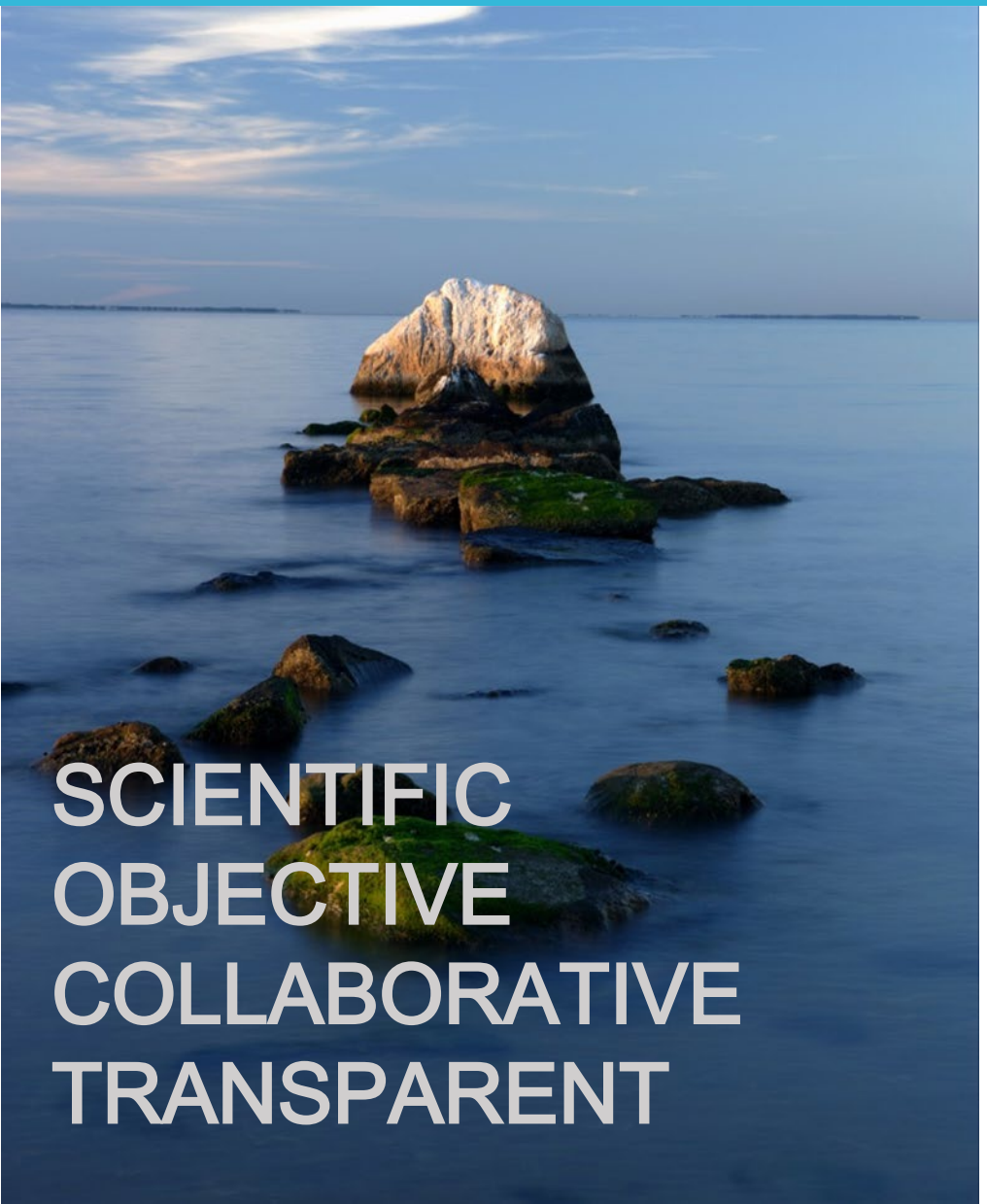
Atlantic States Marine Fisheries Commission

