Resolution of the Florida Keys National Marine Sanctuary Advisory Council Urging the National Data Buoy Center, Aligned State and Federal Agencies, Institutions of Higher Education, and Other Relevant Marine Data Users to Reestablish and Expand Upon the Historic Suite of Permanent Marine Data Monitoring Stations From as Far North and East as Fowey Rocks to as Far South and West as the Dry Tortugas, Florida Bay and the West Florida Shelf.

WHEREAS, the National Data Buoy Center (NDBC), a part of the National Oceanographic and Atmospheric Administration's (NOAA) National Weather Service (NWS), operates and quality controls data from more than 100 moored buoys, 50 Coastal-Marine Automated Network (C-MAN) stations, 55 Tropical Atmosphere Ocean (TAO), and 39 Deep-Ocean Reporting and Assessment of Tsunamis (DART) tsunameter stations; and

WHEREAS, NDBC quality controls and distributes environmental data from more than 570 partner stations such as Integrated Ocean Observing System (IOOS) (approximately 300 stations) National Ocean Service (NOS) (approximately 200 stations), and Minerals Management Service (MMS) stations (approximately 70 stations) in addition to NDBC operated moored buoy and C-MAN stations; and

WHEREAS, the IOOS program at NDBC and its monitoring stations acquire environmental data used primarily for preparing weather warnings, analyses, and forecasts; and

WHEREAS, buoys are also used to provide ground-truth measurements for space-based observation platforms and to establish long-term environmental records for engineering applications, climate research, and air-sea interaction studies; and

WHEREAS, NDBC has developed the capability to make a variety of measurements, including:

- Atmospheric pressure.
- Wind direction, speed, and gust,
- Air and water temperature,
- Wave energy spectra (non-directional and directional),
- Water-column height (Tsunami Detection),
- Relative humidity,
- Ocean current velocity,
- Precipitation,
- Salinity,
- Solar radiation,
- Visibility, and
- Water level and water quality, and

WHEREAS, the NDBC, IOOS, NOS, and MMS network is comprised of sites offshore and along most of the U.S. coastline, most particularly, including Florida; and

WHEREAS, the importance of accurate data from these stations cannot be over emphasized; and

WHEREAS, the maritime recreational, commercial, and scientific communities have come to rely on the data for the safe conduct of operations, and the network often provides the only real-time measurements available from remote, data sparse areas; and

WHEREAS, the primary user of real-time NDBC data is the NWS which uses the data for the issuance of warnings, analyses, forecasts and for initializing numerical models; and

WHEREAS, the general public has access to the data in real-time via the NDBC web site and NOAA and external recreational, commercial, and scientific users can access the data in real time via NOAAPORT and other access portals; and

WHEREAS, it has been the goal since the inception of the Florida Keys National Marine Sanctuary to carry out research and monitoring, including the collection of water quality, sea grass, coral, coral reef, fisheries, and other natural resources data, all of which would be enhanced with long term data sets that are provided by and could be expanded on through the NDBC system of monitoring stations; and

WHEREAS, within the boundaries of the suite of local, state and national parks and preserves along the southeast and southwest coasts of Florida, the Florida Everglades, Florida Bay and the Florida Straits multiple research and monitoring projects are underway continuously which benefit from remaining NDBC stations and would be enhanced by the expansion of NDBC monitoring stations throughout the area; and

THEREFORE, BE IT RESOLVED that the Florida Keys National Marine Sanctuary Advisory Council:

- 1. Indicates that the importance of continuous long term monitoring stations and the data that they can provide is imperative to other long term resources monitoring projects and to all research projects within the FKNMS and other local, state and federal parks and preserves.
- 2. Voices support of the National Data Buoy Center, aligned state and federal agencies, institutions of higher education, and other relevant marine data users reestablishing and even expanding upon the historic suite of marine data monitoring stations from as far north and east as Fowey Rocks to as far south and west as the Dry Tortugas, Florida Bay and the West Florida Shelf.
- 3. Urges that consideration be given to substantially higher levels of funding for permanent collection station in order to restore and expand upon the historic suite of permanent data collection stations throughout the South Florida Region.
- 4. Requests the Sanctuary Superintendent transmit copies of this resolution to her contacts and colleagues as she sees appropriate.

Disclaimer: The council is an advisory body to the sanctuary superintendent. The opinions and findings of this publication do not necessarily reflect the position of Florida Keys National Marine Sanctuary, Office of National Marine Sanctuaries, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Florida Department of Environmental Protection or the Florida Fish and Wildlife Conservation Commission.