Man, Land, & Sea

A publication by Guam Coastal Management Program November 25, 2022

GUAM COASTAL MANAGEMENT PROGRAM
EST. 1979
COMPREHENSIVE PLANNING FROM RIDGE TO REEF

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Protecting Guam from Ridge to Reef

Governor and Lt. Governor MESSAGE

UFISINAN I MAGA'HÅGA
OFFICE OF THE GOVERNOR

JOSHUA F. TENORIO
SIGUNDO MAGA'LÅHI • LIEUTENANT GOVERNOR

LOURDES A. LEON GUERRERO
MAGA'HÅGA • GOVERNOR

Hafa Adai:

Marine debris is a growing concern not only for Guam but also worldwide. The trash in our ocean pollutes our water, kills and injures wildlife, and can negatively impact Guam's economy through lost tourism and lower property values.

Our administration has dedicated resources and programs such as the Islandwide Beautification Task Force, (IBTF) chaired by Lieutenant Governor Josh Tenorio in organizing year-round cleanup events and we are proud of our community volunteers and organizations in conducting individual and group cleanup events throughout the year.

Several weeks ago, the 26th Annual Guam International Coastal Cleanup (GICC) resumed after two years of cancellations due to the pandemic, however, the GICC remains an iconic annual event in which students, nonprofit organizations, government, and private sector entities come together in the spirit of collaboration to remove debris on Guam's beaches and nearshore environments. This year's International Coastal Cleanup came back strong with over 2,100 volunteers who participated in cleaning approximately 22 coastal sites covering over 25 miles of Guam's shoreline.

We congratulate the Bureau of Statistics and Plans, Guam Coastal Management Program with support from the Ocean Conservancy and the National Oceanic and Atmospheric Administration (NOAA), and the many volunteers, site leaders, and staff who made the cleanup event a success and in helping keep our island's shorelines clean and free of marine debris.

LOURDES A. LEON GUERRER
Maga'hågan Guåhan
Governor of Guam

JOSHUA F. TENORIO
Sigundo Maga'låhen Guåhan
Lieutenant Governor of Guam

"This year's International Coastal Cleanup came back strong with over 2,100 volunteers..."

New Release: PBS UNIVERSITY

Season 4- Seagrasses and Mangroves

Grab some popcorn (and some pencils and paper) and check out the recently released season four of PBS university! This season features Guam's seagrasses and mangroves, which are vital but often overlooked marine ecosystems that provide homes for fish and wildlife, absorb pollution, prevent coastline erosion, and fight climate change by storing massive amounts of carbon from the atmosphere.

Along with the production team at PBS Guam, our former 2020-2022 national coral reef management fellow, Cara Lin, worked nearly a year to write, edit, organize interviews, generate illustrations and animations, and film wildlife from seagrass and mangrove sites around the island. The episodes are intended for secondary school-level student audiences and feature interactive portions of open-ended questions to promote creative thinking and problem-solving. Although there are other seagrass and mangrove videos and documentaries online, these episodes are unique in that they are meant to be used in a classroom, and feature footage captured from Guam so students can see exactly what animals and environments can be found around our island. The episodes were shared with local marine biology and science teachers to be used as resources for this school year.

Alongside our former coral reef management fellow, this season's episodes also feature two young women studying the sciences at the University of Guam. The mangrove episode features Ms. Gabriella Helene Prelosky, University of Guam Biology Student and NSF INCLUDES: Supporting Emerging Aquatic Scientists (SEAS) Islands Alliance research fellow. Ms. Prelosky, who studied mangrove-associated diatoms and named a new diatom species, shared her knowledge and what it was like to get involved in scientific research. The seagrass episode features Ms. Merry Jubilaine Remetira, a University of Guam Undergraduate Civil Engineering Student and 2021 NSF EPSCoR student researcher. Ms. Remetira spoke about her findings from the seagrass and water quality research she conducted last year, and why seagrasses are important to our community. The two students shared their insights and experiences as segments in the longer episodes. Their full-length interviews can also be viewed as their own shorter episodes... By showing these young research scientists, the episode producers hoped to inspire younger secondary school audiences, and showcase the trailblazing work being done by local young scientists.

If you missed the television premiere, you can still access and watch the episodes anytime on PBS Guam's YouTube channel or on the free PBS Video App. The episodes were made possible with funding from the Government of Guam Education Stabilization Fund.

GUAM CORAL REEF INITIATIVE

Welcomes Olivia Bañez

The Bureau of Statistics and Plans (BPS), Guam Coral Reef Initiative recently hired **Olivia Bañez as the new Coral Reef Policy and Communications Coordinator**, a position funded by the Department of the Interior's Coral Reef and Natural Resources grant. In September, she joined BSP's Guam Coral Reef Initiative (GCRI) and is excited to work with the team on developing educational materials and outreach opportunities to help connect the community to Guam's incredible reefs and fisheries. Her work will also include advancing policies and regulations that will enhance coral reef management on Guam.

