



ROSA
Responsible Offshore
Science Alliance



Identifying Offshore Wind and Fisheries Research Gaps Using the FishFORWRD Database

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American Fisheries Society Annual Meeting

Offshore Wind, Fish, and Fisheries -
Emerging Knowledge and Application
August 13, 2024

Leading Regional Research on Offshore Wind & Fisheries

Mission:

We **advance research, monitoring, and methods** on the effects of **offshore wind energy development on fisheries** across US waters.

We serve as an objective resource for all sectors and facilitate the coordination of regional scientific research to collaboratively and efficiently deepen understanding.

Inception:

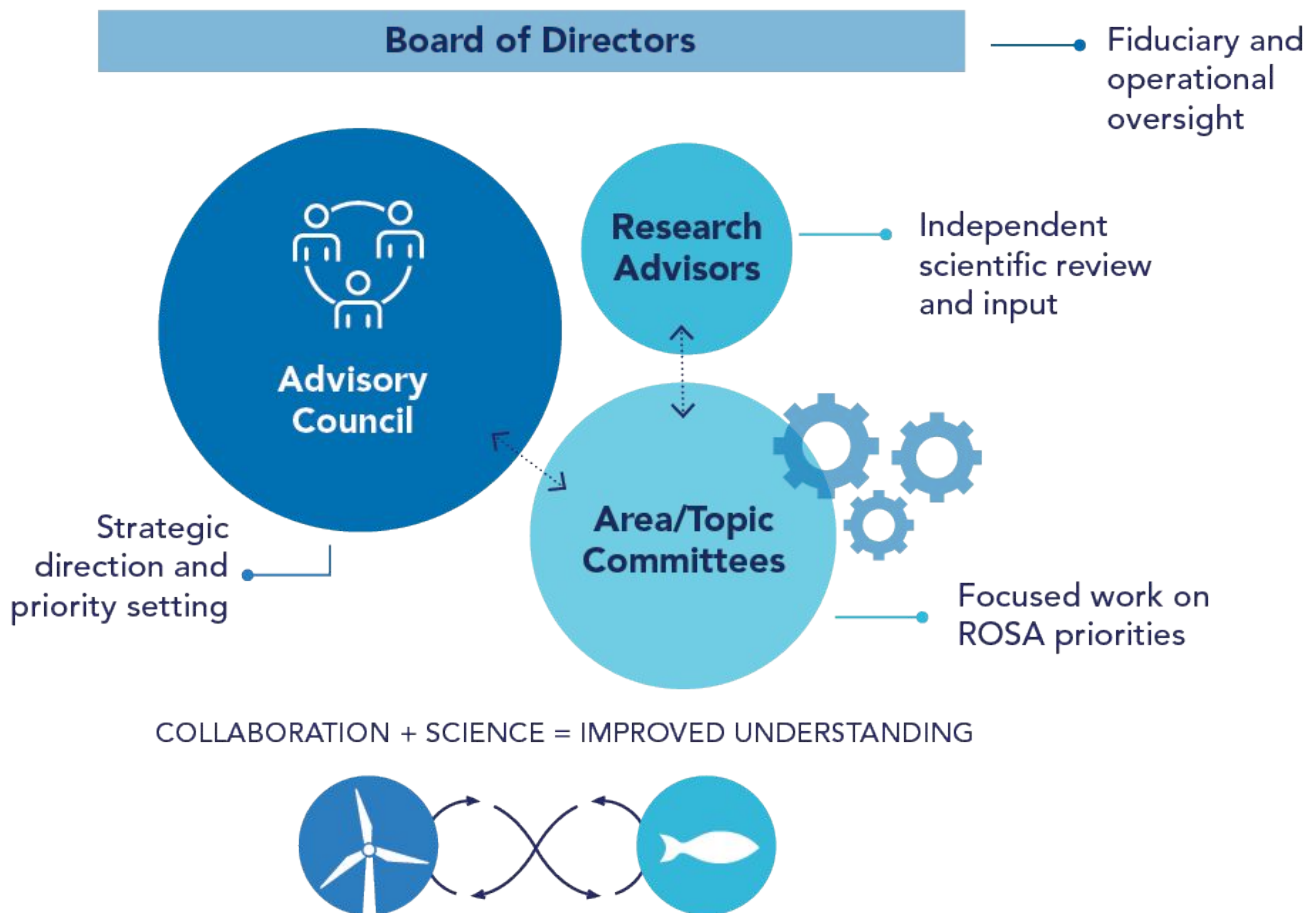
Formed in early 2019 as a 501(c)3

Partnership between RODA & OSW developers

SCIENTIFIC
COLLABORATIVE
OBJECTIVE
TRANSPARENT



ROSA's Organizational Structure



*Tribal Nation representation TBD

Strategic Plan – 3 Key Objectives

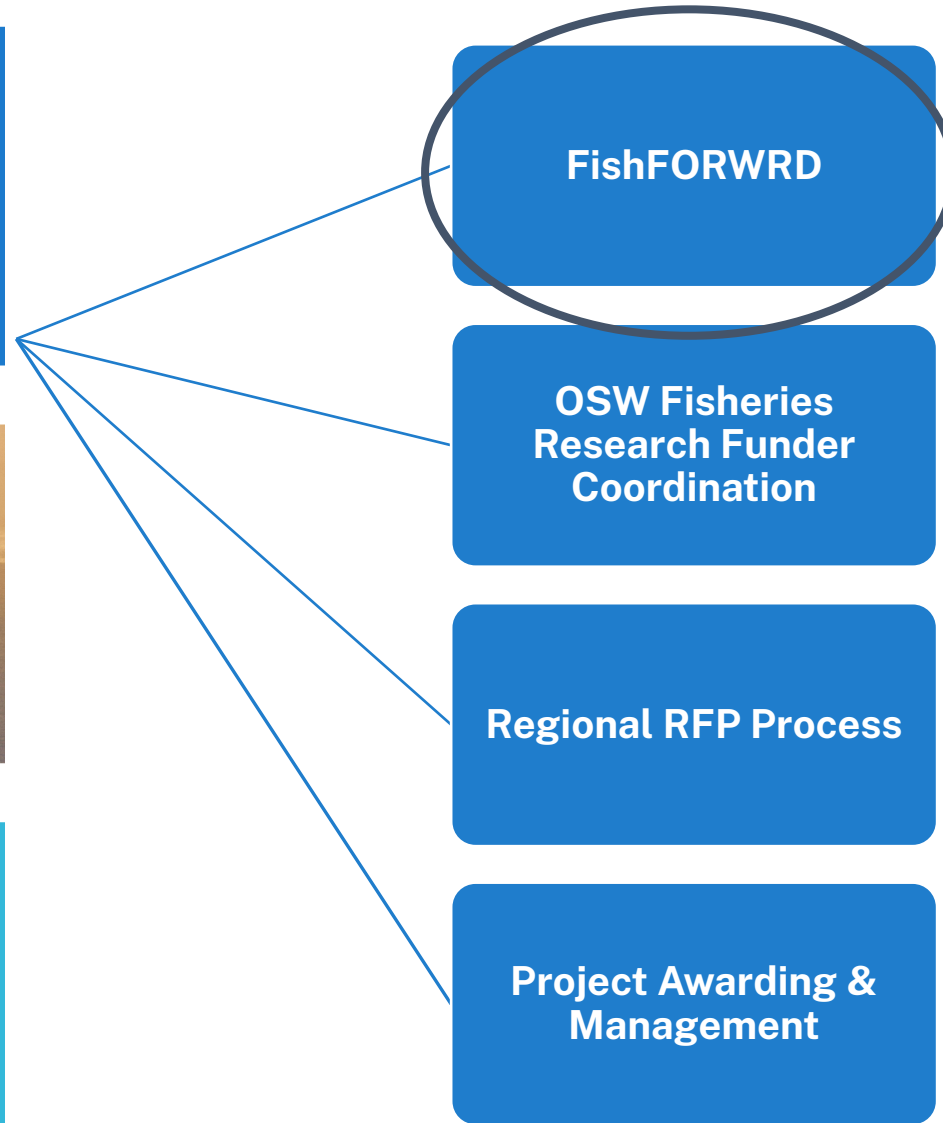


Administer Regional
OSW Fisheries
Research & Monitoring

Facilitate Assessment
of Regional &
Cumulative Impacts



Build Coordination
Through Engagement



FishFORWRD | Fish and Fisheries OffshoRe Wind Research Database

Objective

increase awareness of ongoing work
avoid duplication of efforts
create a common understanding of research needs

Contents

Research Projects

- Research projects funded by federal agencies, state agencies, non-profits, etc.
