

DCRM

*Division of Coastal Resources Management
Bureau of Environmental & Coastal Quality*

About DCRM

PROGRAMS



- Permitting
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- Outreach & Education
- Coral Reef Initiative
- Marine Monitoring
- Watershed Management
- Climate Change Adaptation

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Conserve to Preserve

The Division of Coastal Resources Management (DCRM), organized under the Bureau of Environmental & Coastal Quality (BECQ), was established in 1983 to promote conservation and wise development around CNMI's coastal resources. DCRM consists of the Coastal Zone Management Program (CZMP) and the Coral Reef Initiative (CRI), which work cooperatively to achieve complementary goals of the agency. While the CZMP works to promote wise use and conservation of the CNMI's resources through permitting and planning, the CRI program emphasizes the need to protect and preserve the CNMI's coral reefs, ensuring responsible management of these resources associated with those habitats.



Our Vision

An informed CNMI actively protects and maintains a clean and healthy environment and makes decisions that balance cultural values, environmental integrity, and economic prosperity.

Our Mission

To protect and enhance the CNMI's coastal resources for residents and visitors through effective and adaptive resource management, inter-agency collaboration, and stakeholder engagement, in a manner that builds and sustains community resilience and well-being.

2020 In Review

Coral Reef Restoration



From an environmental perspective, benefits of a healthy reef provide residents with clean ocean water, visibly healthy coral and fish populations, and coastal protection from storm surge. DCRM, in cooperation with the Division of Fish & Wildlife (DFW), is currently installing a coral nursery in Saipan's Lagoon, capable of housing 1,000 coral fragments until they are ready for out-planting onto damaged reefs. To further support restoration in the CNMI, the Office of Planning & Development, DCRM, and DFW, have secured a multi-million dollar grant from the National Fish and Wildlife Service (NFWF) to support terrestrial and marine restoration efforts in the Garapan watershed. Specific to DCRM, this grant will provide funding for 3 FTEs, supplies, and infrastructure to support coral larvae and gamete collection and rearing efforts. Most importantly, this will build local capacity through partnerships and provide educational opportunities through targeted outreach.

This project works towards DCRM's Strategic Plan Goal 3: Management of coastal resources are improved through monitoring and research.

Wildfire Risk Assessments



In the CNMI, fires are broadly understood to interrupt the natural pattern of succession leading to the degradation of native limestone forests, the proliferation of grasslands, and the eventual creation of badlands; areas in which vegetation is unable to grow. However, little baseline data regarding the spatial and temporal patterns of fire on Saipan exist in order to create effective Fire Management Plans, or understand the more nuanced impacts that fire has on both the terrestrial and marine landscape. This year, DCRM's Coral Fellow has worked to establish this baseline data identifying historic fires in order to create and improve watershed management. Through this work, we have found that over 3,800 acres of Saipan burned between 2013 and 2020, with some locations burning as many as 14 separate times. Looking forward, DCRM hopes to determine how wildfire impacts different landcover types (grasslands vs forests) and how drought exacerbates the risk for wildfire outbreak.

This project works towards DCRM's Strategic Plan Goal 2.3: Implement the mitigation hierarchy to ensure avoidance, minimization, and mitigation of negative impacts.

International Coastal Cleanup



Despite the COVID-19 public health pandemic, the people of the CNMI continue to demonstrate resiliency. The hard work of the COVID-19 Task Force and our front liners proved successful in slowing the spread of the virus locally, which allowed for DCRM to push through with the annual International Coastal Cleanup (ICC), the world's largest single day cleanup event where participants are asked to gather data on the types of debris they collect. On September 19, 2020, a total of 975 volunteers collected 9,097 pounds of trash at 75 different locations on Saipan, Tinian, and Rota. This data was inputted into Ocean Conservancy's Global Trash Database. Although these numbers are not as much as the 2019 ICC, the amount of community involvement surpassed DCRM's expectations.

This project works towards DCRM's Strategic Plan Goal 4.3.2: Utilize local organizations, magazines, radio, social media platforms, and other venues to increase the reach of messages to all target audiences.

Saipan Lagoon Use Education Plan (SLUEP)



The Saipan Lagoon Use Management Plan (SLUMP) provided management recommendations to protect our coastal resources by stimulating sustainable use. Emerging from Recommendation #4, the Saipan Lagoon Use Education Plan (SLUEP) was developed to inform Marine Sports Operators (MSO) of environmental and safety best practices as well as applicable local regulations relevant to their activities. The finalized SLUEP received an insufficient amount of stakeholder input due to COVID-19's negative impact on operations. To update the SLUEP, DCRM will be engaging with MSOs through a workshop held in November 2020. The improved plan will be fed into an MVA-led NMC Eco-Certification Course.

This project works towards DCRM's Strategic Plan Goal 1.1.2: Continue to pursue management recommendations from the 2017 SLUMP update, actively engage stakeholders throughout the implementation process, and annually evaluate user conflict and other emerging issues.

Summer Internship Program



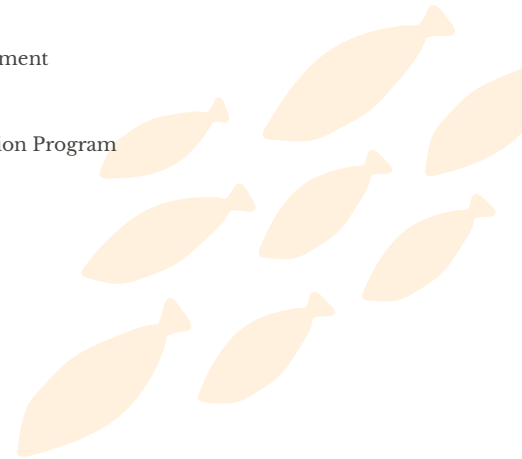
Every year, DCRM offers a 10-week summer internship program from June-August where college-bound and current college students work on projects related to coral reef and coastal zone matters in the CNMI. The success of this program prompted its expansion in 2019, increasing the number of interns from ten (10) to fifteen (15). The 2020 internship provided opportunities in shoreline monitoring, education and outreach, the Micronesian Challenge (MC), environmental enforcement, wildlife habitat surveying, wildfire risk assessment, environmental laboratory surveillance, and pesticide control. All fifteen interns completed 200 hours of work, a news article, which were published in the local newspapers as well as the DCRM website, and a final presentation.