May 07, 2025

Growing collaboration at the intersection of ocean development & fisheries



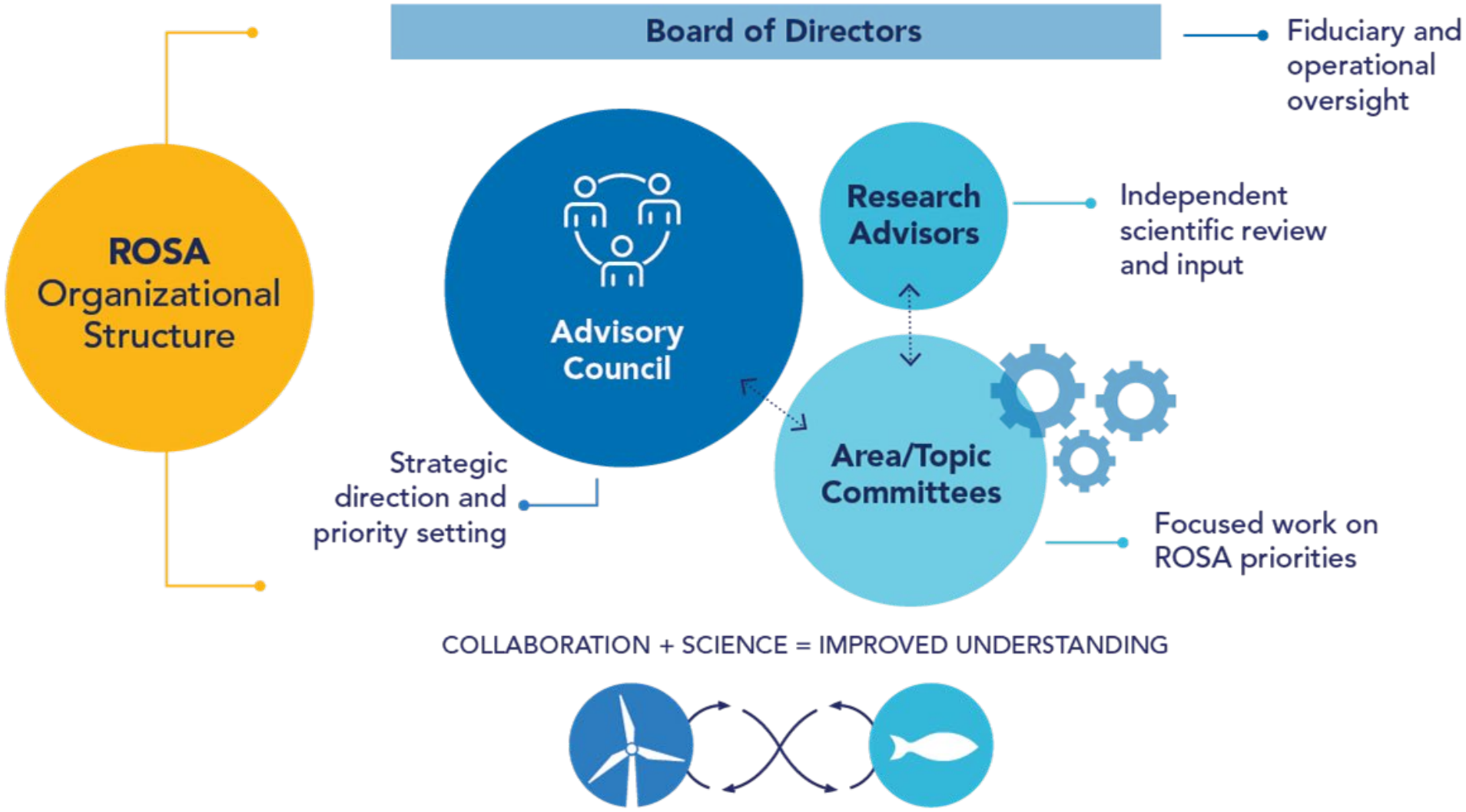
Inception:

Formed in early 2019 as a 501(c)3 through partnership between RODA and OSW developers

