



# CARICOOS

CARIBBEAN COASTAL OCEAN OBSERVING SYSTEM

## **CARICOOS Regional Ocean Partnership - Data Sharing Initiative**

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### **LONG-TERM GOALS**

**Enhance the capacity to share and integrate Federal and non-Federal source data to support Caribbean region coastal and ocean management priorities.**

The ROP Data Sharing Initiative long-term goal strengthens and expands CARICOOS services in the Caribbean region while providing high priority data and products to coastal managers and stakeholders.

### **MILESTONES / OBJECTIVES**

1. Review and document past Caribbean ROP activities (2013-2015)
2. Characterize existing regional data sharing capabilities and identify additional capacity needed in the region.
3. Host workshops with Puerto Rico and USVI stakeholders to identify and prioritize ocean data needs and challenges.
4. Organize and host meetings with CARICOOS board members and scientists, key coastal managers, regional and extra-regional experts to define feasible approaches to the acquisition of data required and the construction of pertinent data products.
5. Develop a road plan toward CROP goals to be followed in the US Caribbean region.

### **WORK COMPLETED**

1. Meetings with Ernesto Díaz (CZMP) and Aurora Justiniano (Former Caribbean ROP coordinator) to discuss past CROP goals, activities, achievements, challenges and recommendations.
2. Recovered and review documentation generated: MOU's – 2012 (PR and USVI governments), CROP meeting report and presentations, Stakeholders meeting notes and participant lists, CROP outreach materials, Marine Planner tool, CROP Portal (Host: The Nature Conservancy).
3. Recovered GIS data analysis reports (Geographic Mapping Technologies, Corp.), geospatial data layers shapefiles and .gdf files and discussed with The Nature Conservancy and DRNA about custody of data bases, required infrastructure to host portal and likelihood to reactivate and transfer original CROP portal to CARICOOS.
4. Browsing of Federal and State government, IOOS and private sector portals and clearing houses to identify sources of regional databases/products. Evaluated data sources includes: Marine Cadastre, NOAA ERMA, NCEI, NWS, Digital Coast, Coast Watch, NCCOS, MARCO, USGS, FEMA, USACE, GIOVANNI, PR DNER-CZMP, USVI DPNR, PRPB-MiPR, IOOS-MBON).



5. Conceptualization of CROP Decisional Support Tool prototype integrating preliminary data products and visualizations for further consultation with stakeholders.
6. Initiated needs assessment formal consultation with coastal managers and key stakeholder through virtual meetings and surveys.
  - Virtual meetings: DNER CZMP, NOAA CFMC, US Coast Guard, Environmental Protection Agency, Instituto de Investigacion y Planificacion Costera de PR (CoRePI), NGO's & researchers working in post hurricanes efforts (Sociedad Ambiente Marino, Reefscape, ISER Caribe, Coastal Survey Solutions, Protectores de Cuencas, Vida Marina).
  - CARICOOS/CROP online surveys (Email and social media) to CARICOOS Board of Directors and stakeholders
7. Oversee the progress of pilot projects and contracts: Very high-resolution wave climate atlas for PR (Dr. Miguel Canals), Coastal Landscape Transformation viewer (Dr. Tania Lopez/Think a Map), CROP DST tool (Candela Creative Group).

## **MAJOR OUTCOMES**

1. CROP Decisional Support Tool – Draft design of a friendly user interphase focusing on user needs and integrating elements easy to access and understand (e.g. interactive maps). The Beta version, integrating data products, visualizations and information from various sources, to support planning and resource management, is under development.
2. Development of a Very High-Resolution Wave Climate Atlas (Miguel Canals) - with input from the CZMP sponsored high-resolution wave climatology study for Puerto Rico. This project is ongoing and completion is expected by December 2020.
3. Development of a Coastal landscape transformation viewer (Tania Lopez) - using PR georeferenced aerial photographs from 1930, 1950, 1990, 2017 (post hurricanes) and 2020.
4. Initiated virtual need assessment process with key coastal managers and stakeholders in Puerto Rico.

## **RELATED PROJECTS**

***High-resolution wave climatology study for Puerto Rico*** (Miguel Canals – funded by DNER CZMP). Developed climatology being used to develop the **Very High-Resolution Wave Climate Atlas for PR**.

## **CHANGES/PROBLEMS**

Earthquakes in southwestern Puerto Rico and the COVID 19 - pandemic forced us to postpone the need assessment workshops in PR & USVI. However, workshops and need assessment consultations are being conducted through one-on-one and focal groups virtual meetings.



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## **WORK PLAN FOR UPCOMING PERFORMANCE PERIOD (June 1, 2020 – November 30, 2020)**

- Upload the Very High-Resolution Wave Climate Atlas for Puerto Rico to [www.caricoos.org/waveatlas](http://www.caricoos.org/waveatlas).
- Initiate development of very-high-resolution wave climate atlas for USVI.
- Deliver final version of the Coastal Landscape Transformation viewer
- Finalize CROP Decisional Support Tool Beta version and conduct pilot testing with relevant stakeholders for PR and USVI.
- Expand the DST to support data needs identified in pilot phase.
- Continue CARICOOS/CROP needs assessment meetings in PR and USVI.
- Develop new data products to address Caribbean region priority management and emergent issues (e.g. Sargasso, climate change).