

# Regional Wildlife Science Collaborative For Offshore Wind: Regional Wildlife Science Collaborative For Offshore Wind

## Roles and Responsibilities for the Project

Who will be the Data Manager for this project?

*Example Answer:*

The Data Manager for this project is [name, affiliation, contact, ORCID].

*Guidance:*

This individual will lead data management efforts for this project. They may or may not hold other roles on the project.

Who will be the primary Point of Contact to RWSC for this project?

*Example Answer:*

The primary Point of Contact for this project is [name, affiliation, contact, ORCID].

*Guidance:*

This individual will serve as the primary way RWSC and this project team communicate about data stewardship and governance. This may be the Principal Investigator or another key person on the project.

Project funded by RWSC are required to identify a Primary Point of Contact to RWSC.

Other funders may require a Primary Point of Contact to RWSC for purposes of collaboration and coordination.

Who will be responsible for ensuring compliance with this Data Management & Sharing Plan?

*Example Answer:*

The Principal Investigator of the project will be responsible for compliance with this DMSP.

*Guidance:*

State the person who holds responsibility for compliance with this DMSP. This individual will update the DMSP on a regular basis and will distribute the DMSP within the project team. If this person has not been listed under another role, provide their name, affiliation, contact, and ORCID.

For projects funded by RWSC research funds, this person will keep RWSC apprised of any updates to this DMSP.

If this project is not funded by the RWSC Research Fund, researchers are still strongly encouraged to identify the person responsible for compliance with this DMSP.

Who will be responsible for any updates, responding to inquiries, and ongoing maintenance of the data, even after the conclusion of the project?

*Example Answer:*

The designated data manager will be responsible for any updates, corrections, and maintenance of the data. There may be personnel turnover in this role, but this role will remain the point of contact for the data.

*Guidance:*

Describe who will maintain the data both during the project and after the project concludes. This long-term data maintenance can include fixing mistakes, updating metadata, and answering questions from data users. This could be someone with longevity at one of the project organizations who has knowledge of the data, or it could be a specific role (e.g. Director of Data Science) at an organization that might transition personnel over time but will have this responsibility long-term. The role of contact person for data is critical to data usability and impact now and into the future.

Describe other data stewardship roles and responsibilities on the project team and how those activities will be supported and attributed.

*Example Answer:*

Data producers/collectors will be responsible for following established sampling or collection protocols and documenting data with appropriate metadata upon collection or as soon as possible thereafter.

People cleaning or quality controlling the data will be responsible for documenting their work in version-controlled code that is shared.

People analyzing the data will also be responsible for versioning the code that documents their analyses, as well as updating metadata and/or creating metadata for derived datasets.

Authorship of data, derived data, and other data products will be contingent on responsible stewardship of the data and fulfillment of the assigned responsibilities

*Guidance:*

Describe how data stewardship and management responsibilities will be distributed across the project team. Roles might include third party data providers, data producers, technicians, post-docs, students, or anything not already described above. Responsibilities might include collecting, analyzing, curating, or engineering data. This is also the place to describe roles not explicitly defined in the previous questions.

How will decisions about data sharing and management be made, and by whom?

*Example Answer:*

The PI will use the DACI (driver, approver, contributor, informed) framework to structure decision-making about data sharing and management for this project.

OR

The Data Manager will make decisions about data sharing and management, in consultation with the Principal Investigator. When designing the project, the Data Manager and Principal Investigator will meet regularly to make decisions and plan for data sharing and management. Data management decisions and protocols will be posted to Github to allow for comment and contributions by the project team. Quarterly team meetings will include discussion of data management and sharing.

*Guidance:*

Describe who will have the authority to make these decisions and how the project team will be involved in decision-making (e.g. voting, consensus).

Does the project have a plan for ensuring that data and information are preserved when there are changes in the project team, including changes in staff, external partners, and/or consultants?

- Yes
- No, but we want RWSC's assistance developing such a plan

*Guidance:*

If this project has a plan, select Yes. If the project does not have a plan, select No. If no plan is in place, project teams are strongly encouraged to develop one as part of designing their project, to ensure data and information from the project are preserved and accessible for the next 30-40 years. RWSC is available to provide example workflows for entities that ensure data are preserved.

## **Data Stewardship, Sharing & Preservation for the project**

Is this project funded by RWSC research funding?