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

ROSA

ROSA's Organizational Structure



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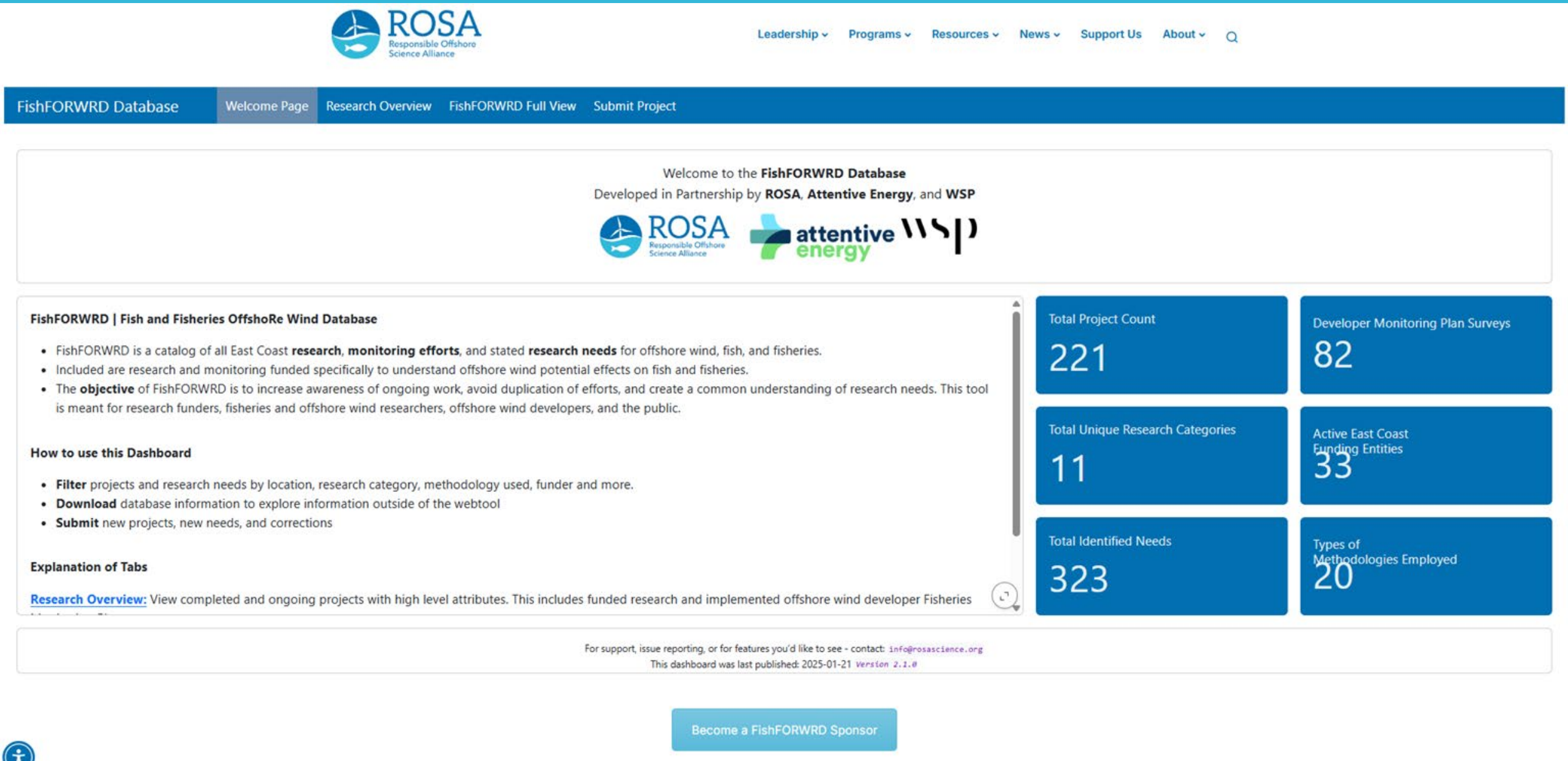
Fish & Fisheries Offshore Wind Research Database (FishFORWRD)



