

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

### **Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

## **1. General Description of Data to be Managed**

### **1.1. Name of the Data, data collection Project, or data-producing Program:**

NCCOS Assessment: Community Assessment to Flood Hazard in the United States Virgin Islands, 2023-01-01 to 2024-08-30

### **1.2. Summary description of the data:**

This dataset includes estate level component scores of various indices from the National Centers for Coastal Ocean Science (NCCOS) Community Assessment to Flood Hazard in the United States Virgin Islands (USVI). Indices include social vulnerability, structural vulnerability (and sub-indices), structural exposure (and sub-indices), nearshore environment protection benefits, compounded flood hazard, waterborne toxins and contaminants, vegetation, and potential walkability. Each component score is aggregated to the estate level geography provided by the U.S. Census Bureau. Additionally, intermediary raster-based datasets on stormwater flooding potential, compounded flooding (both near-term-moderate and projected-high), orbital velocity data, a Shannon land use diversity index, and a Visible Atmospherically Resistant Index (VARI) are included. This assessment used a geospatial, indicator-driven approach to integrate data from a variety of sources related to community vulnerability in the USVI. These data included measures of social and structural vulnerability and exposure, the nearshore environment, flood hazards, waterborne toxins and contaminants, vegetation, and potential walkability. These indicators were based on territorial needs, existing research, local stakeholder feedback, and data feasibility checks. Each component was analyzed using publicly available data, renormalized using a min-max normalization method, and aggregated to estate-level geographies. These were then categorized into statistical quantile breaks to show relative rankings across the territory. This integrative approach supports bivariate choropleth mapping for highlighting areas of co-occurrence and prioritization and also highlights estate-level hazard and vulnerability. Additionally, several raster based indices were created in this assessment. For full dataset methods please see the NOAA Technical Memorandum NOS NCCOS 334 at <https://repository.library.noaa.gov/view/noaa/66566>.

### **1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2023-01 to 2024-08

**1.5. Actual or planned geographic coverage of the data:**

W: -65.1089351, E: -64.5196511, N: 18.41, S: 17.6507787

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

Amanda Alva

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

amanda.alva@noaa.gov

**2.5. Phone number:**

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

NCCOS Scientific Data Coordinator

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

No

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

Unknown

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- This dataset includes estate level component scores of various indices from the National Centers for Coastal Ocean Science (NCCOS) Community Assessment to Flood Hazard in the United States Virgin Islands (USVI). Indices include social vulnerability, structural vulnerability (and sub-indices), structural exposure (and sub-indices), nearshore environment protection benefits, compounded flood hazard, waterborne toxins and contaminants, vegetation, and potential walkability. Each component score is aggregated to the estate level geography provided by the U.S. Census Bureau. Additionally, intermediary raster-based datasets on stormwater flooding potential, compounded flooding (both near-term-moderate and projected-high), orbital velocity data, a Shannon land use diversity index, and a Visible Atmospherically Resistant Index (VARI) are included. This assessment used a geospatial, indicator-driven approach to integrate data from a variety of sources related to community vulnerability in the USVI. These data included measures of social and structural vulnerability and exposure, the nearshore environment, flood hazards, waterborne toxins and contaminants, vegetation, and potential walkability. These indicators were based on territorial needs, existing research, local stakeholder feedback, and data feasibility checks. Each component was analyzed using publicly available data, renormalized using a min-max normalization method, and aggregated to estate-level geographies. These were then categorized into statistical quantile breaks to show relative rankings across the territory. This integrative approach supports bivariate choropleth mapping for highlighting areas of co-occurrence and prioritization and also highlights estate-level hazard and vulnerability. Additionally, several raster based indices were created in this assessment. (Citation: Fleming, Chloe S., Fleming, Chloe S., Regan, Seann D., Freitag, Amy, Aslam, Uzma, & Burkart, Heidi. (2024). A Community vulnerability assessment to flood hazard in the U.S. Virgin Islands. National Centers for Coastal Ocean Science (U.S.) ; CSS, Inc.)

**5.1.1. If data at different stages of the workflow, or products derived from these**

**data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

For details of data quality control methods, see Lineage Sources. All users should independently analyze the datasets according to their own needs and standards to determine data usability.

**6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:**

**6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/74317>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

Yes

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

National Centers for Coastal Ocean Science (NCCOS)

**7.2.1. If data hosting service is needed, please indicate:**

**7.2.2. URL of data access service, if known:**

<https://doi.org/10.7910/DVN/CZTITY>

**7.3. Data access methods or services offered:**

Download from website

**7.4. Approximate delay between data collection and dissemination:**

Six months

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

## **8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

OTHER

**8.1.1. If World Data Center or Other, specify:**

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

National Centers for Coastal Ocean Science - Silver Spring, MD

**8.3. Approximate delay between data collection and submission to an archive facility:**

Six months

**8.4. How will the data be protected from accidental or malicious modification or**

**deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

NCCOS IT Policy

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*