



CNMI Comprehensive Wetlands Management Plan Update and Stakeholder Coordination

PROPOSAL TO: NOAA, OFFICE FOR COASTAL MANAGEMENT
2024 COASTAL MANAGEMENT FELLOWSHIP

SUBMITTED BY: COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
BUREAU OF ENVIRONMENTAL AND COASTAL QUALITY – DIVISION OF COASTAL
RESOURCES MANAGEMENT

Richard V. Salas
Director, Division of Coastal Resources Management
Phone: (670) 664-8319
Email: rsalas@dcrm.gov.mp



Background and Introduction

The Commonwealth of the Northern Mariana Islands (CNMI) Division of Coastal Resources Management (DCRM) is the federally approved coastal zone management (CZM) program established by CNMI Public Law 3-47, the Coastal Resources Management Act of 1983. The National Oceanic and Atmospheric Administration (NOAA) approved the program in 1980, pursuant to the Coastal Zone Management Act of 1972 (CZMA). DCRM manages the coastal zone of more than 13 islands, including submerged lands and waters extending seaward to a distance of three (3) nautical miles, and excluding federally-leased areas. Saipan is the largest and most developed island municipality in the jurisdiction, and other island municipalities include Tinian, Rota, and the Northern Islands.

When the CNMI became a Commonwealth of the US through US Public Law 94-241, the Covenant to Establish the CNMI in Political Union with the USA, the legal framework outlined specific provisions for long-term interests in land ownership, including public lands. In turn, wetlands became subject to the ownership provision. Although wetlands receive various protective measures from federal and local laws and regulations, they still continue to be threatened from development, pollution, invasive species, and other stressors. DCRM conducted the CNMI 2021-2025 Section 309 Assessment and Strategy (A&S) Report, where the majority of stakeholders polled in the 309 A&S ranked wetlands as the highest priority area, following a second five-year cycle of wetlands chosen as one of the enhancement areas. The 309 A&S Report evaluated several datasets, estimating that there are somewhere between 641.79 to 717.8 acres of total wetlands, but there are discrepancies from datasets as to the precise boundaries. Based on these discrepancies, DCRM received funding from the approved 309 A&S Report to conduct field investigations for ground-truthing wetlands and buffer zones boundaries to update the wetlands APC.

Based on the literature review for the 309 A&S Report, it appears that despite the number of policies and regulatory mechanisms in place to protect wetlands, there is no current plan or consensus between government agencies and stakeholder groups to guide management on wetland conservation. Improved interagency collaboration regarding wetland management was the third management priority in the 309 A&S, and strongly endorsed by the Office of Planning and Development (OPD), whom NOAA Office for Coastal Management (OCM) recommended DCRM work closely with, in the last 312 Evaluation Findings. The last comprehensive wetlands management plan for Saipan was produced in 1991, followed by a state of the wetlands and recommendations for wetland policy report in 2005.

It should not come as a surprise that the dynamic between the CNMI constitutional land ownership provision, the limited amount of land including wetlands, the close relationships in small island communities, and the overlap in jurisdiction between resource agencies, has created a somewhat problematic overall approach for managing wetlands. Land owners are understandably frustrated because of the restrictions to develop on their own land, but resource agencies are hesitant to do much beyond their own authority. In turn, lack of cohesive management can lead to the aforementioned stressors, where enforcement or conservation

measures may be disregarded and lead to the loss of wetlands and deterioration of ecosystem services to the CNMI.

Despite the challenging jurisdiction over wetlands, DCRM continues to push for interagency coordination. Goal 2.3.2 of the DCRM 2018-2023 Strategic Plan sought to reactivate coordination from the last 2005 “Recommended Wetland Policy” report, but attempts to assemble stakeholders has not been fruitful. DCRM is trying other approaches to wetland management through funding from the Bipartisan Infrastructure Law, with the long-term vision of pursuing land acquisition from willing private landowners in Areas of Particular Concern (APC) such as wetlands, to create conservation areas for CZM purposes.

Although DCRM and partner agencies have recently lost capacity for wetlands management, there has been an interest from CNMI leadership and partner agencies for DCRM’s push to manage public land through acquisition. DCRM believes that with the many avenues for federal funding now available, and the attention from leadership, it could continue to gain momentum for stakeholder willingness, and CNMI agency cooperation. DCRM is hoping to take advantage of the funding opportunities, but also needs wetland technical expertise and capacity. Working in tandem with the delineation of wetland boundaries for a program change, and land use planning for potential future acquisition, DCRM hopes that revitalizing an old plan will guide the CNMI in a new direction for equitable and adaptive wetlands management.