What's in FishFORWRD

221
projects

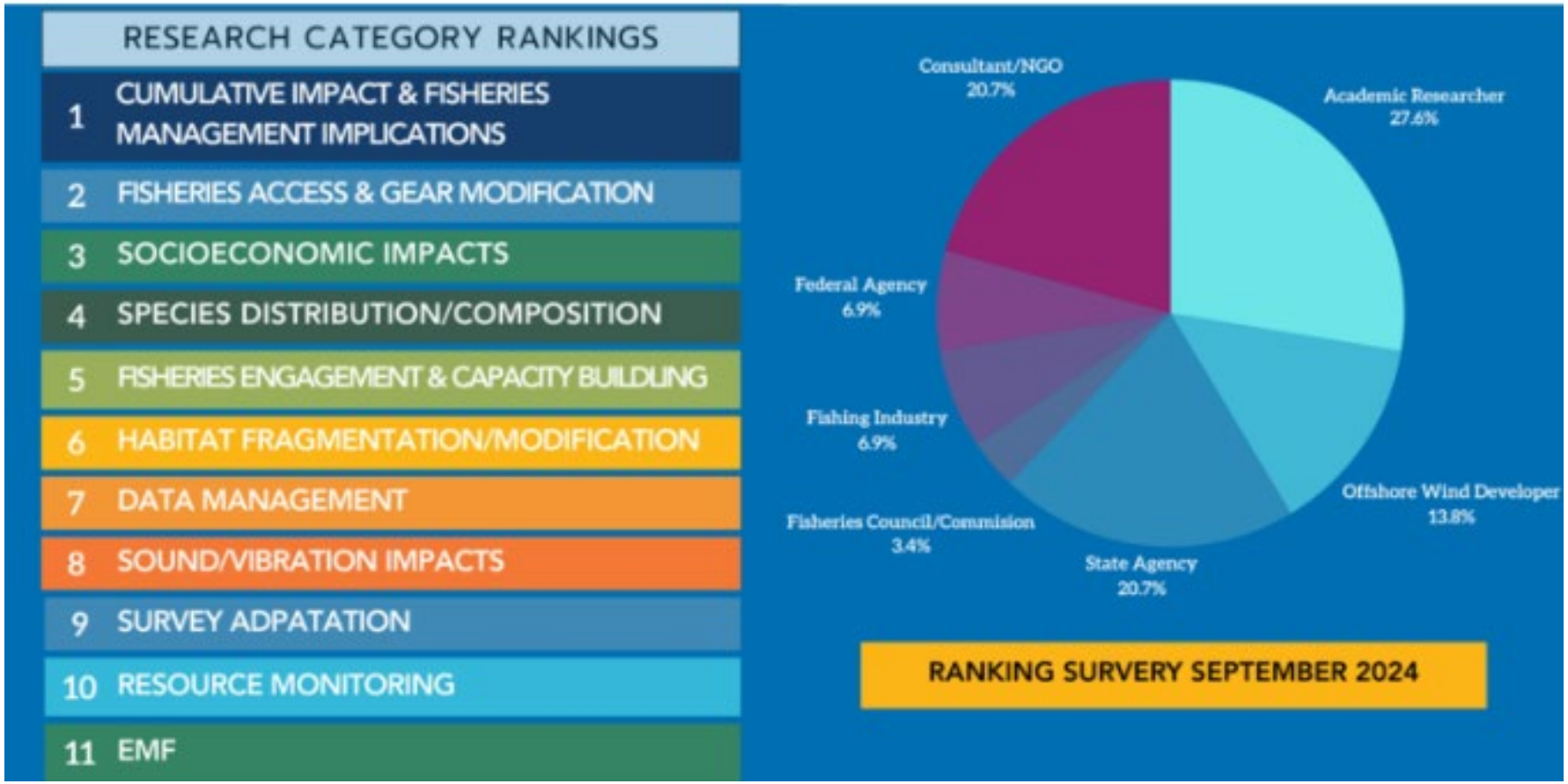
82
individual surveys from developer fisheries & benthic monitoring plans