- Implemented Developer Fisheries Monitoring Plans

Research Needs

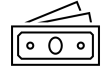
- Individual research needs from 17 different published documents by federal agencies, states agencies, and public-private partnerships

Research Gaps Analysis

Research Categories



Habitat Fragmentation/Modification



Socioeconomic & Sociocultural Impacts



Cumulative Impacts & Fisheries Mgmt



Sound/Vibration Impacts



Species Distribution/Composition



EMF



Fisheries Access & Gear Modification



Fisheries Engagement & Capacity Building



Survey Adaptation



Data Management



Resource Monitoring



Welcome to the **FishFORWRD Database**
Developed in Partnership by **ROSA**, **Attentive Energy**, and **WSP**



FishFORWRD | Fish and Fisheries OffshoRe Wind Database

- FishFORWRD is a catalog of all East Coast **research, monitoring efforts**, and stated **research needs** for offshore wind, fish, and fisheries.
- Included are research and monitoring funded specifically to understand offshore wind potential effects on fish and fisheries.
- The **objective** of FishFORWRD is to increase awareness of ongoing work, avoid duplication of efforts, and create a common understanding of research needs. This tool is meant for research funders, fisheries and offshore wind researchers, offshore wind developers, and the public.

How to use this Dashboard

- **Filter** projects and research needs by location, research category, methodology used, funder and more.
- **Download** database information to explore information outside of the webtool
- **Submit** new projects, new needs, and corrections

Explanation of Tabs

Total Project Count

221

Developer Monitoring Plan
Surveys

82

Total Unique Research
Categories

11

Active East Coast
Funding Entities

33

Total Identified Needs

323

Types of
Methodologies Employed

20

Current Projects					Identified Research Needs		Acronyms List		Terms Definition		References	
Download as CSV												
Rsrch. Proj. Id	Proj. Title	Rsrch. Category		Proj. Objectives	Methodology		Receptor		Est. Project End		Funder	
All ▾		All ▾										
Ex-1	Benthic Monitoring During Wind Turbine Installation and Operation at the Block Island Wind Farm, Rhode Island	Habitat Fragmentation/Modification		to better understand anticipated and because of the seafloor	V/video/stills		Be Inv mi					
Ex-2	Evaluation of Potential EMF Effects on Fish Species of Commercial or Recreational Fishing Importance in Southern New England	EMF		To determine	ner		All					
Ex-3	Feel the Vibrations: Behavioral Response by Fishes and Invertebrates to Particle Motion and Substrate Vibration from Offshore Renewable Energy Development	Sound/Vibration Impacts		To establish a borne vibroac that could po	ner		All					
Ex-4	A Comprehensive Assessment of Existing Gulf of Maine	Habitat Fragmentation/Modification		To compile ex	ner		All					