Goals and Objectives

The Fellow will be tasked with the project goal of collaborating closely with key stakeholders to update the 1991 Saipan Comprehensive Wetlands Management Plan, and further integrating wetland spatial, ecological, and functional data and analysis for other CNMI islands to transform it into a CNMI Comprehensive Wetlands Management Plan. In doing so, the Fellow will meet the following objectives for the duration of their fellowship:

Objective 1: The Fellow will conduct one comprehensive wetlands management stakeholder resource assessment workshop on Saipan, CNMI by year 1 to gather data and input from CNMI leadership, government agencies, community groups, academia and other stakeholders on the island of Saipan, to inform the Plan’s direction.

Objective 2: The Fellow will conduct three stakeholder resource assessments for each of the municipalities of Tinian, Rota, and the Northern Islands, in collaboration with the respective Municipal Offices and government agency branch offices by the end of year 1.5.

Objective 3: The fellow will collaborate with respective CNMI and federal agencies to collect and interpret information and feedback through resource assessments, literature and policy reviews, geospatial data, and other relevant data sources to complete a CNMI Comprehensive Wetlands Management Plan by the end of year 2.

Objective 4: The Fellow will conduct outreach to at least 10 different groups and organizations over the course of their fellowship on the importance of wetlands management, and what they hope to attain through their fellowship project by the end of year 2.

Objective 5: The fellow will present out their findings and the final plan to stakeholders and seek approval from CNMI leadership by the end of year 2.

In the process of meeting this goal and objective, the Fellow will:

- Understand and evaluate the key issues surrounding wetlands use in the CNMI in context with land ownership, regulatory roles, and development pressures.
- Conduct a thorough data analysis and bridge data gaps to include other CNMI municipalities that were previously unaccounted for in the 1991 Plan and 2005 Report.
- Inventory all existing wetlands and provide complete descriptions for them.
- Work closely with stakeholders to determine priority areas for future strategies and land use management practices.
- Propose management strategies based on assessments and literature reviews to support future land use in tandem with DCRM's current feasibility assessment for creating and managing protected geographical areas through the public land exchange process, and provide insight and support for such undertaking as applicable to wetlands.
- Address 309 A&S Management Priority 3: Improved interagency collaboration regarding wetland management.
- Conduct outreach on wetland ecology and importance of wetland management, while using the outreach as a platform to gather feedback and information from stakeholders.
- Develop a methodology that measures effectiveness of management measures on wetlands.

Milestones and Outcomes

The following chart outlines the Fellow's expected progress through the two-year course of the project. The Fellow and Mentors will work together to create a more detailed timeline for the second year as the project develops. The Fellow should anticipate and be comfortable with the fact that, despite best intentions, some tasks will operate on traditional "island time."

Timeframe	Milestones and Outcomes
August - September 2024	Fellow becomes familiar with the various wetland management roles for DCRM and other CNMI resource agencies, especially concerning overlapping jurisdiction between agencies. Fellow conducts courtesy calls to CNMI leadership and other partner agencies, initiates networking, and becomes familiar with key partners (ongoing)
September - December 2024	Fellow conducts initial desktop review of wetlands management plans, policies, documents, and geospatial data. Fellow conducts field visits as necessary and continues to establish working relationships with partners. Fellow identifies data gaps and presents out findings to DCRM Planning Team and other partners.
January - March 2025	Fellow designs Stakeholder Resource Assessment Workshop Strategy and prepares logistics for Workshop. Fellow completes data inventory for plan.
March - August 2025	Fellow executes Stakeholder Resource Assessment Workshop for Saipan and compiles data from assessment to be interpreted for plan.
August 2025 - February 2026	Fellow executes Stakeholder Resource Assessment Workshop for Tinian, Rota, and Northern Islands and compiles data to be interpreted for plan.
February - April 2026	Fellow interprets results into presentation, and presents to DCRM, DCRM Board, and other partners. Fellow proposes recommendations for future co-management based on stakeholder assessments, and helps DCRM identify potential funding sources to continue project momentum (ongoing).
April - June 2026	Fellow completes draft management plan and presents to leadership for approval.
June - August 2026	Fellow submits exit report, final implementation recommendations, and finalizes plan. Fellow works with DCRM to seek NOAA approval for program change.

Project Description

RESEARCH AND DESKTOP REVIEW: The Fellow will begin by initiating background research through a desktop review of existing data and past efforts made. The Planning Team has collected and inventoried much of this data, and is familiar with the research surrounding wetlands. The Fellow may benefit from perusing successful wetland management strategies and plans from other jurisdictions in order to draw comparisons that may be useful for the plan. The Fellow may also benefit by doing field surveys and site visits with the Team, to observe some of the issues with development and other stressors, as well as to gain potential ideas that can be applied to the plan.