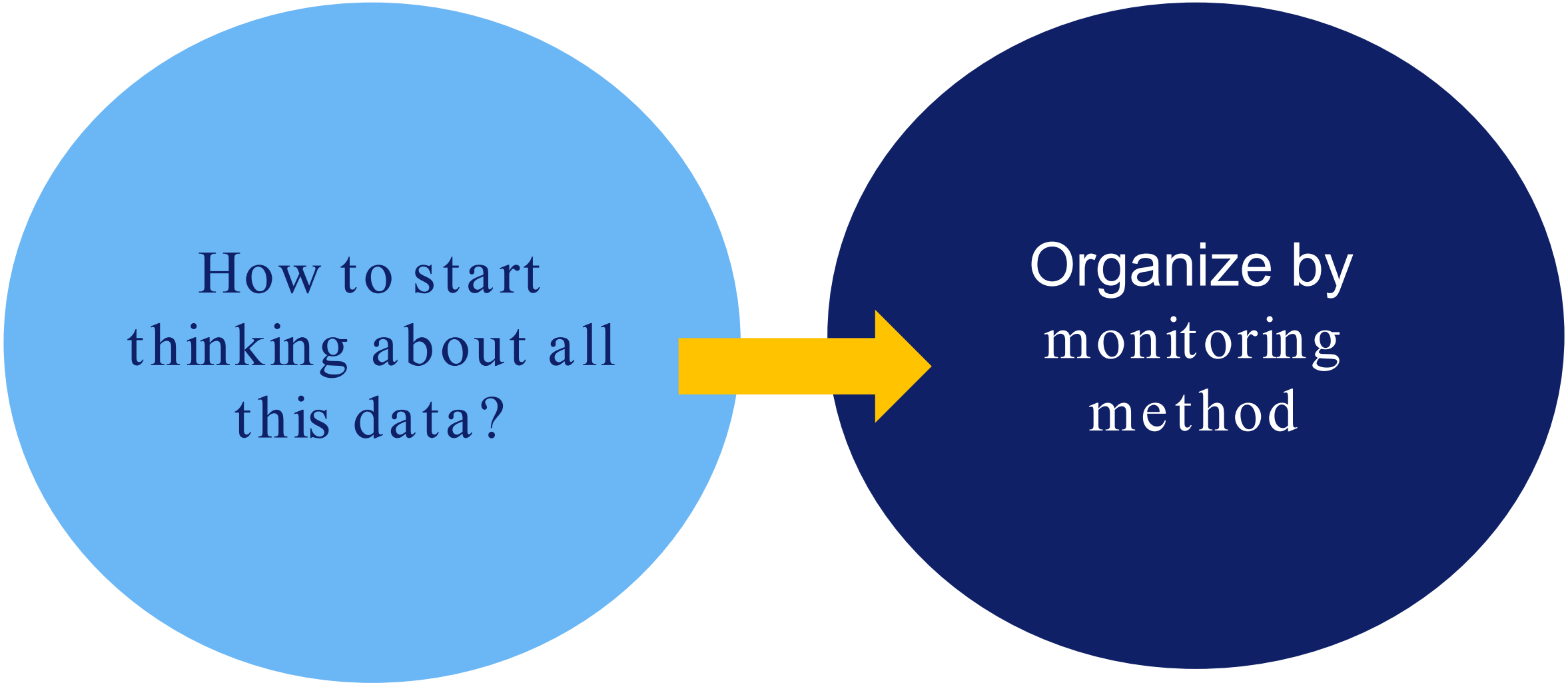
139
research and monitoring projects

323
research needs

ROSA

Research Gaps Analysis & Rankings




How to start thinking about all this data?
Organize by monitoring method

NROC
Northeast Regional Ocean Council

MARCO
MID-ATLANTIC REGIONAL COUNCIL ON THE OCEAN

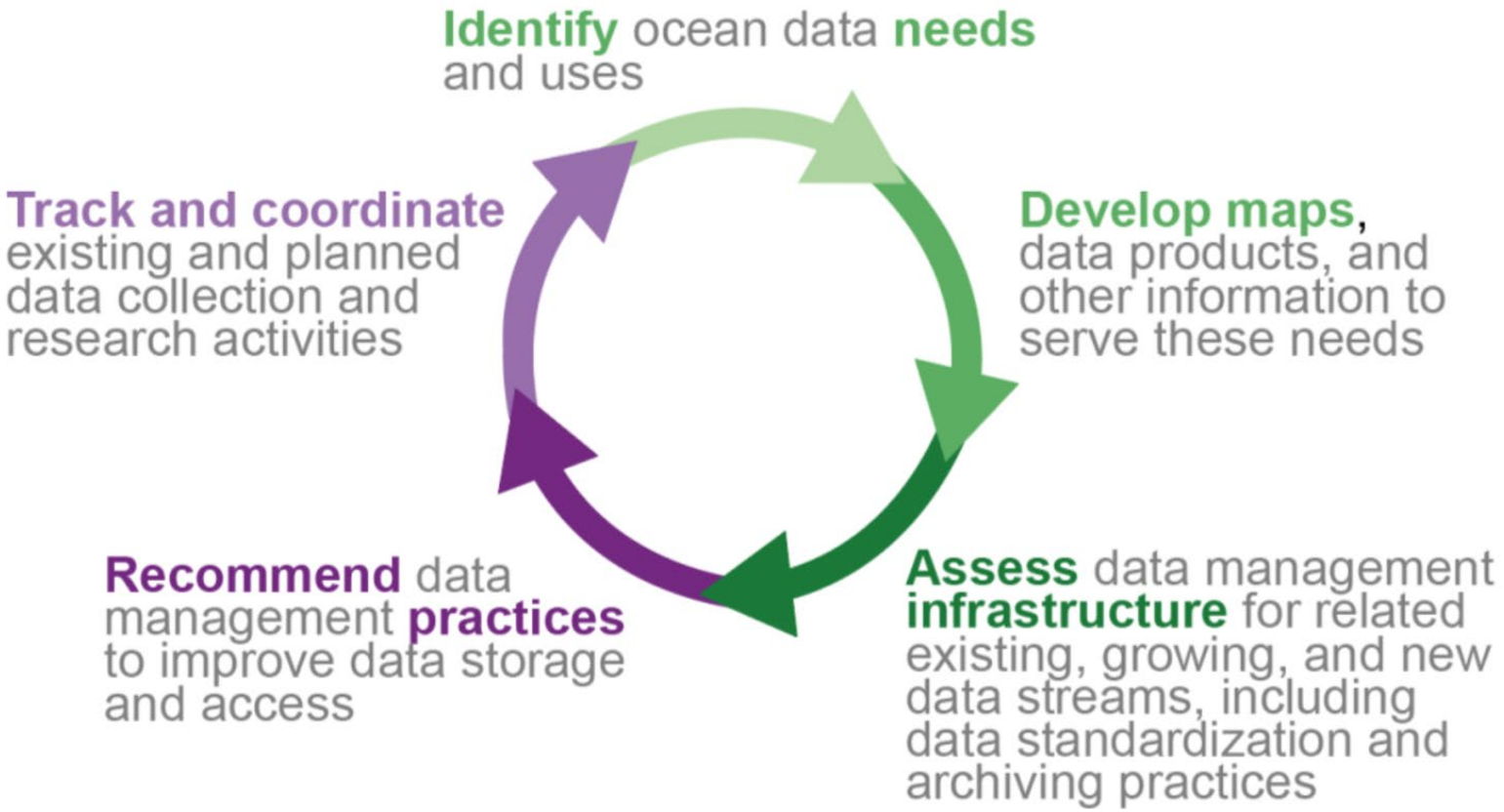
ROSA
Responsible Offshore Science Alliance

RWSC
Regional Wildlife Science Collaborative

Reliable Maps, Data Products, and Ocean Data Systems for Business, Government and Research Decisions

