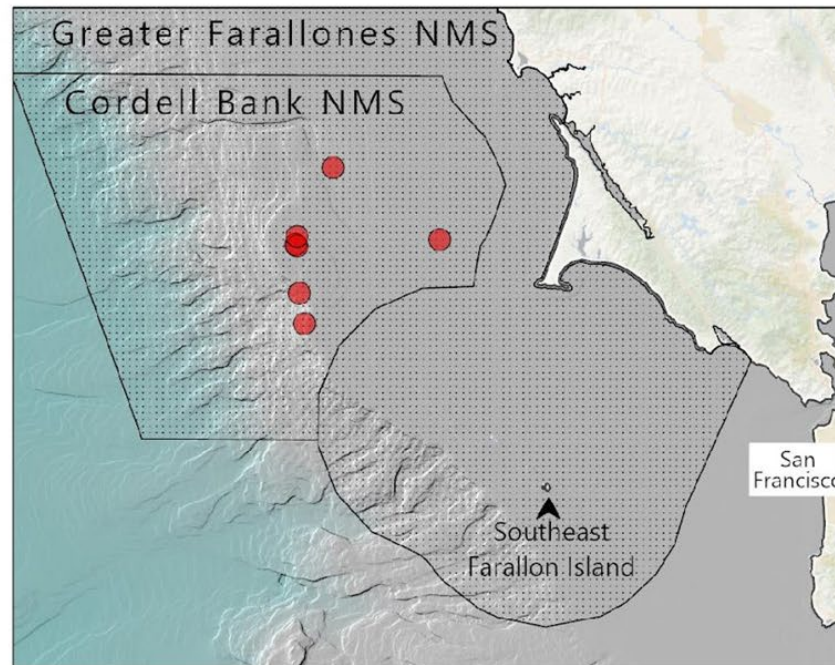
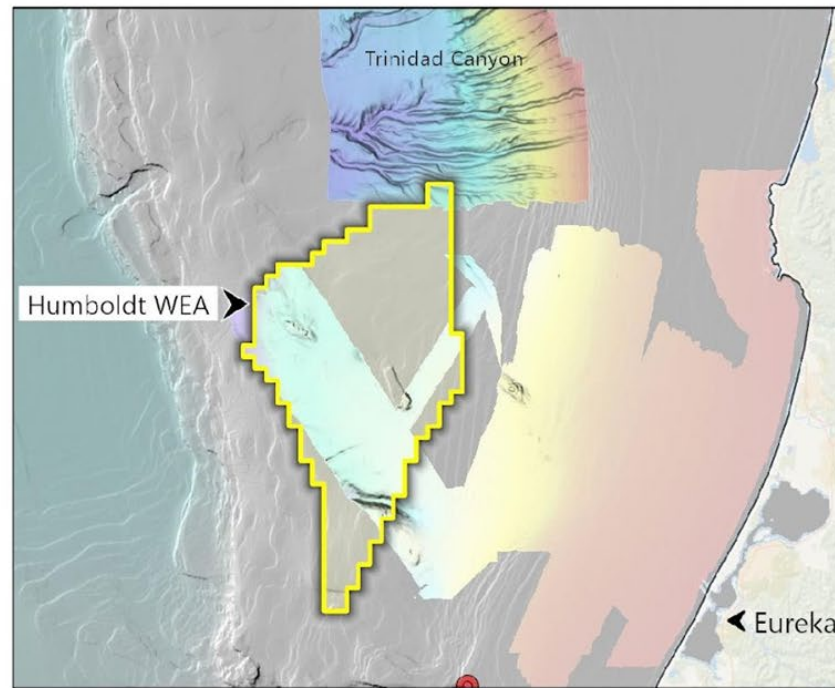
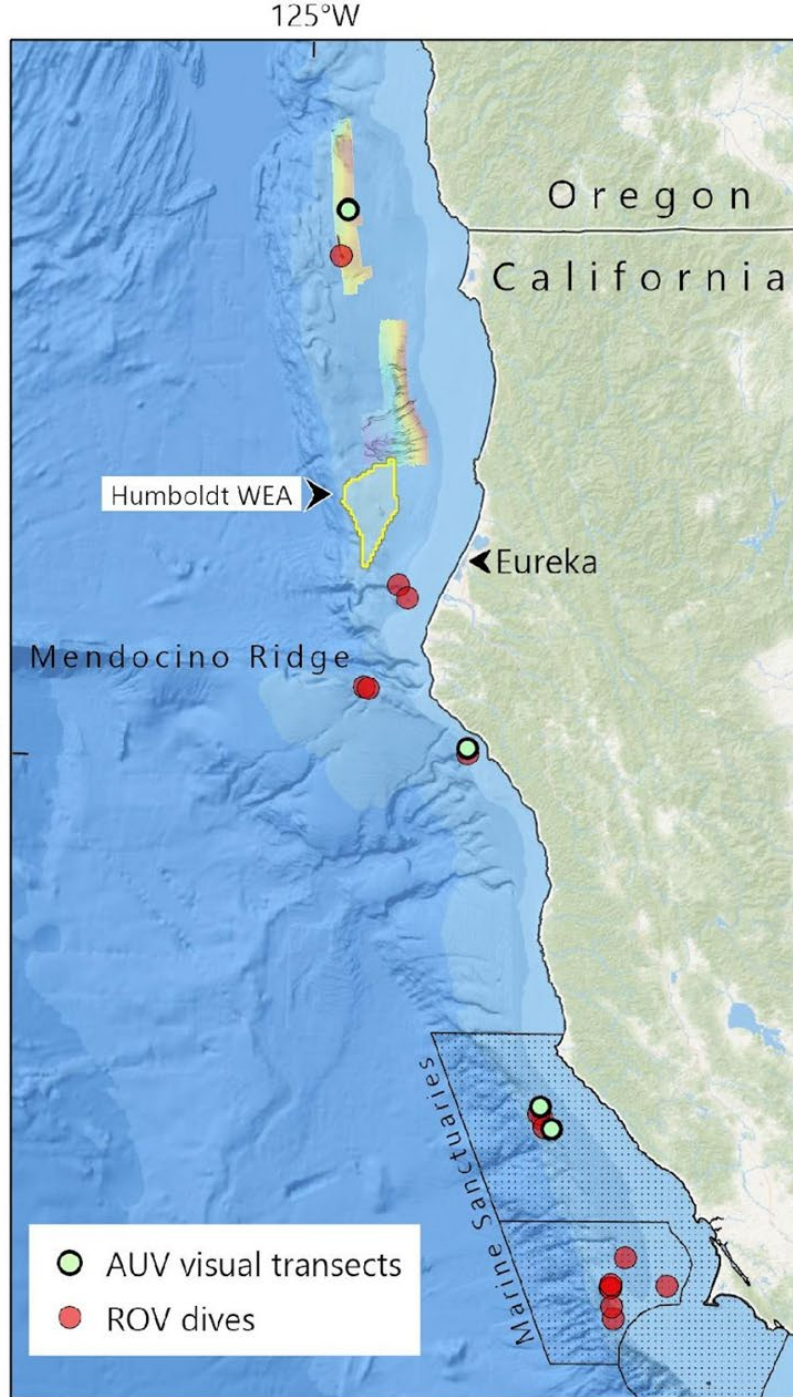