- Yes
- No

*Guidance:*

If Yes is checked, you are affirming, on behalf of your project, that the data produced by this project will be made publicly available within one year of collection, consistent with the [Data Policy](#).

Does any other funder, project partner, your organization, or any project team member's organization require that research outputs, including data, from this project are made publicly available, and if so, in what timeframe?

*Example Answer:*

Yes. All data from this project is required to be made publicly available by the funder RWSC. This project will adhere to the requirements and timelines described in the [Data Policy](#).

OR

Yes. As an employee of University *[insert name]*, the PI and other project staff are required to make all research data publicly available within 5 years of collection. Additionally, this project is funded by NSF OCE, which requires that metadata files, full data sets, derived data products and physical collections must be made publicly accessible within two (2) years of collection.

*Guidance:*

Describe any general requirements to make the data from the project publicly available, and in what timeframe. Specific requirements by data type are covered in the following sections.

Projects funded by RWSC Research Funding are required to make data publicly available as per the [Data Policy](#). Projects funded by other sources are strongly encouraged to identify any requirements here.

Will access to any research outputs, including data, be restricted?

- Yes
- No

*Example Answer:*

Yes, This project is funded by *[Name of Company]*, which prohibits sharing any research outputs, including data, for business reasons. The data produced by this project will never be made publicly available.

*Guidance:*

Indicate whether any data or research outputs produced by this project will be restricted. If yes is selected, provide details in the comment area.

Does a funder, project partner, repository, or your organization require a specific license for research outputs, including data, from this project?

*Example Answer:*

No specific licenses are required. However, our funder does require that data be shared as openly as possible, and our planned license (CC-BY) will fulfill this requirement.

*Guidance:*

Describe any overall licensing requirements for this project. Do not list each data type and corresponding license here; those will be covered in the following sections on specific research outputs.

RWSC strongly recommends projects funded by RWSC Research Funding apply a CC0 or CC-BY license to all research outputs, including data, because these licenses enable the most reuse. A CC-BY-NC license is also acceptable.

What steps will your project team take to secure long-term availability of project data and research outputs? Check all that apply.

- Publish data in a recommended repository
- Create informative metadata for research outputs
- Use non-proprietary data formats
- Use persistent identifiers for people, organizations, and research outputs (e.g. DOI, ORCID)

*Guidance:*

The expected lifespan of an offshore wind project is 30-40 years. RWSC strongly encourages projects to plan for data preservation and access for this length of time. Select as many as apply. If other steps will be taken, select other and describe these steps in the comment area.

If data will be collected and/or stored by contractors, consultants, or other institutions not named in the Roles & Responsibilities section, please provide a point of contact for those additional partners.

*Example Answer:*

[*person's name, affiliation, contact*] at [*name of contractor*] will be the point of contact for protected species data.

*Guidance:*

Provide the name, affiliation, and contact for the person serving as a point of contact at any additional project partners.

It is important to consider the funding, logistical, and implementation aspects of data management.

Check all that apply. Provide relevant detail or explanation in the comment area.

- We have considered the implications of data volumes in terms of storage, access and preservation, and the project budget includes these costs.
- We have considered whether the scale of the data will pose challenges when sharing or transferring data between sites and have plans to address these challenges.
- We have considered strategies to minimize restrictions on sharing (e.g., anonymizing or aggregating data, gaining participant consent for data sharing, gaining copyright permissions, and agreeing a limited embargo period).
- We have consulted with the repository(ies) to understand their policies and procedures, including any metadata standards, and costs involved.
- The project budget includes resources needed to deliver this DMSP (e.g., storage costs, hardware, staff time, costs of preparing data for deposit and repository charges).

*Example Answer:*

We have included funds for data management, transmission and repository storage costs in the project budget. We have not yet consulted with each repository. We plan to consult with repositories once we have a better idea for data volumes and timing (expected in year 2 of the project).

*Guidance:*

Subsequent sections of this DMSP template request detail on data volumes and specific repositories. For this question, focus on generally conveying the degree to which the project has planned and budgeted for data management implementation and logistics.

## **Research Inputs - Data from a third party**

Will this project use data from a third party?

- Yes
- No

*Guidance:*

If this project will use data not collected by the project, please select Yes. If this project will only use data collected by the project, please select No. Third party data could include data from a government agency, private or public company/business, academic institution, non-profit organization, or any other data holder that is not part of this project.