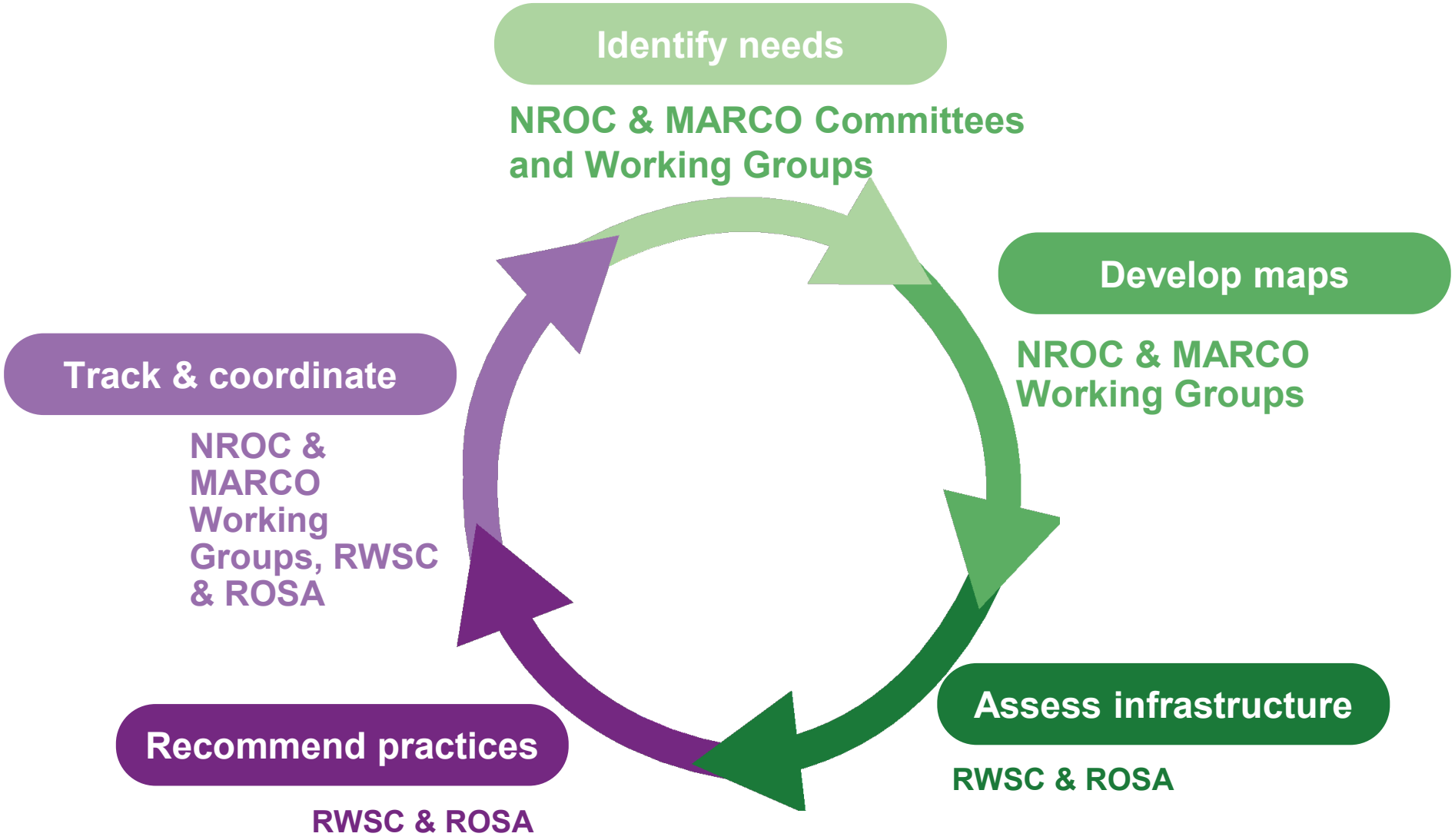
Emily Shumchenia,
NROC Science & Portal Director
RWSC Director

NROC MARCO RWSC ROSA working groups and subcommittees



- Identify needs
- Develop maps
- Assess infrastructure
- Recommend practices
- Track & coordinate

NROC MARCO RWSC ROSA working groups and subcommittees



ROSA Data Governance Program

ROSA's Data Governance Program will provide guidance for data on fisheries, offshore wind, and ocean development in support of future regional or cumulative impact assessments and to complement and to support interoperability with other data efforts in the region.

WHY A DATA GOVERNANCE PROGRAM?

ROSA DATA GOVERNANCE COMMITTEE

No obvious repository for fisheries-related ocean development data now

Some data types have well -established options

Animal telemetry data → OTN & nodes ACT-MATOS & FACT ATN

Passive acoustic monitoring data → Passive Acoustic Data Archive

But what about?

- BRUV video files
- Bottom trawl surveys
- eDNA
- Social science data
- and other data types…

We're here to figure this out

Higher priority

Lower priority

Fishing Methods Group

- Bottom Trawl
- Trap/Pot
- Gillnet
- Other Fishing Gear
- Dredge
- Ichthyoplankton Survey

Image Data Group

- ROV/video/stills
- Baited Remote Underwater Video (BRUV)
- drop cameras and habcam

- Acoustic Telemetry
- eDNA
- Modeling
- Social Science

ROSA team to dig into FishFORWRD for more

Data Governance work to date

ROSA

- Acoustic Telemetry best practices guide
- Data Policy
- Guidance around data sharing in RFP, including a pre-award Data Management & Sharing Plan (DMSP)

RWSC

- Data policy
- DMSP template on dmptool.org
- Essential metadata guidance
- Prototype data catalog
- Repository review & recommendations

https://rwsc.org/research-data/

Acoustic Telemetry One -pager

RWSC
Regional Wildlife Science Collaborative for Offshore Wind

ROSA
Responsible Offshore Science Alliance

COORDINATION OF ACOUSTIC TELEMETRY

Many marine species exhibit ranges and distributions that traverse man-made boundaries. For migratory, protected, and recreationally and commercially important species, tools that assess movement and presence/absence must be implemented at broad scales to accurately characterize animal distribution and potential range shifts, understand cumulative effects, and to separate these effects from other influences. Acoustic telemetry networks enable cooperative research for these species at broad scales.