Olivia comes to us from California, where she most recently served as the Science Communication Coordinator for the Santa Barbara Museum of Natural History Sea Center. In this role, she managed a team of part-time Naturalists, produced science communication training materials for Sea Center volunteers, and organized outreach events like the World Oceans Day celebration. Prior to that, she worked for Lanterns Global, a small startup educational company, where she created their first-ever marine biology outdoor class for elementary-aged homeschool students and wrote the curriculum, managed teachers as the program scaled up state-wide, and had a blast teaching her students at the beach! She holds a Bachelor of Science in Biology with honors from Pepperdine University and conducted her senior thesis research on a local fish species, the California grunion.

Olivia enjoys sharing her passion for marine life with people of all ages and also loves to experience it firsthand through snorkeling, scuba diving, tide-pooling, and surfing. She and her husband, Noah, are currently settling into their new life here on Guam and are very excited to explore more of the island and get involved in the community. She is always stoked to learn new things and meet new people, so please don't hesitate to stop by the GCRI office to introduce yourself and say hello!

7TH ANNUAL ASSEMBLY OF PLANNERS SYMPOSIUM

CREATING SPACES THAT EMPOWER COMMUNITIES THROUGH GOOD DESIGN, SUSTAINABLE DEVELOPMENT, ECONOMIC VIBRANCY, AND WISE STEWARDSHIP OF OUR NATURAL AND CULTURAL RESOURCES.

The Bureau of Statistics and Plans, Guam Coastal Management Program, in partnership with the Office of the Governor held the 7th Assembly of Planners Symposium at the Dusit Thani Guam Resort on August 17 & 18, 2022.

The theme of this year's symposium was"Creating Spaces that Empower People." This event serves as a niche where notional and theoretical concepts converge with frontline practitioners in planning, policy, and regulatory structures that work to advance healthy ecosystems, resilient communities, and vibrant economies.

2022 AOP TOPICS

- Understanding the Road Ahead: Preparing the Guåhan 2050 Sustainability Plan for Success.

- Designing for Sustainability, Resiliency, and Community

- Guam Forests System Plan - Building a Strong Foundation to Realize Conservation and Future Land Use Planning for Guam

- Land Use Planning: Strategic Perspectives

- Watershed and Development Impacts
- Flood and Stormwater Mitigation

- Guam Endangered Species Population and Abundance Update

- Federal Agency Activity? Federally Approved or Funded Activity? What you need to know about obtaining Federal Consistency

- Smart Cities: Environmental Justice

- Solid Waste Management Plan and the Zero Waste Master Plan
- A Vision for Tourism in Guam

- Factors Affecting Affordable Housing Opportunities for Guam's Families

- Guam Power Authority Infrastructure Outlook

- Integrating Effective Long-Term Planning Toward Infrastructure Funding Opportunities. Discussions on Military Expansion & Diversification Initiatives

- Stewards of Guam's Heritage: Respecting our Lands, Mitigating our Impact

- Perspectives in Planning for Economic Recovery of the Aquaculture Industry in Guam

Partners and presenters included:
Guam Housing Corporation; University of Guam, Sea Grant; Chamorro Land Trust Commission (CLTC); Guam State Historic Preservation Office; Guam Travel & Tourism Association; Zero Waste Guam; Market Research & Development (MRD) Guam; Guam Preservation Trust; Marianas Chapter of the American Institute of Architects (AIA) Guam; Guam Department of Public Works (DPW); Guam Waterworks Authority (GWA); Jacobs Engineering Corporation Guam; Office of Insular Affairs, U.S. Department of the Interior; Guam Environmental Protection Agency (EPA); Joint Region Marianas; Guam Housing and Urban Renewal Authority (GHURA); Guam Department of Land Management (DLM); Guam Department of Agriculture (DOA); Guam Department of Parks and Recreation (DPR); and the Guam Power Authority (GPA).

For more information on the symposium, visit bsp.guam.gov/aops-2022/ or watch the video episodes on YouTube #Guam Coastal Management Program.

GUAM 2022 INTERNATIONAL COASTAL CLEANUP

Ocean Conservancy®

The 2022 Guam International Coastal Cleanup (GICC) was held on Saturday, September 10, 2022, at various coastal locations around the island. Approximately 2,100 volunteers representing the government, non-profit, private sector, and island schools participated in the event. 22 coastal clean-up sites were identified and cleaned up by volunteers. Guam Coastal Management Program provided trash bags, gloves, t-shirts, and bus transportation for the volunteers for GICC.

Approximately 13,000 lbs. of trash were collected from over 25 miles of the island shoreline. Data will be reported to the Ocean Conservancy to include in their worldwide Coastal Cleanup database.

COMMUNITY CLEAN UP

FDMS Adopt-A-Road Clean Up

Students from the Father Duenas Memorial High School NJROTC program conducted a roadside cleanup in Mangilao earlier this year as part of the FDMS Adopt-A-Road Clean Up. Thank you FDMS for helping keep our island free of litter.