This project works towards DCRM's Strategic Plan Goal 4: Strengthen communication of DCRM program activities and outcomes to increase environmental stewardship and promote a resilient and sustainable CNMI.

Revenues & Expenses

FY 2020 FEDERAL AWARDS

CFDA No.	Award
CFDA 11.419	Coastal Zone Management \$ 1,111,000.00
CFDA 11.482	Coral Reef Conservation Program \$ 487,000.00
CFDA 15.875	Coral Reef Initiative \$ 124,435.00
CFDA 11.419	Program Income Permit Fees \$ 121,067.21 Enforcement Fines \$ 19,500.00 Total Program Income \$ 140,567.21



FY 2020 EXPENDITURE



2021 Moving Forward

Land Change Analysis



With an influx of a new market, there has been an increase in major permitted projects. These projects often change the landscape and vegetation in and around their respective project sites. Building upon a previous project of tracking and analyzing vegetation change, DCRM's Permitting and Planning sections can better promote sustainable and eco-friendly end projects. With the availability of higher accuracy tools and access to "drones" (UAV) and land cover data, DCRM will be able to provide higher resolution images of change due to major permitted projects. Information such as the amount of hard or impervious surfaces, if there was an increase or decrease, and what has been done to mitigate those changes (ex. creating a rain garden, green rooftop, etc.). These types of data will be provided in the form of data layer(s) displayed through web maps and/or available for download in the DCRM Open Data Portal.

This project works towards DCRM's Strategic Plan Goal 3.1.1: Improve the collection, organization, and sharing of GIS data and metadata.

Watershed Management



Within the CNMI, four watersheds have been identified as "priority" watersheds — selected for their economic, biological and social significance, and severity of environmental threats — including the most recently identified Achugao priority watershed. One of the key issues in the Achugao watershed is land-based sources of pollution (LBSP), including sedimentation, excess nutrients, and stormwater runoff. Sedimentation in particular is of concern due to historical deforestation and soil erosion in the watershed, resulting in sediment outputs into the Lagoon smothering seagrass meadows and coral reefs. To address this issue, DCRM has secured funding to, in cooperation with local partners including DLNR Forestry, reforest at least six acres of upland Achugao with native trees and shrubs over the next three years. With the increase in forest cover in the grassland areas, soil will be stabilized and erosion reduced, while also creating habitat for Saipan's terrestrial biodiversity.

This project works towards DCRM's Strategic Plan Goal 2.3: Implement the mitigation hierarchy to ensure avoidance, minimization, and mitigation of negative impacts.

Shoreline Monitoring Enhancement



Sandy shorelines on Saipan, Tinian, and Rota are regularly surveyed by our long-term shoreline monitoring program to identify erosion and accretion trends. Beach profiles are generated by shoreline measurements to help visualize beach profile change over the years. Notably, part of the Hyatt shoreline lost 20 feet from Super Typhoon Yutu. This year, summer interns have produced both an updated Shoreline Monitoring Story Map, and a map with beach profiles, which are published on our website. Shoreline monitoring protocol will integrate digital surveying methods and more accurate surveying equipment including a Trimble Geo 7x GPS unit and a total station.

This project works towards DCRM's Strategic Plan Goal 3.2.4: Use shoreline profile data to identify the beaches most vulnerable to erosion and calculate appropriate rate-based development setbacks for these sites.

Intern Longitudinal Study (ILS)



The Intern Longitudinal Study aims to collect data on the efficacy of the annual DCRM Summer Internship Program to advance interns towards further education and employment in natural resource management. The ILS will provide former interns with a demographic survey that collects data on the whereabouts, education, and careers. The 2020 Education & Outreach interns created such surveys and were able to gather data from 40 past interns. Moving forward, upcoming interns will take the pre- and post-internship surveys and will be tracked longitudinally for 3 years upon leaving the program. Maintaining agency-intern communication is a critical component of the ILS. DCRM will create online platforms to allow interns to communicate, share opportunities, and expand their networks.

This project works towards DCRM's Strategic Plan Goal 3.1.4: Facilitate interagency capacity building with respect to the collection, sharing, analysis, and use of environmental data.

Sustainable Development



"Better Building Practices to Address Coastal Hazards" is one of DCRM's federally approved Coastal Zone Management Act Section 309 revised strategies to incorporate key elements of both coastal hazard preparedness and cumulative and secondary impact strategies into a single approach, through planning and siting of new projects. The Better Buildings Guidebook will provide feasible and appropriate practices in the CNMI, to increase infrastructural resilience to extreme weather and climactic impacts, while reducing environmental impacts. The research, guidebook, and insight from agency and stakeholder support will be utilized for proposing regulation change to the CRM Agency Board. Ideally, this regulation change will include a clear incentives program which will be incorporated into the permitting process to address hazard preparedness. (Photo taken by Bryan Manabat, Marianas Variety)

This project works towards DCRM's Strategic Plan Goal 2.2.1: Improve the process for assessing and minimizing secondary and cumulative impacts by establishing a framework to guide internal review of proposed projects.