Does the third party data holder place restrictions on data access, use, or publication of research outputs for confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements? If yes, please describe those restrictions in the comment area.

- Yes
- No

*Example Answer:*

A specific data use agreement will govern the use and timelines for data product dissemination for input data provided by [*third party name*], consistent with the Data Policy. Input data will remain the property of [*third party name*] and will not be disclosed to outside parties. Data products developed using these input data will be reviewed by [*third party name*] 30 days prior to publication and uploaded to [*repository name*] to verify that confidential information is not discernible.

*Guidance:*

If yes, use the comment area to describe in detail as shown in the example answer.

## Research Outputs - Satellite telemetry data

What taxa will be studied using satellite telemetry?

- If the project is NOT collecting satellite telemetry data, please check none.
- List focal species in the comment area.
  
- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's satellite telemetry research. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 10 datasets will be collected during this study. Each dataset is estimated to be about 4.9 MB, not including metadata.

*Guidance:*

Given the planned project and data collection, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor and deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

Will the project register satellite tags with a data management platform? If yes, specify the platform in the space below.

- Yes
- No

*Example Answer:*

Tags will be registered with the Animal Telemetry Network.

*Guidance:*

Tag manufacturers, Argos, Movebank, and Animal Telemetry Network accept tag registrations and provide data management and visualization services. Please describe if and how this project will leverage these types of services for data management and/or visualization.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standard will be used in the comment area.

- ISO19115-2
- EML

- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data or additional context needs to also be shared to interpret or reuse the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared alongside water quality data to aid in interpretation of these data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- Movebank
- ATN
- OTN

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data collected by this project need to have access restricted to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, for how long?

*Example Answer:*

Planet Labs will be contributing a certain number of satellite images to this project as part of a charitable agreement with our organization. Individual images will be available to the project team, but only aggregate research outputs will be made public.

OR

Location data for endangered sea turtles, will be embargoed for one year. No additional restrictions will be needed.

*Guidance:*

Describe any necessary access restrictions, including the timelines for when restrictions will be lifted. These details may not be known prior to the onset of the project, and answers to this question can be modified and added to after a funding agreement has been executed. If unsure about this question or topic, please reach out to RWSC for more information and support.

## Research Outputs - Automated Radio Telemetry Data

What taxa will be studied using radio telemetry?

- If the project is NOT collecting passive acoustic data, please check none.
- List focal species in the comment area.
  
- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's radio telemetry research. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 15 datasets will be collected during this study. Each dataset is estimated to be about 31 KB, not including metadata.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

The following metadata are recommended. Check all that will be collected for this project. If none, explain why the recommendations won't be used and what metadata will be collected instead.

- [Metadata Field Sheet for Offshore Motus Stations](#)
- [Minimum metadata to collect in the field each time an animal is tagged](#)
  - Site name and location (latitude and longitude) of capture and tagging activities
  - Capture date and time
  - Release date and time
  - Species
  - Age: if known
  - Sex: if known
  - Weight
  - Measurements (e.g., wing cord, bill length, tarsus)
  - Tag type (manufacturer and model)
  - Tag ID number: manufacturer ID and serial number (if available)
  - Tag attachment type
  - Band number
  - Auxiliary marker(s): e.g., leg flag, color bands, marker characteristics (alpha-numeric codes, color)
  - Institution and contact info
  - Agent and contact info
  - Notes on animal or tag status: e.g., date and location of mortality, dropped tag, failed tag, etc.

- Metadata Field Sheet for Offshore Motus Stations
- Minimum metadata to collect in the field

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- NetCDF
- ASCII
- XML
- JSON

*Guidance:*

Describe what format will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- Motus
- Movebank

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*



The Data Policy on confidential information will be applied for data provided by business partners. No additional restrictions will be needed for other data collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the data and data products, the methods for applying them, and for how long they will be applied.

## Research Outputs - Acoustic Telemetry Data

What taxa will be studied using acoustic telemetry?

- If the project is NOT collecting passive acoustic data, please check none.
- List focal species in the comment area.
  
- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's acoustic telemetry research. Check all that apply.