March 27, 2022: Bear Rock Clean Up

By: Rhozzenda Jhazlyn Valdes

The GCC Social Media Marketing Class (MK125) of Mrs. Nita Jeannette Cepeda organized a beach clean-up near Bear Rock in the beautiful village of Inalåhan. At first, we did not know what to expect when we parked because no trash was visible, however, when we went around to the other side of the beach, what we saw was devastating and shocking. The trash that we found had been broken down into small plastic debris (microplastics) which it difficult to pick it up with our bare hands. With the help of the Inalåhan Mayor and staff, our class was able to secure a shovel and a rake to gather the trash in one area and place it into the trash bags. We were saddened that no matter how much we collected and put into trash bags, it felt like it was never going to end. The microplastics were mixed into the sand and stuck to the coconuts which motivated us to clean the beach more and more until all the debris was gone.

My classmates told me to stop cleaning when our time for the event was over, but just looking at the location was heartbreaking. How can we swim here? How can we bring tourists here? How can we call this island our home when it looks like this? How can people sit there and watch the debris float, break, and let it stay in our water? If we do not do anything now, we won't be setting a good example for future generations. At the end of the day, we had a great time cleaning the environment, even though we did a small part. We are grateful that doing our part made at least some difference. This event would not have been possible without the help of Mr. Steven Dierking and the Bureau of Statistics and Plans, Guam Coastal Management Program for supplying us with the trash bags, gloves, and t-shirts. We would also like to thank Inalåhan Mayor and his staff for lending us a hand by participating in this event and assisting with the trash collection.

TEAM 26 Clean Up

February 2022

Team 26 Graduates from the Advanced Leadership Seminar by Dan Dorr conducted a beach cleanup in February 2022. Family and friends joined the group to clean up East Hagatña Bay from the Onward Beach Resort to Paseo collecting more than 30 bags of trash on the shoreline. Special thanks to all the volunteers who participated to keep Guam's beaches and shores clean.
Team 26: We Got Your Six!

Man, Land, and Sea Newsletter
November 25, 2022

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The Man, Land and Sea newsletter is funded by a grant from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) through the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management and the Guam Coastal Management Program (GCMP) of the Bureau of Statistics and Plans, Government of Guam through Cooperative Agreement Award NA20NOS4190178

https://bsp.guam.gov/guam-coastal-management-program/

Guam Bureau of Statistics and Plans

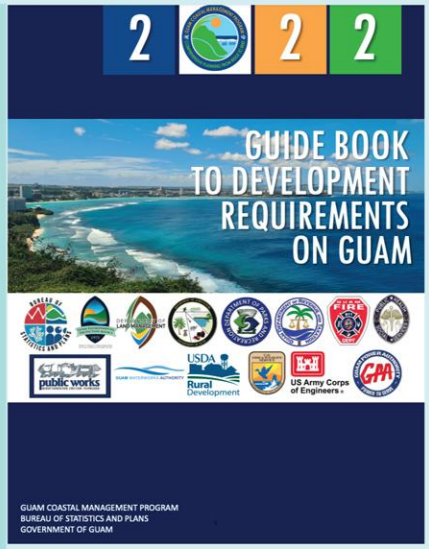
THE DATA HUB
WITH TYRONE TAITANO

Newstalk K57 AM

10 am Tuesday

Guidebook to Development Requirements now available for free download

Fundamental resource ready for developers



The guide provides an overview of development requirements on Guam.

Guam Coastal Management Program, Bureau of Statistics and Plans

Guam Coastal Management Program announces updated 2022 guidebook, serves as reference for island developers

This new guide is a fundamental resource that's available free of charge to developers planning to undertake any major or minor project on Guam. Updated as of March 2020, the guide serves as a reference point for developers researching how to execute environmentally compliant development projects.

A key component of the guidebook is the Permit and Construction Enforcement Matrix, which identifies general project types and lists typical types of plans, specifications, calculations, reviews, approvals or other agency permits required. The matrix is useful in finding the description that best corresponds with a proposed project, along with which plans, specifications, calculations and other associated permits and approvals are required.

Within the 252-page guide, you will find information on laws, regulations, permits and clearances, as established by numerous local and federal regulatory agencies. This includes all categories of construction, earthmoving and agriculture, as well as other types of land use and water-oriented construction.

The guide also aims to provide an overview of major permitting requirements of typical development projects on Guam. It outlines the applicable considerations at local and federal levels to help streamline the permitting process and support compliance objectives.

In addition to the permitting information, the guide contains the following resources:

- **Directory of government agencies, including contact information**
- **Sample forms**
- **Glossary of acronyms**
- **Definitions of key terms**
- **Key public laws**
- **Environmental mapping on Guam**
- **Permitting matrix**

This guide is not meant to be used as the sole resource that developers should rely on when executing projects. You are advised to consult with the appropriate government agencies as early as possible in the project planning stage. For reference, you can turn to representatives at the Department of Public Works, the Department of Land Management, the Guam Environmental Protection Agency and the Bureau of Statistics and Plans for help in determining which laws, regulations, permits clearances are required for a particular project.

A limited number of hard copies of the guidebook are available to the public. You can also download a copy at bsp.guam.gov/guam-development-guidebook/ For more information, please contact steven.dierking@bsp.guam.gov or call (671) 475-9647.