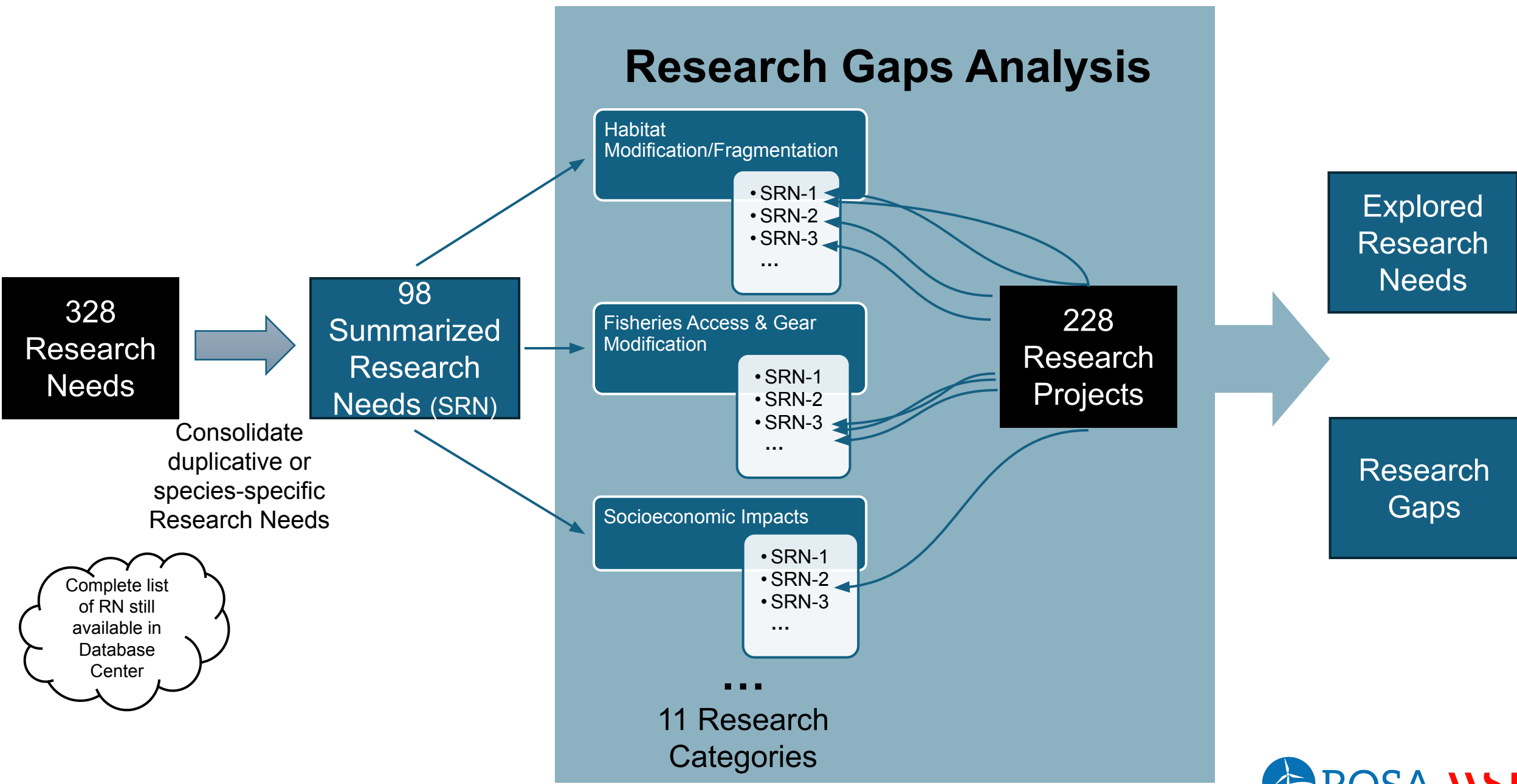
- Developer Fisheries Monitoring Plan (Y/N)
- Fixed or Floating
- Wind Farm Development Phase
- Spatial Scale
- Location
- Project Title
- Lead Entity
- Partner Entities
- PI Name
- Project Objectives
- Methodology
- Receptor
- Project Start
- Est. Project End
- Funder
- Funding Partners
- Project Website

FishFORWRD: Phase 2

Research Gaps Analysis

What Research Needs are Under Exploration?
How? On Which Receptor? By Whom? Where?