Will the project participate in the regional acoustic telemetry network for the study area (e.g., Atlantic Cooperative Telemetry Network (ACT), FACT Network, Ocean Tracking Network (OTN)) and set the project to "public" as recommended by RWSC and ROSA? Participation involves submitting all completed data products and metadata forms ([templates provided by ACT](#)). If no, provide an explanation.

- Yes
- No

*Example Answer:*

The project will participate in ACT but in year 1 the project will be set to "private". The project visibility will be changed to "public" at the onset of year 2.

*Guidance:*

Detailed recommendations are provided in RWSC's [Acoustic Telemetry Data Management & Storage Recommended Practices](#)

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 10 datasets will be collected during this study. Each dataset is estimated to be about 4.9 MB, not including metadata.

*Guidance:*

Given the planned project and data collection, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor and deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What file or storage formats will data and metadata be collected, processed, and stored in? Check all that apply. If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- ASCII
- JSON
- XML
- NetCDF

*Guidance:*

Describe what format will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data or additional context needs to also be shared to interpret or reuse the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared alongside water quality data to aid in interpretation of these data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- OTN
- ACT-MATOS
- FACT
- Movebank

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data collected by this project need to have access restricted to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, for how long?

*Example Answer:*

Planet Labs will be contributing a certain number of satellite images to this project as part of a charitable agreement with our organization. Individual images will be available to the project team, but only aggregate research outputs will be made public.

OR

Location data for endangered sea turtles, will be embargoed for one year. No additional restrictions will be needed.

*Guidance:*

Describe any necessary access restrictions, including the timelines for when restrictions will be lifted. These details may not be known prior to the onset of the project, and answers to this question can be modified and added to after a funding agreement has been executed. If unsure about this question or topic, please reach out to RWSC for more information and support.

## Research Outputs - Passive Acoustic Data

What taxa will be studied using passive acoustic data?

- If the project is NOT collecting passive acoustic data, please check none.
- List focal species in the comment area.
- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's passive acoustic research. Check all that apply.

Check the boxes indicating the types of passive acoustic data to be collected and any derived products to be generated. Briefly describe each type of data in the comment area.

- Audio files

- Sound level metric(s)
- Detections
- Sound propagation model(s)

*Guidance:*

Projects collecting passive acoustic data are expected to generate raw data (audio files) and first-order products like animal detections and sound level metrics. For each type of data, describe the expected file type(s), and any specific metrics and specific model outputs.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 1000 audio files will be generated during this study. The total size of the data is estimated to be about 3 TB.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor/instrument and deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

The following metadata are recommended. Check all that will be collected for this project. If none, explain why the recommendations won't be used and what metadata will be collected instead.

- For ambient ocean noise and biological sounds recorded underwater
  - Metadata prepared using the [NCEI Passive Packer](#) application
  - Metadata prepared using [NOAA Fisheries Passive Acoustic Reporting System templates](#)
- For bird, bat, and other biological sounds recorded above water
  - Metadata prepared using [NABat metadata templates](#)
- NCEI Passive Packer metadata
- NOAA Fisheries Passive Acoustic Reporting System templates
- NABat metadata
- None

*Guidance:*

Describe the types of metadata for each data type in the comment area.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the standard that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2

- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- wav
- aif
- mp3
- flac
- csv
- netcdf
- xml

*Guidance:*

Describe what format will be used for data and metadata. Check all that apply.

What accompanying data needs to also be shared to interpret or use the data? Describe at least the following:

- Hydrophone/microphone calibration information
- Automated detector performance metrics and/or publications

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared alongside water quality data to aid in interpretation of these data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- near-real time
- 1 year
- 2 years
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- Passive Acoustic Data Archive
- NABat

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data collected by this project need to have access restricted to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, for how long?

*Example Answer:*

Planet Labs will be contributing a certain number of satellite images to this project as part of a charitable agreement with our organization. Individual images will be available to the project team, but only aggregate research outputs will be made public.

OR

Location data for endangered sea turtles, will be embargoed for one year. No additional restrictions will be needed.

*Guidance:*

Describe any necessary access restrictions, including the timelines for when restrictions will be lifted. These details may not be known prior to the onset of the project, and answers to this question can be modified and added to after a funding agreement has been executed. If unsure about this question or topic, please reach out to RWSC for more information and support.

## **Research Outputs - Videos and Photographs**

What taxa will be studied using video and/or photographs? If other is selected, please list the taxa in the comment area. If none apply, please check none.

- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's video/photograph research. Check all that apply.

What is the approximate number and size of videos and/or photographs that will be produced?

*Example Answer:*

Approximately 70 photographs will be collected during this study. Each photograph is estimated to be about 2.5 MB.

*Guidance:*

Given the planned project and data collection, provide the most accurate estimate possible. This information will help data storage calculations.

What formats will videos and photographs be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- JPG
- PNG
- m4a
- other

*Guidance:*

Select what format will be used for data and metadata.

What metadata standards will be followed to document these videos/photographs? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standard will be used in the comment area.

- Audiovisual Core
- FGDC-endorsed
- EML
- other

*Guidance:*

Select what metadata standard will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the videos/photographs?

*Example Answer:*

Metadata describing the video and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these videos/photographs?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering. If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these videos/photographs?

- CC0
- CC-BY

In which repository will the videos/photographs be published?

- OBIS-SEAMAP
- North Atlantic Right Whale Consortium
- BCO-DMO
- Zenodo

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features. If selecting other, please name the repository in the comment area.

Will any of the videos/photographs need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

The Data Policy on confidential information will be applied for photographs provided by business partners. No additional restrictions will be needed for other videos/photographs collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the videos/photographs, the methods for applying them, and for how long they will be applied.

## **Research Outputs - Wildlife Observational Data**

What taxa will be studied using observational techniques? If other is selected, please list the taxa in the comment area. If none apply, please check none.

- marine mammals
- sea turtles
- protected fish
- birds
- bats
- other
- none

*Guidance:*

Identify the subject(s) of this project's observational research. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 7 datasets will be collected during this study. Each dataset is estimated to be about 25 KB, not including metadata.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will trip/cruise metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- XML
- JSON
- NetCDF
- other

*Guidance:*

Select what format(s) will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other



*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Flight information will be included for interpreting aerial survey data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- OBIS-SEAMAP
- North Atlantic Right Whale Consortium
- NABat

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

The Data Policy on confidential information will be applied for data provided by business partners. No additional restrictions will be needed for other data collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the data and data products, the methods for applying them, and for how long they will be applied.

## Research Outputs - Benthic Biological Data

What aspects of benthic habitats will be studied? If other is selected, please list the habitat and samples in the comment area. If none apply, please check none.

- submerged vegetation
- infauna
- epifauna
- other
- none

*Guidance:*

Identify the benthic biological components and samples that will be part of this project's research. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 26 datasets will be collected during this study. Each dataset is estimated to be about 24 KB, not including metadata.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor, instrument, cruise, or deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- XML
- NetCDF
- JSON

*Guidance:*

Describe what format will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared alongside water quality data to aid in interpretation of these data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- EDI
- Pangea
- OBIS
- GBIF

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Once published, will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

The Data Policy on confidential information will be applied for data provided by business partners. No additional restrictions will be needed for other data collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the data and data products, the methods for applying them, and for how long they will be applied.

## Research Outputs - Biological Oceanography Data

What type of biological oceanography data will be collected by this project? If other, please list the data that will be collected in the comment area.

- phytoplankton
- zooplankton
- picoplankton
- other
- none

*Guidance:*

Identify the subject(s) of this project's protected species observed program. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 16 datasets will be collected during this study. Each dataset is estimated to be about 55 KB, not including metadata.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor and deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- NetCDF
- XML
- JSON

*Guidance:*

Select what format(s) will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data or additional context needs to also be shared to interpret or reuse the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared alongside water quality data to aid in interpretation of these data.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort, gear used, or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- EDI
- BCO-DMO

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

The Data Policy on confidential information will be applied for data provided by business partners. No additional restrictions will be needed for other data collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the data and data products, the methods for applying them, and for how long they will be applied.

## Research Outputs - Physical & Chemical Oceanography Data

What type of physical or chemical oceanography data will be collected by this project? If other, please list the oceanography data that will be collected in the comment area.

- nutrients
- salinity
- dissolved oxygen
- alkalinity
- real-time meteorological-oceanographic
- hydrodynamics
- currents
- other
- none

*Guidance:*

Identify which type(s) of physical or chemical oceanography data will be collected by this project. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 11 datasets will be collected during this study. Each dataset is estimated to be about 205 KB, not including metadata.