Ship Days-At-Sea by Agency and by NOMECC Goal





2018



NOTES

Goal 2: Map

NOAA Ship *Rainier*

Approximate area 1,620 sq. km

Goal 3: Exp. & Char.

Main map:

17 ROV dives, 4 AUV dives

NOAA Ship *Shimada*

Humboldt map:

none

Sanctuaries map:

7 ROV dives

2019

NOTES

Goal 2: Map

NOAA Ship *Fairweather*

Approx area added: 4,265 sq. km

Goal 3: Exp. & Char.

Main map:

+ 3 ROV dives, 5 AUV dives

NOAA Ship *Lasker*

+ 1 gravity core, 39 piston cores

R/V *Bold Horizon*

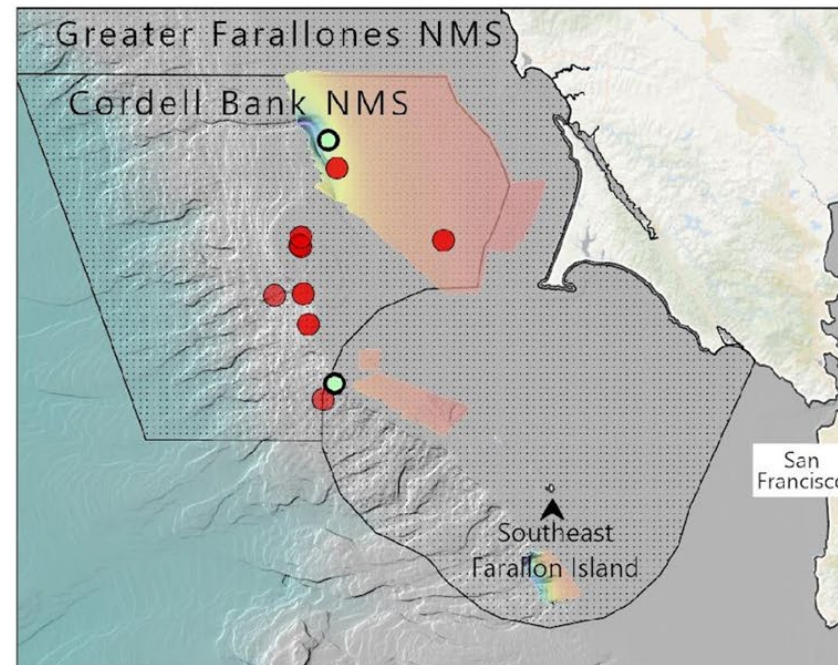
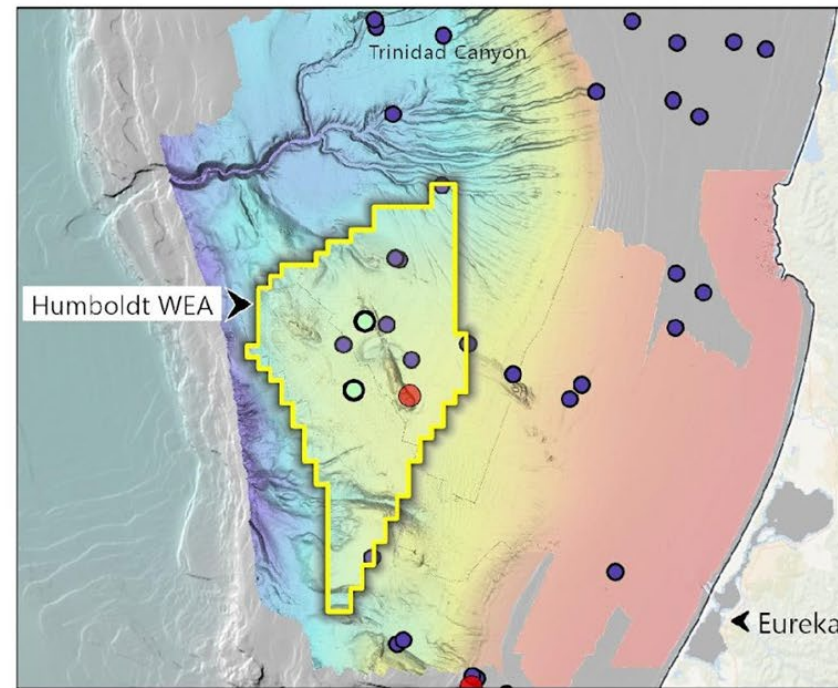
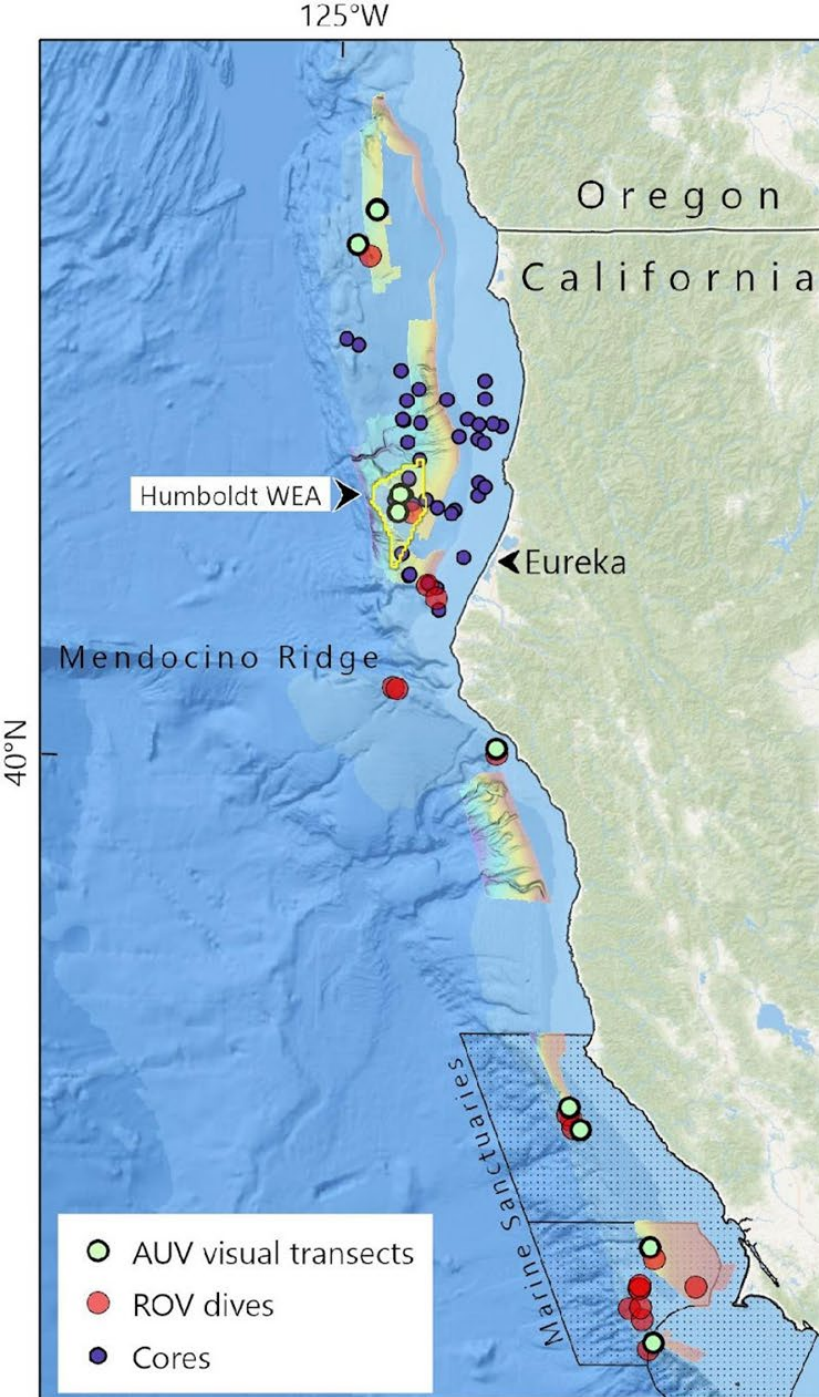
Humboldt map:

+ 1 ROV, 2 AUV dives

+ 30 piston cores

Sanctuaries map:

+ 2 ROV, 2 AUV dives



2020

NOTES

No new mapping

Goal 3: Exp. & Char.

Main map:

+ 24 ROV dives + 386 pushcores,
166 vibracores

R/V Western Flyer

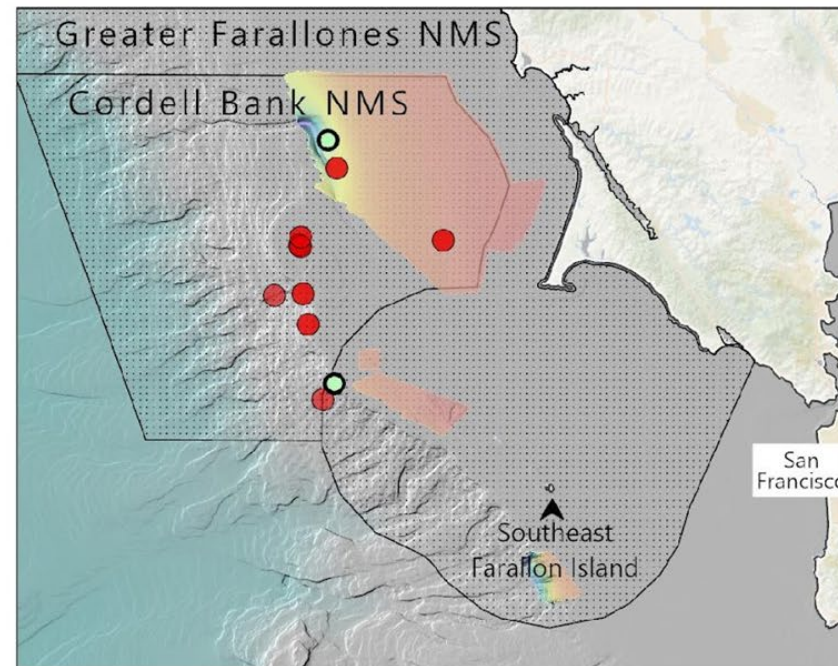
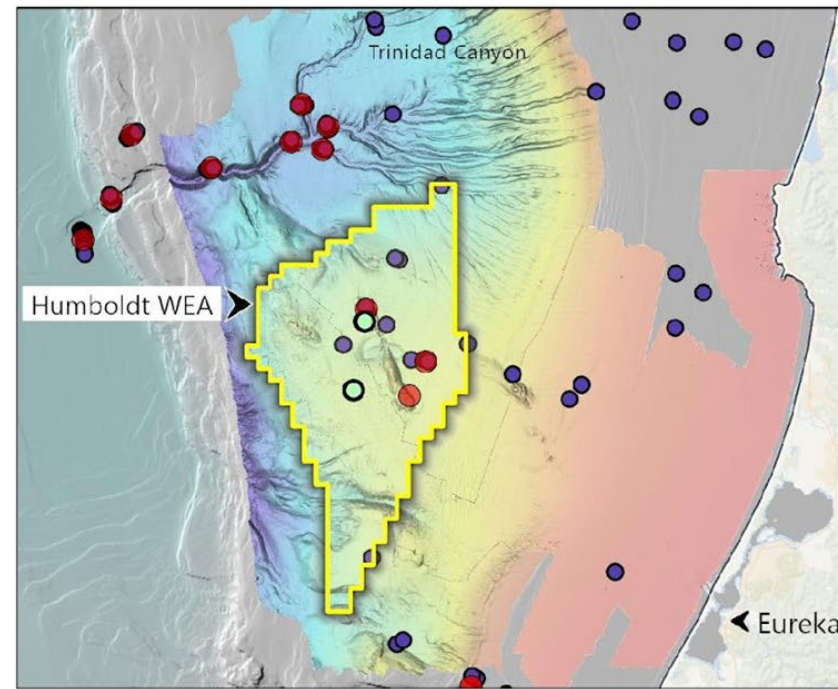