WHAT ARE WE ASKING OFFSHORE WIND COMPANIES TO DO?

Best and preferred

RWSC and ROSA recommend that your entity joins the regional acoustic telemetry network in your study area (e.g., Atlantic Cooperative Telemetry Network (ACT), FACT Network, Ocean Tracking Network (OTN)), and submits its acoustic telemetry data (receiver metadata, tag metadata, downloaded detection files) as either a publicly available project or a private project that participates in regional data management following your region's user agreement. Note that with your permission, your regional telemetry network can assist with sharing your receiver locations with RWSC and ROSA for inclusion in the RWSC Research Planning Map (https://rwsc.org/map) without making changes to your current project permissions. Visit the ACT Network's MATOS Data Portal (https://matos.asascience.com) for the mid-Atlantic and Northeast U.S. or FACT (https://secoora.org/fact/) for the Southeast U.S. for more information including User Agreements. In addition, RWSC and ROSA recommend that movement data products for electronically tracked marine animals are uploaded to the OTN thematic OBIS node and archived with NOAA NCEI. Please contact admin@rwsc.org with any questions or assistance implementing these recommendations.

At minimum

RWSC and ROSA can also accept receiver locations for inclusion on the Research Planning Map for all ocean users to access. This can be done by emailing the receiver location information to admin@rwsc.org, using the acoustic telemetry metadata templates available at https://matos.asascience.com/report/submit.

BENEFITS OF COLLABORATIVE DATA SHARING

- **Standardized, interoperable, analysis-ready data:** the regional acoustic telemetry networks provide data standardization and QA/QC services by acoustic telemetry data experts for all datasets in their network. This provides consistency for researchers and analysts working with big datasets and saves time.
- **A framework for managing data collaboration:** membership within a regional acoustic telemetry network gives participants a defined framework for collaborative data collection, and allows entities to define and execute timelines for data reporting and fulfil external expectations of data availability.

ABOUT ACOUSTIC TELEMETRY

Acoustic telemetry has revealed a great deal about species movement that informs fisheries management and conservation. In U.S. Atlantic waters, this method is increasingly being used as a cost-effective way to gather data on species in and around offshore wind areas. Through acoustic telemetry, live marine animals are released back into the ocean after being instrumented with an electronic tag that pings out a unique ID code at regular intervals. When a tagged animal travels within range (typically 0.5 km or more in continental shelf environments), a receiver records its unique ID number, along with the date and time. Arrays of acoustic receivers record the presence of tagged animals along with other environmental information that is transmitted by the tags or gathered by additional sensors affixed to the receiver stations. Receivers are periodically retrieved and detection data are downloaded and combined with tag and receiver metadata to understand animal movement.

Offshore wind developers who participate in RWSC and ROSA have expressed interest in generating data to inform the successful development and operation of their individual projects as well as to deepen understanding of potential cumulative effects of offshore wind development in U.S. Atlantic waters. Whether acoustic telemetry is used to study the movements of migratory species that often span beyond individual receiver arrays or more

rosascience.org/acoustic-telemetry/

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Regional Wildlife Science Collaborative

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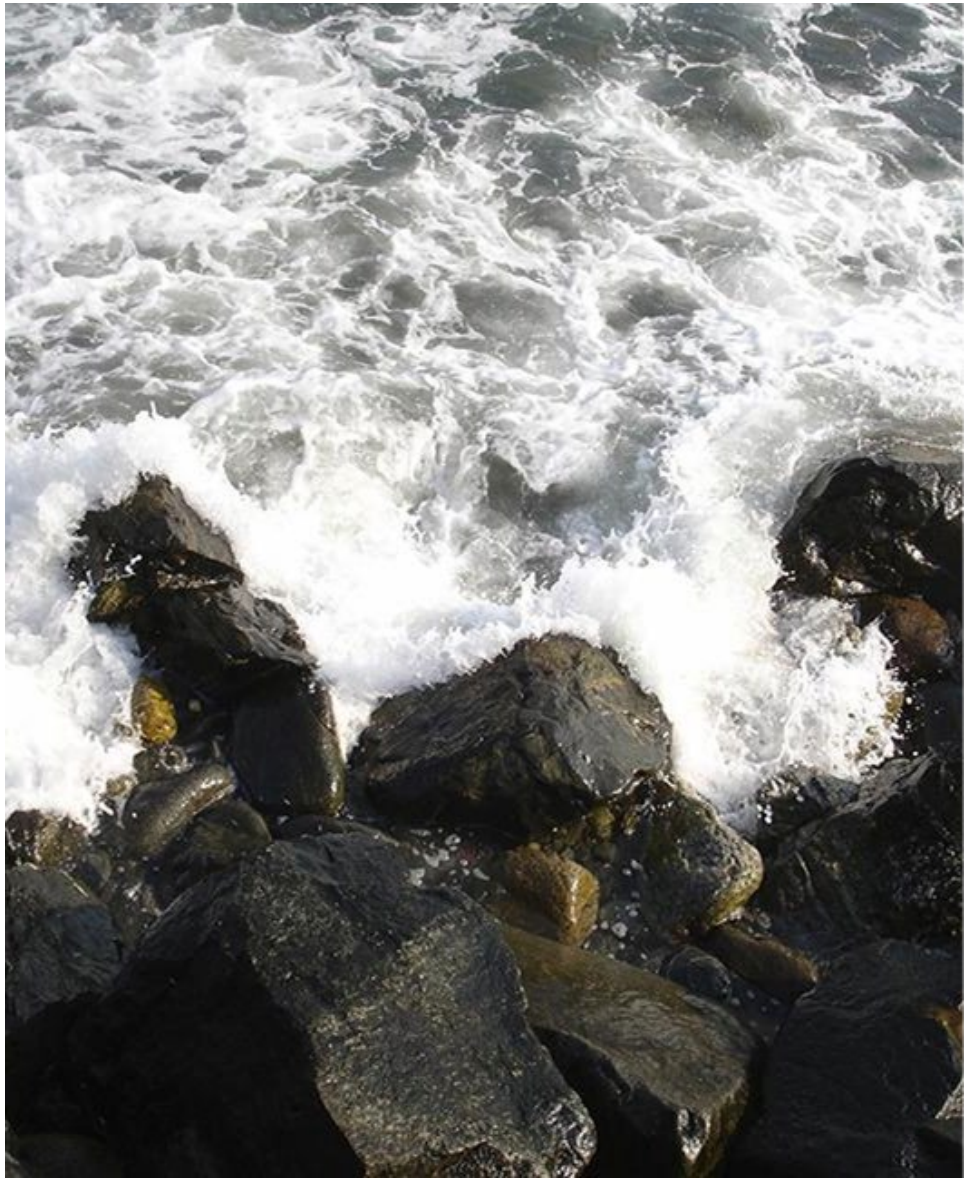
ROSA Data Policy