*Guidance:*

Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will sensor, cruise, and deployment metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- ASCII
- NetCDF

- XML
- JSON
- other

*Guidance:*

Select what format(s) will be used for data and metadata.

What data standards will be followed for these data?

- ISO8601 for dates
- Other

*Guidance:*

Select the standard that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standard(s) will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standard(s) will be used in the comment area.

- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standard(s) will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the data?

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets. Sensor specifications will be shared to aid in interpretation of these data.

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- BCO-DMO
- EDI
- PANGAEA
- Rolling Deck 2 Repository

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

Planet Labs will be contributing a certain number of satellite images to this project as part of a charitable agreement with our organization. Individual images will be available to the project team, but only aggregate research outputs will be made public.

OR

Location data for endangered sea turtles, will be embargoed for one year. No additional restrictions will be needed.

*Guidance:*

Describe any necessary access restrictions, including the timelines for when restrictions will be lifted. These details may not be known prior to the onset of the project, and answers to this question can be modified and added to after a funding agreement has been executed. If unsure about this question or topic, please reach out to RWSC for more information and support.

## **Research Outputs - Geological, Geophysical, Geotechnical Data**

What type of geo- data will be collected by this project?

- If other, please list the geo- data that will be collected in the comment area.
- If the project is NOT collecting geo- data, please check none.

Note that geological/seafloor data products (e.g., multibeam bathymetry mosaics, interpreted habitat maps) are considered below in the "Data Products" section.

- boulder relocation data
- sediment characteristics
- sub-bottom profiles
- multibeam bathymetry
- multibeam backscatter
- single-beam bathymetry
- side-scan sonar backscatter
- other
- none

*Guidance:*

Identify which type(s) of geo-data will be collected by this project. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 13 datasets will be collected during this study. Each dataset is estimated to be about 148 KB, not including metadata.

*Guidance:*



Given the planned project and data types, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will deployment or cruise metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as sensor metadata, data file metadata, project metadata, tag metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- NetCDF
- ASCII
- JSON
- XML
- other

*Guidance:*

Select what format(s) will be used for data and metadata.

What data standards will be followed for these data?

- CF-Conventions
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- NROC-MARCO-RWSC Seafloor Data Repository
- NCEI-IHO Data Centre for Digital Bathymetry
- USGS National Archive of Marine Seismic Surveys
- Marine Geoscience Data System

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

Planet Labs will be contributing a certain number of satellite images to this project as part of a charitable agreement with our organization. Individual images will be available to the project team, but only aggregate research outputs will be made public.

OR

Location data for endangered sea turtles, will be embargoed for one year. No additional restrictions will be needed.

*Guidance:*

Describe any necessary access restrictions, including the timelines for when restrictions will be lifted. These details may not be known prior to the onset of the project, and answers to this question can be modified and added to after a funding agreement has been executed. If unsure about this question or topic, please reach out to RWSC for more information and support.

## **Research Outputs - Environmental DNA**

What taxa will be studied using eDNA? If other is selected, please list the taxa in the comment area. Species information can also be contributed in the comment area. If none apply, please check none.

- marine mammals
- sea turtles
- protected fish
- birds
- bats

- other
- none

*Guidance:*

Identify the subject(s) of this project's eDNA research. Check all that apply.

What is the approximate number and size of data files that will be produced?

*Example Answer:*

Approximately 10 eDNA samples will be collected during this study. Each dataset is estimated to be about 30 KB, not including metadata.

*Guidance:*

Given the planned project and data collection, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

Will trip/cruise metadata be collected? If yes, describe what type(s) in the comment area.

- Yes
- No

*Guidance:*

Describe the types of metadata, such as ship metadata, data file metadata, project metadata, cruise metadata, in the comment area.

What formats will data and metadata be collected, processed, and stored in? If a format is not listed here, please select other and specify which formats will be used in the comment area.

- CSV
- XML
- JSON
- ASCII
- other

*Guidance:*

Select what format will be used for data and metadata.

What data standards will be followed for these data?

- Darwin Core
- other

*Guidance:*

Select the format that will be used to make the data interoperable. If the other option is selected, please provide details of the standard that will be used in the comment area.

What metadata standards will be followed to document these data? If using a FGDC-endorsed standard, please list the specific standard in the comment area. If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- DCAT-US
- FGDC-endorsed
- other

*Guidance:*

Select what metadata standards will be followed. Metadata standards may be commonly used in the domain or required by a funder or repository. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What accompanying data needs to also be shared to interpret or use the data?