What Gaps Still Remain?



PEER REVIEW

Summer 2025

328
Research
Needs



98
Summarized
Research
Needs (SRN)

Consolidate
duplicative or
species-specific
Research Needs

Complete list
of RN still
available in
Database
Center

Research Gaps Analysis

Habitat
Modification/Fragmentation

- SRN-1
- SRN-2
- SRN-3
- ...

Fisheries Access & Gear
Modification

- SRN-1
- SRN-2
- SRN-3
- ...

Socioeconomic Impacts

- SRN-1
- SRN-2
- SRN-3
- ...

...
11 Research
Categories

228
Research
Projects

Explored
Research
Needs

Research
Gaps

TEAM	Research Category
1	Cumulative Impacts & Fisheries Management Implications
	Data Management
2	EMF
	Sound/Vibration Impacts
3	Fisheries Engagement & Capacity Building
	Socioeconomic Impact
	Fishery Access & Gear Modification
4	Habitat Fragmentation/Modification
5	Species Distribution/Composition
6	Survey Adaptation

6
teams

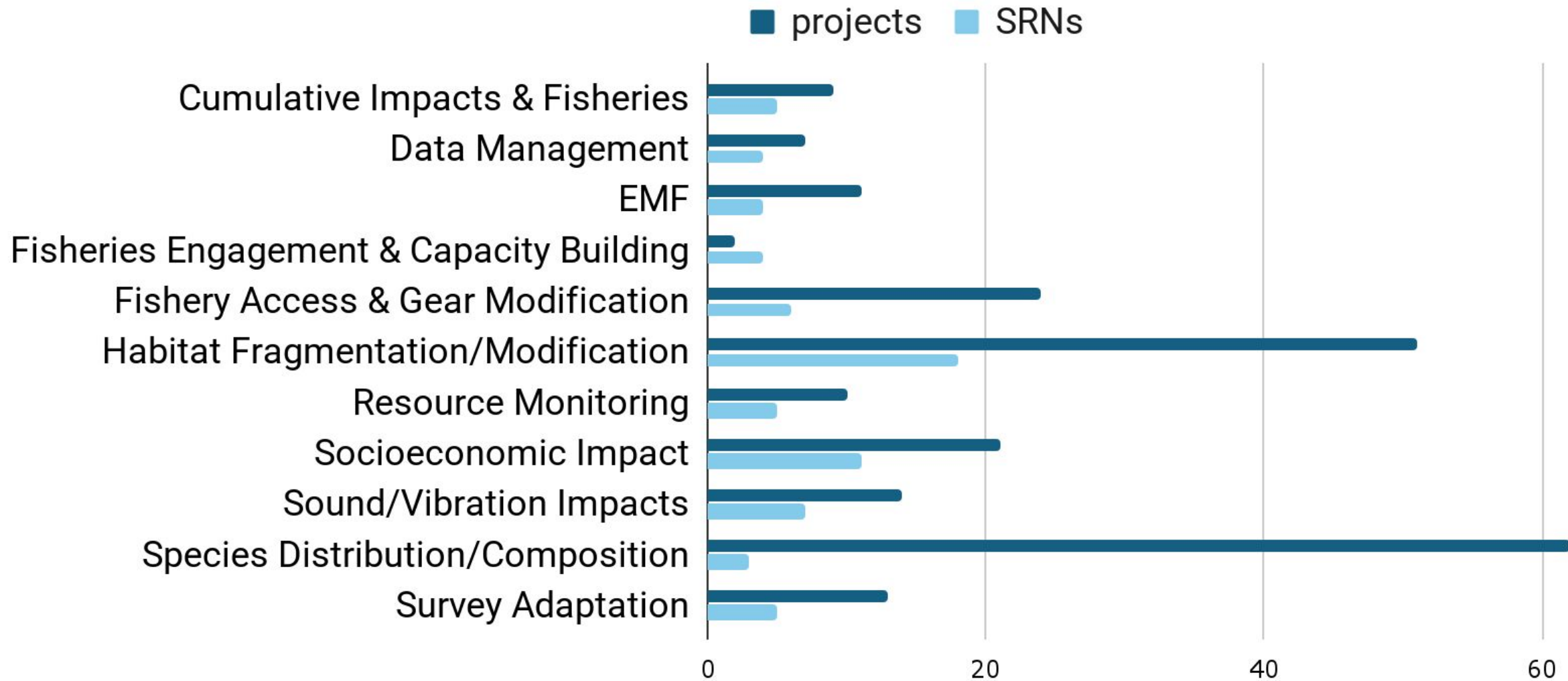
15
peer reviewers

7
meetings



Research Gaps Analysis

Preliminary Results



72

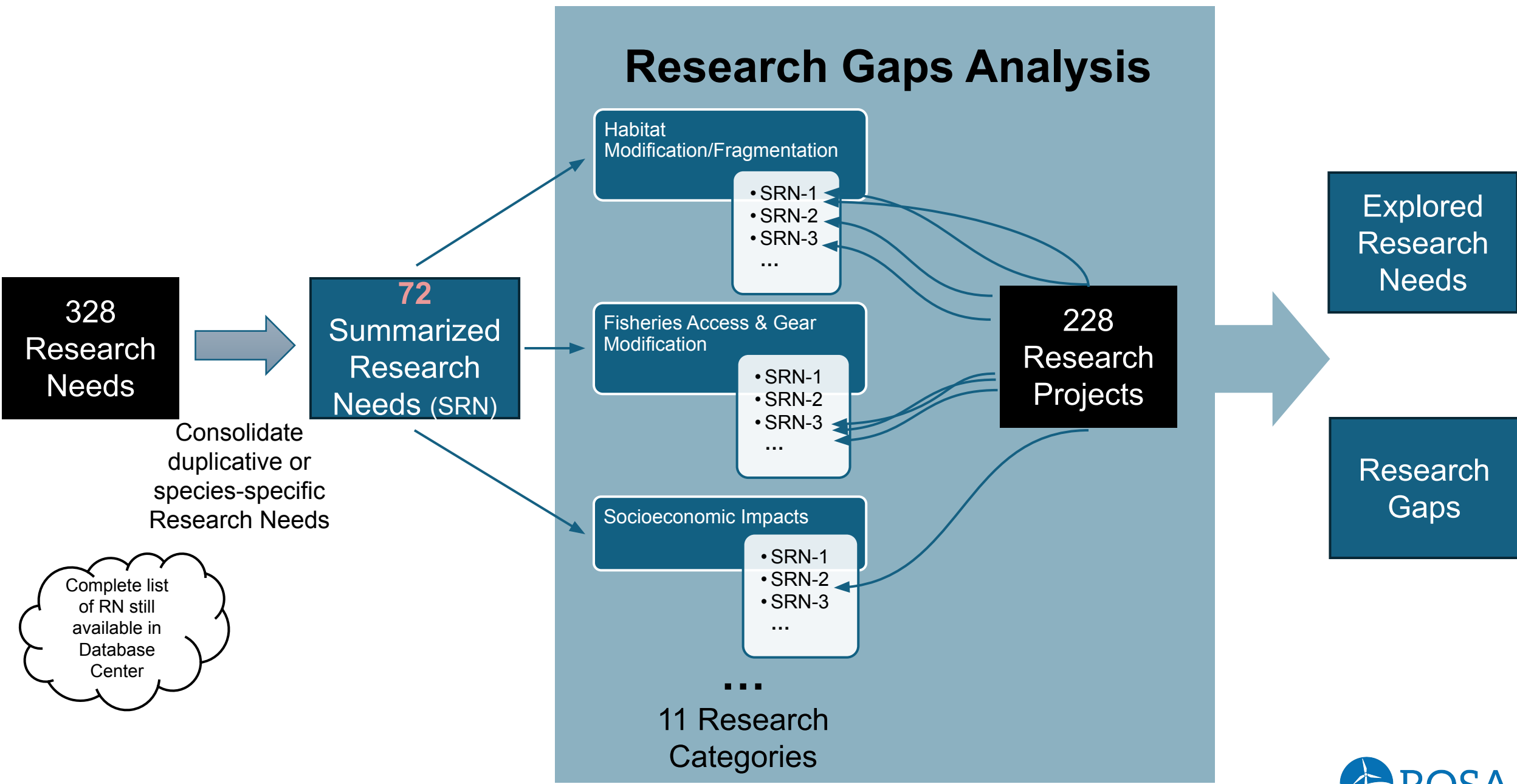
summarized research
needs

13

new needs

12

research gaps



Research Gaps Analysis

Habitat
Modification/Fragmentation

- SRN-1
- SRN-2
- SRN-3
- ...

Fisheries Access & Gear
Modification

- SRN-1
- SRN-2
- SRN-3
- ...

Socioeconomic Impacts

- SRN-1
- SRN-2
- SRN-3
- ...

...

11 Research
Categories

228
Research
Projects

Explored
Research
Needs

Research
Gaps

Projects
Addressing Each Need

Location

Methodology

Receptor

Research Needs to Move the Needle

Research Categories



Habitat Fragmentation/Modification



Socioeconomic & Sociocultural Impacts



Cumulative Impacts & Fisheries Mgmt



Sound/Vibration Impacts



Species Distribution/Composition



EMF



Fisheries Access & Gear Modification



Fisheries Engagement & Capacity Building



Survey Adaptation



Data Management



Resource Monitoring

Navigation & Safety

Research Needs to Move the Needle

Research Categories



Habitat Fragmentation/Modification



Socioeconomic & Sociocultural Impacts



Cumulative Impacts & Fisheries Mgmt



Sound/Vibration Impacts



Species Distribution/Composition



EMF



Fisheries Access & Gear Modification



Fisheries Engagement & Capacity Building



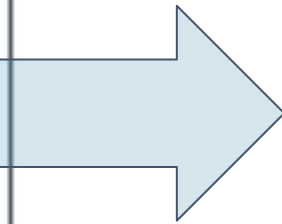
Survey Adaptation



Data Management



Resource Monitoring



Framework needed to bring consistency to be able to CIA framework or guidance to enable consistency across approaches and identification of appropriate methodologies to respond to specific CI questions across studies and assessments

