APPENDIX D: Data Sharing Plan (Example)

Project Title: Doing Something Important to Improve Environmental Decision Making in Support of Environmental Health

1. Points of Contact

1.1 Give the name, title, location, e-mail address, phone number and mailing address, for the individual(s) responsible for data collection and maintenance on this project.

Dr. Jane Doe, Title Organization / Agency Address E-mail: Jane.Doe@somewhere.org Phone number: 999-999-9999

and

Dr. John Doe, Title Address E-mail: John.Doe@somewhere.org Phone number: 999-999-9999

2. General Description of Data to be Managed

2.1. Provide a summary description of the data to be generated.

Monitoring of existing and newly constructed living shorelines to assess their performance in the [study area] coastal area will be conducted under varying physical and environmental conditions. All of the data generated will be environmental data. It will include historical data collected by the [agency], summarized spatial data provided by various entities (e.g., [list of partners]), and new data collected by the [agency] specifically for this project.

2.2. What will be the temporal and geographic coverage of the data?

The [agency] has constructed approximately 100 living shorelines from bagged shell and crab traps that will serve as the foundation dataset for this project. The [agency] began implementation of living shorelines in 2001 which has continued to the present. Therefore, the data mining and monitoring of existing living shorelines will be conducted for reefs constructed between 2001and 2018. The newly constructed living shoreline data set will be limited to 2015 to 2018. Living shorelines have been and will be constructed throughout the coastal area of [study area].

2.3. What data types will you be creating or capturing?

Digital numeric data

2.4. How will you capture or create the data?

Data will be derived from spatial analyses of available data, manual surveys, and continuous sensors (salinity, flow). Data will either be hand entered or obtained directly from an instrument or computer analysis.

2.5. Will the data contain personally identifiable information or any information whose distribution may be restricted by law or national security?

The data will not contain personally identifiable information. The data will not include information that is restricted by law or national security. All of the data to be derived or collected will be environmental data.

3. Data Quality Control / Quality Assurance Procedures

3.1. What quality control and quality assurance procedures will be employed?

All staff will be trained in proper sampling techniques. Datasondes will be calibrated and post-calibrated to ensure accuracy. A nearby benchmark will be used to confirm the accuracy of the RTK GPS. At least 10% of each batch of samples processed in the laboratory (e.g., sediment composition) will be processed a second time for QA/QC analyses using a separate sub-sample taken from the original sample. All measurements must have less than a 10% error for the major components or the entire sample batch will need to be processed again using a separate sub-sample of the original sample. All hand entered data will be checked by another staff member to ensure accuracy of the data entry.

3.2. What is the overall life cycle of the data from collection or acquisition to making it available to the intended end user?

Most of the data collected will be made available to the intended user within approximately 1-2 months after its collection. For samples that require processing in the laboratory, the data will be available after approximately 1-2 months of processing. Processing is expected to take approximately 2 months after sample collection; however, this is dependent on the phasing of sample collection.

4. Data Documentation / Metadata

4.1. What standards will be used to represent data and metadata elements in this data collection?

Data will be provided in flat text files and metadata will be FGDC compliant.

5. Data Access and Sharing

5.1. How will the data be made available to the public? What is the expected date of first availability? Is this a one-time data collection, or an ongoing series of measurements? Will there be a Principal Investigator hold or other delay between data collection and publication, and if so for how long?

The flat text data files will be made publicly available on the [agency] or National Estuarine Research Reserve (NERR) Centralized Data Management Office (CDMO) website. All new and

existing living shoreline monitoring data will be made publicly available within 6 months of project completion and no later than **XX/XX/XXXX**. This will include the temporal monitoring data.

5.2. If the data are not to be made available to the public, explain why and under what authority distribution may be restricted.

Not applicable.

5.3. Will users be subject to any access conditions or restrictions, such as submission of non-disclosure statements, special authorization, or acceptance of a licensing agreement?

No restrictions or conditions will be placed on the data.

5.4. What data access protocols will be used to enable data sharing? The use of open-standard, interoperable, non-proprietary web services are highly recommended.

Open standards will be used for data access through web downloads.

6. Data Archival

6.1. Where and how will the data be stored initially (i.e., prior to being sent to a long-term archive facility)?

The data will be managed in a Microsoft Access database and an ArcGIS geodatabase.

6.2. How will the data be protected from accidental or malicious modification or deletion? Discuss data back-up, disaster recovery/contingency planning, and off-site storage relevant to the data collection.

The database, geodatabase, and raw data will be stored on **[agency]** servers which use a RAID6 drive array for redundancy. The **[agency]** uses a Shadow Copy version control twice per day. The **[agency]** file servers are backed up daily, weekly, monthly and quarterly. The weekly, monthly, and quarterly backups are stored offsite. The weekly backups are retained for 1 month. The monthly and quarterly backups are retained for at least 6 months.

6.3. If there will be limitations to data access, how will these data be protected from unauthorized access? How will access permissions be managed? What process is to be followed in the event of unauthorized access?

The flat text data files will be made publicly available via the [agency] and/or CDMO website. These files will be protected such that they cannot be altered. There will be no limitations on access to the data.

6.4. How will the data be archived for long-term preservation?

The flat text data files, Access database and geodatabase will be archived at the [agency] or NERR CDMO, dependent on the preference of the granting agency.