*Example Answer:*

Metadata describing the data and the methods with which it was collected will be necessary to interpret the other data collected by this project. Rich metadata will be packaged and published with the datasets.

*Guidance:*

Describe the accompanying information that is needed to interpret the data, such as effort or calibration information. Describe what other data will be shared to enable interpretation of the data. This may include metadata (e.g. about sensors or other equipment), temporal and spatial details, or effort data (e.g. from observational surveys).

What is the timeline for sharing these data?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these data?

- CC0
- CC-BY

In which repository will the data be published?

- NCBI
- OBIS
- GBIF
- Catalogue of Life

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features. eDNA information that can be published in repositories include raw sequences, derived observations, and reference libraries (checklists). The [NOAA Omics Data Management Guide](#) also contains relevant details and recommendations.

Will any of the data need access restrictions to protect personal privacy, confidential or proprietary business interests, Indigenous data sovereignty, national security, intellectual property, protected species, or other rights or requirements, and if so, how and for how long?

*Example Answer:*

The Data Policy on confidential information will be applied for data provided by business partners. No additional restrictions will be needed for other data collected for this project.

*Guidance:*

Describe any restrictions, embargoes, or other methods that will be applied to the data and data products, the methods for applying them, and for how long they will be applied.

## **Research Outputs - Code, Software, & Related Tools**

What code, software, and related tools will be produced by this project?

- code
- software

- applications
- portals or platforms
- other
- none

*Guidance:*

List the data-related products that will result from this project.

What tools will be used to document and version control the code for the project?

- git
- GitHub
- GitLab
- Bitbucket
- Subversion
- other

*Guidance:*

Select the tools that will be used to version the code for processing and analyzing data for this project.

Where will code for the project be published?

- Zenodo
- other

*Guidance:*

Select which repository will be used to publish the code from the project.

What is the timeline for sharing the code?

- within 1 year
- within 2 years
- other

*Guidance:*

Select the timeline for sharing code. If other is selected, describe the timeline in the comment area.

## **Research Outputs - Data Products (e.g., maps, models, etc.)**

What other data products will be produced by this project? If other is selected, please list the products in the comment area. If none apply, please check none.

- maps
- model outputs
- visualizations
- story maps
- figures
- workflows
- seafloor bathymetry mosaics
- backscatter mosaics
- subbottom interpretations
- other
- none

*Guidance:*

Identify the data products that will be created during this project. Check all that apply.

What is the approximate number and size of data products that will be produced?

*Guidance:*

Given the planned project and data products, provide the most accurate estimate possible. This information will help data storage calculations, and may impact the repositories where the data can be published.

*Example Answer:*

Approximately 7 visualizations will be produced during this study. Each visualization is estimated to be about 2.5 MB.

What metadata standards will be followed to document these products? If a standard is not listed here, please select other and specify which standards will be used in the comment area.

- EML
- ISO19115-2
- FGDC
- Audio Visual Core
- other

*Guidance:*

Select what metadata standards will be followed. If multiple metadata standards will be used, please select multiple options and describe the reason for this decision in the comment area.

What is the timeline for sharing these products?

- within 1 year of collection
- within 2 years of collection
- other

*Guidance:*

Select the timeline for sharing data. If other is selected, describe the timeline in the comment area. Include any appropriate or required embargoes when answering.

If the project is funded by RWSC, data must be shared within 1 year of collection, consistent with the Data Policy.

What license will be applied to these products?

- CC0
- CC-BY

In which repository will the products be published?

- NROC-MARCO-RWSC Seafloor Data Repository
- Zenodo
- PANGAEA
- EDI

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.

## **Research Outputs - Other**

What other research outputs will be produced by this project? If other is selected, please list the outputs in the comment area. If none apply, please check none.

- children's storybook
- white paper
- other
- none

*Guidance:*

Identify the other research outputs that will be created during this project. Check all that apply

In which repository will the products be published? If products are published in a repository not listed here, please name the repository in the comment area.

- Zenodo
- Figshare
- other

*Guidance:*

Select the repository that would be best suited for the data planned to be collected by the project. Consider repositories commonly used in the scientific community as well as which repository would provide the most robust features.