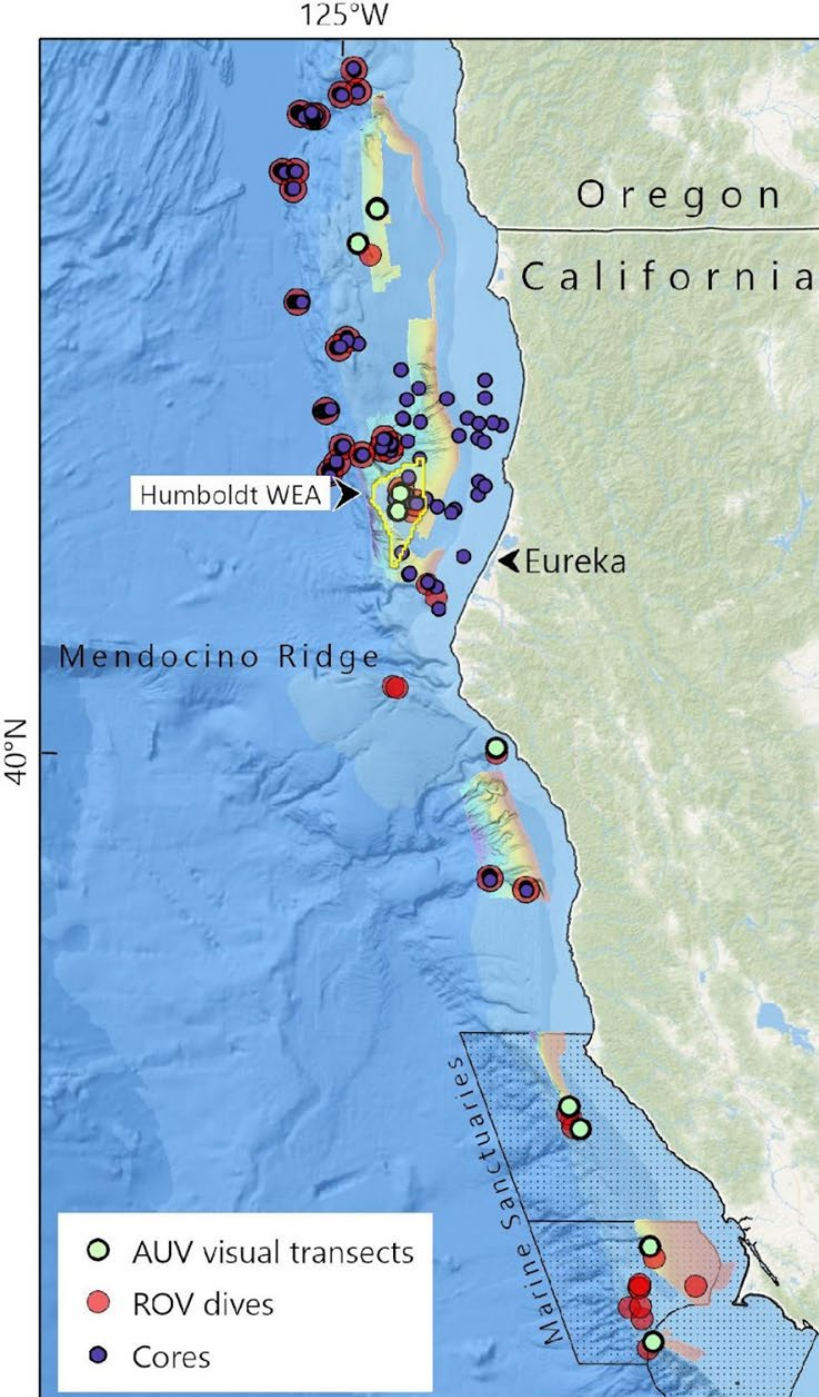
Humboldt map:

+ 10 ROV dives

+ 131 pushcores, 57 vibracores

Sanctuaries map:

No new activities



2021

NOTES

Goal 2: Map

R/V *Rachel Carson*

5 sites of AUV mapping
approx. 91 sq. km total

NOAA Ship *Fairweather*
~2,340 sq. km

Goal 3: Exp. & Char.