Designed to

- help inform other policies, contracts, and agreements so that wildlife, fisheries, and offshore wind research can **advance knowledge**, be **used in decision-making**, and have **wide utility** to researchers, government agencies, and others
- encourage funders to consider adopting this language to standardize data availability of wildlife and fisheries offshore wind research.

RWSC
Regional Wildlife Science Collaborative

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ROSA Data Policy

Sections

- **Ownership** of research outputs
- **Non-exclusive license** to use, reproduce, copy, modify, transmit, distribute, perform, display
- **Data Sharing**
  - Annual progress report
  - Data Management & Sharing Plan (DMSP)
  - Share data within one year of data collection and data outputs to repository and assign an DOI
  - Publish
- **Confidential Information**
  - No proprietary information in research outputs, opportunity for partners to review
  - Data use agreements for accessing and using third party data in research

ROSA

Data Management & Sharing Plan (DMSP)

Highlights of a DMSP

- Roles & responsibilities around data
- Lists of all data, metadata, and data products to be produced/created
- Data standards used
- Data licenses and access restrictions
- Timeline and plan for sharing the data
- Plans for stewardship & preservation

A formal document that outlines **how research data will be handled, stored, shared, and preserved** throughout the lifecycle of a project. The plan should demonstrate the researcher's commitment to good data management practices (e.g., FAIR: Findable, Accessible, Interoperable, Reusable) and **ensure that data are available for future research** .

Adapted from draft RWSC DMSP, ROSA is using a Pre-Award DMSP in its RFP that can be found on our website

RWSC
Regional Wildlife Science Collaborative

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Data Governance Working Groups

Recommend

- Documentation (including metadata)
- Metadata standards and recommended repositories
- How to organize and structure datasets within a ‘project’
- Any other specific info to be included (i.e. special fields, tags)
- Catalog of experimental designs used
- How to be good managers for our future selves?
- How to preserve and publish data to answer regional or cumulative impact questions?

Proposed Timeline

FEB
Up to 3 work groups formed

MAR - JUN
Work groups draft recommendations, with support from Intertidal & ROSA

JUL - SEP
drafts out for community comment, feedback incorporated

OCT
v1 materials released by ROSA

We want work groups to discuss & recommend

- Documentation (including metadata)
- Metadata standards and recommended repositories
- How to organize and structure datasets within a ‘project’
- Any other specific info to be included (i.e. special fields, tags)
- Catalog of experimental designs used
- How to be good managers for our future selves
- How to preserve and publish data to answer regional or cumulative impact questions?

Ways for ROSA to support

For state fishery management plans:

- what coordination of metadata or data structures across states (for fishery-independent data)?

- ROSA can:
  - learn from those processes
  - pilot tools that you can use

Site assessments or monitoring data use to support other fishery-independent data collection efforts

ROSA

Data Governance Briefing 5/29

During the session, we will cover:

- Core tenets and policies of our updated Data Governance strategy
- How we work to ensure our research outputs are Findable, Accessible, Interoperable, and Reusable (FAIR)
- Progress on practical guidance on data sharing, privacy, and security measures
- Opportunities for collaboration and integration with states or your organization's existing data practices

Register by May 23rd to confirm your attendance. We look forward to your participation and support to foster stronger data governance practices together.

Register here

ROSA

Thank you!