Research Needs to Move the Needle

Research Categories



Habitat Fragmentation/Modification



Socioeconomic & Sociocultural Impacts



Cumulative Impacts & Fisheries Mgmt



Sound/Vibration Impacts



Species Distribution/Composition



EMF



Fisheries Access & Gear Modification



Fisheries Engagement & Capacity Building



Survey Adaptation



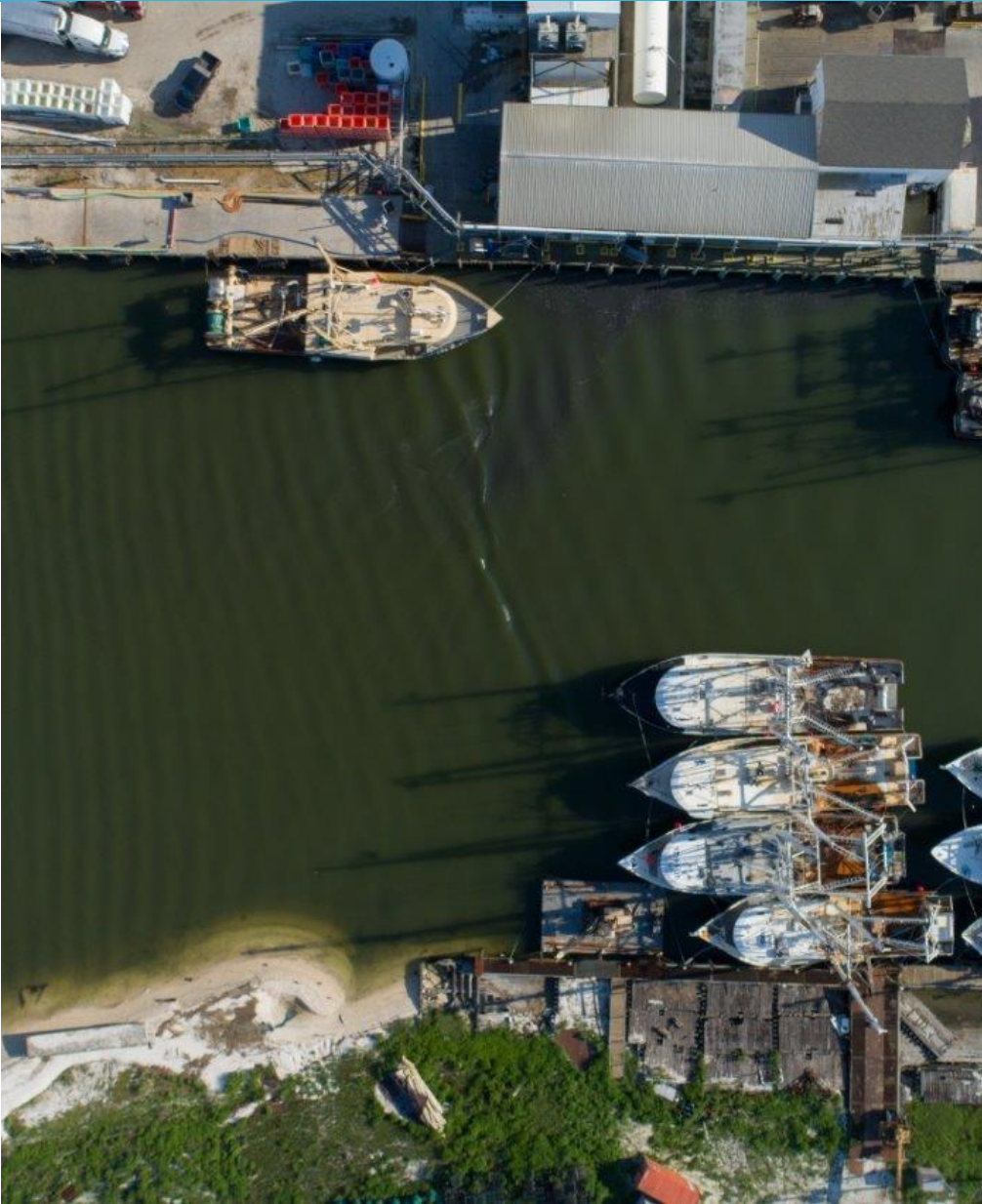
Data Management



Resource Monitoring

**Wind energy
monitoring to fill
regional
scientific survey
data needs**

Research Gaps Analysis Results



Benefits

- Provide efficiency for funders
- Facilitate next generation of scientists and new research ideas
- Inform future developer Fisheries Monitoring Plans
- Use of research needs as starting point for effects of other ocean uses with fish and fisheries

Next Steps



Engagement of Results

- Final Report & Publication
- Funder Coordination
- Councils/Commissions & SSCs

Biannual FishFORWRD Updates

- Adding Gaps Analysis Tabs
- ~35 projects coming online in 2025

thank you for listening

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FishFORWRD



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