Main map:

+ 7 ROV dives – R/V *Western Flyer*

+ 150 pushcores, 67 vibracores

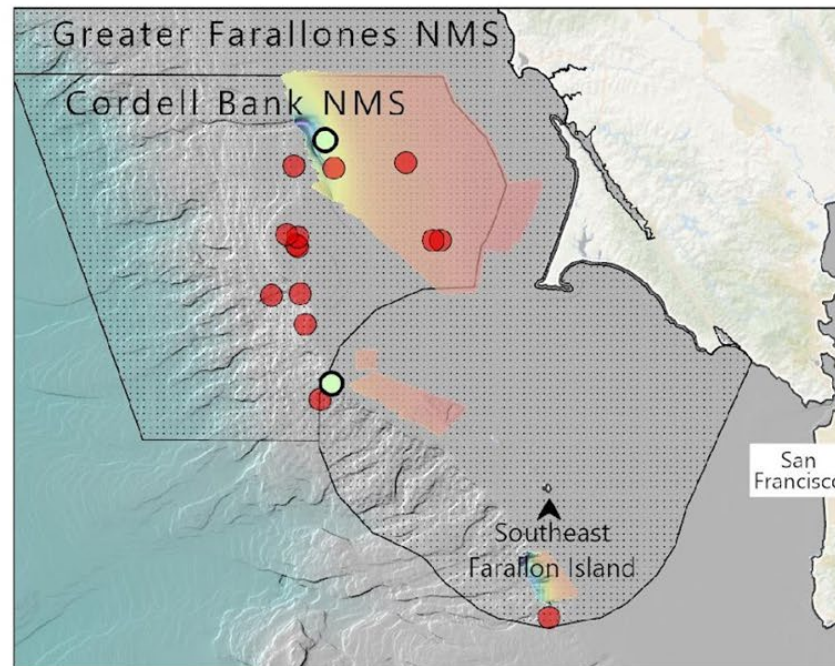
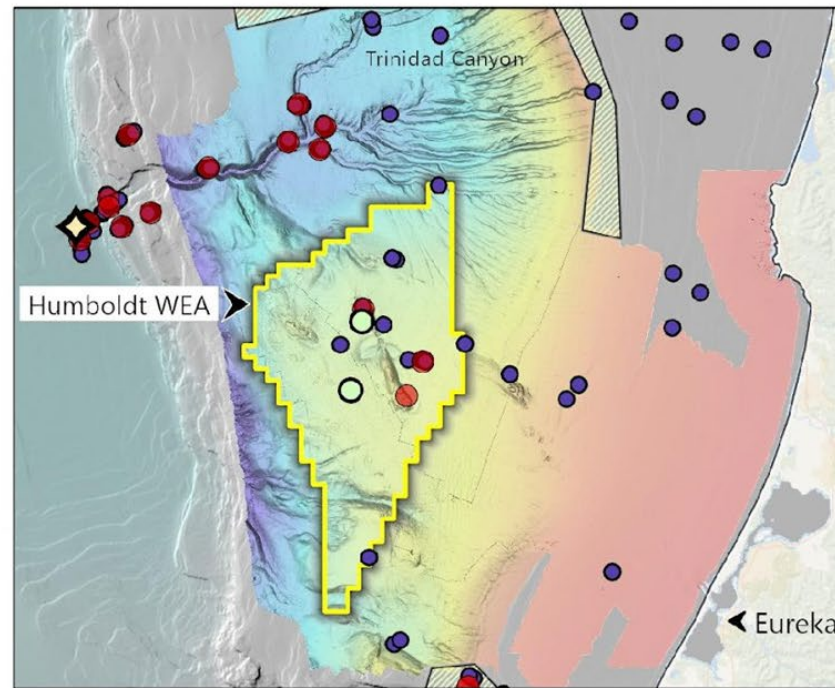
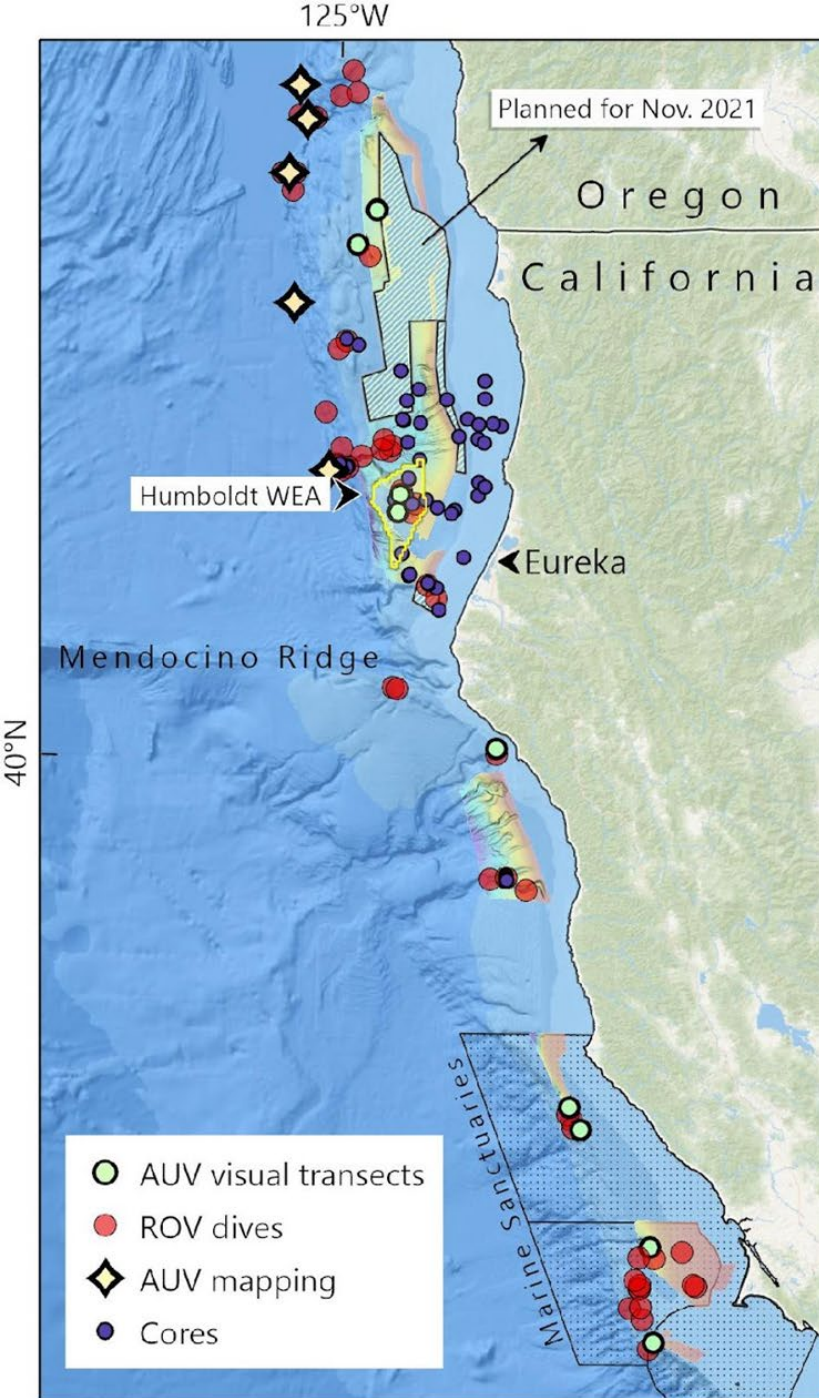
+ 5 ROV dives - R/V *Fulmar*

Humboldt map:

+ 4 ROV dives + 78 pushcores, 101 vibracores

Sanctuaries map:

+ 5 ROV dive



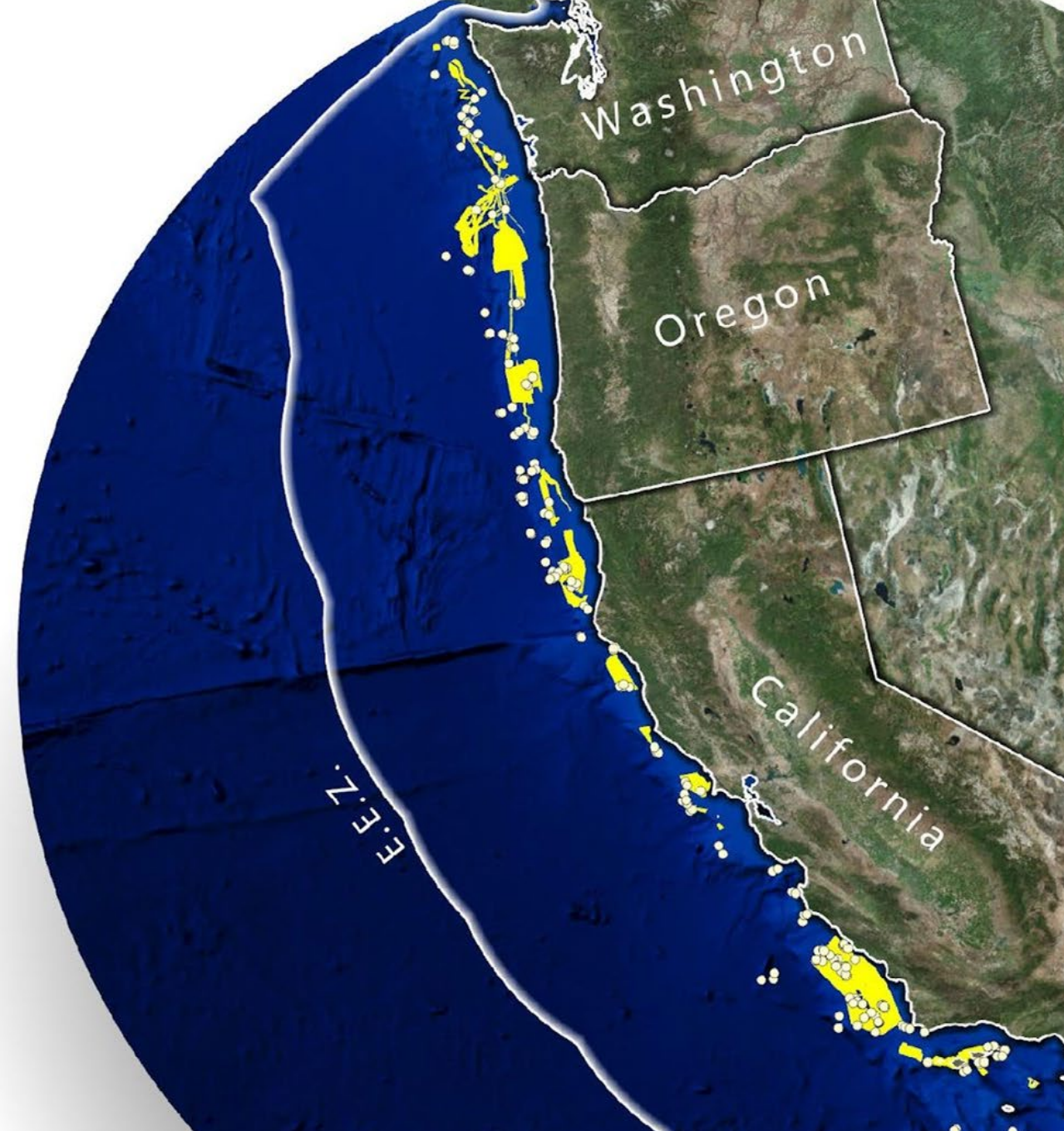
Why has EXPRESS been successful?

- Set modest initial targets for meaningful success
- Complementary and overlapping information needs
- Led by the region but with the support of headquarters
- Primarily targeted federal coordination
- Focused on building the network and relationships
 - Mutual need and mutual benefit
 - ‘Coordinator’ with interagency experience
 - Ability to leverage/influence other agencies’ funding processes
 - Willingness to trust
- Good luck and good timing

NOMECA-Applicable Lessons Learned/Challenges

- Engage and empower regional personnel
- Recognize the underlying motivations behind past efforts
- Need dedicated resources – both funds and personnel
- Worthy of further discussion:
 - What is a ‘campaign’? What isn’t?
 - Effective data management
 - Product development
 - External communications
 - Engaging non-federal partners
 - Use of the Bathymetry Gap Analysis
 - Maximizing value of spatial prioritization efforts

Thank you!



BOEM
Environmental Studies Program
Pacific Outer Continental Shelf Region
Monterey Bay Aquarium Research Institute
NOAA
Channel Islands National Marine Sanctuary
Cordell Bank National Marine Sanctuary
Deep Sea Coral Research & Technology Program
Greater Farallones National Marine Sanctuary
Monterey Bay National Marine Sanctuary
National Centers for Coastal Ocean Science
National Centers for Environmental Information
Northwest Fisheries Science Center
Ocean Exploration
Office of Coast Survey
Office of Marine and Aviation Operations (4)
Olympic Coast National Marine Sanctuary
Pacific Marine Environmental Laboratory
Sea Grant
Southwest Fisheries Science Center
U.S. Geological Survey
Eastern Ecological Science Center
Pacific Coastal and Marine Science Center
St. Petersburg Coastal and Marine Science Center
Wetland and Aquatic Research Center



... And a Special Thank You to Jane Rudebusch (USGS PCMSC)