OUTREACH AND INTERAGENCY COORDINATION: Outreach and interagency coordination will be an ongoing component of the project, and essential for the Fellow to network and gain rapport with local organizations for future collaboration. Upon the Fellow's arrival, DCRM will introduce the Fellow to many of the key personnel with whom they will be working, as well as potential groups and organizations that they can collaborate with for outreach. As mentioned, reinitiating a working group might not be sustainable, and the DCRM Team will guide the Fellow to many of the existing groups and points of contacts.

The Fellow will have opportunities to conduct outreach through existing avenues, as it may not be sustainable for the Fellow to start a new wetlands group based on past unsuccessful efforts to maintain member participation. This strategy has also proven to be successful for completion of projects by NOAA Coral Fellows. For example, groups may include the Watershed Working Group, OPD Task Force, Marianas Mappers, or the CRM Agency Board, and events may include the CNMI Ocean Fairs hosted by DCRM, the DEQ Environmental Expo, and Marianas Terrestrial Conference (TBD). There is also potential to network or gain support through local organizations and academia, internships, or potentially host something on World Wetlands Day for which there is currently no event. DCRM has staff dedicated to outreach, who could help guide the Fellow. At the same time, the Fellow could use the outreach as a chance to conduct stakeholder surveys about wetlands to inform a public perception component of the plan.

RESOURCE ASSESSMENT WORKSHOPS: Resource Assessment Workshops will be crucial for the Fellow to draw consultation from agencies and community groups and have stakeholders provide their feedback on the next steps forward. Since there are four municipalities in the CNMI, the Fellow is expected to generally conduct each of them separately. Previous Fellows have successfully done this by combining their stakeholder engagements with annual events in Tinian or Rota. The Northern Islands Mayors Office is located on Saipan and should also be included in this endeavor, as the municipality has some notable wetlands. The resource assessments should be used to inform future management strategies and included in the final plan.

ANALYSIS OF DATA: Analysis of data will include a thorough review of all the research and desktop reviews, the resource assessments, GIS spatial data for all the islands, relevant policies and laws, and all the work done on wetlands in the span between the last plan to the present. It should include clear and realistic management strategies and solutions, potential policy

implementation or updates, and roles of agencies. It should also include stakeholder feedback, including public perception. It should lastly include an inventory of all the wetlands and their description such as, flora and fauna, hydrological and soil attributes, their current management status, current ownership, geographical locations, impacts from stressors, and any other important information that the Fellow has found through their research.

Management Plan and Recommendations: After completing a draft plan, the Fellow will present their findings and recommendations to partners, including CNMI leadership. If there is additional information that needs to be captured in the plan, the Fellow can edit it before having it approved. As the Fellow will be near the close of their fellowship, they may assist DCRM on how to maintain their capacity through potential funding sources and how to implement the plan.

Diversity Equity, Inclusion, and Justice

DCRM fosters a diverse and inclusive workforce, as the CNMI is an underserved jurisdiction composed of a primarily minority population, including Chamorro and Carolinian indigenous groups. The project will provide capacity for the state CZM program with the aim of protecting coastal resources and the environment, and contributing to a better quality of life for all CNMI citizens. It would also help supplement other related projects, such as land acquisition from indigenous land owners in order to responsibly manage and conserve these areas which provide ecosystem services and a clean and healthier environment for all.

Fellow Mentoring

DCRM will host the Fellow in the Planning Section of the program, where the Fellow will work closely with staff who focus on special area management, coastal policy and federal consistency, geographic information systems (GIS) and spatial planning, land use planning, outreach, watershed management, and permitting. The Fellow's primary mentor will be Mary Fem Urena. Mary Fem will be filling the position of Coastal Resources Planner II from her current role of Coastal Resources Planner I, where her work primarily focused on shoreline special area management. Historically, the Planner II role has assumed a partial emphasis on wetlands management, but as the position was recently vacated, there is a need for capacity. Mary Fem has been assisting with wetland duties as part of the Planning Team, and is eager to share her experience in coastal planning, while learning about the technical aspects of wetland management and expertise that the Fellow has to improve the program.

The Fellow's co-mentor will be Arthur Charfauros, Coastal Resources Planner III who currently focuses on coastal policy and federal consistency, has also supported past wetland efforts, and will provide additional guidance as part of the Planning Team. Both Mary Fem and Arthur work under the supervision of Richard Salas, who worked in wetlands management leading up to his current role as the DCRM Director. All three of them have worked with the 2018-2020 Coastal Fellow, Kelsey McClellan, and are ready to patiently guide the new Fellow through the challenges of CNMI bureaucracy. Additionally, they will serve as a networking point to not only

introduce the Fellow to key stakeholders and CNMI agency leaders, but also to work closely with the Fellow to identify opportunities to pursue upon completion of the project, and hopefully maintaining the Fellow's capacity within the CNMI as many other past fellows have chosen.

Wetlands management has much overlapping work duties with other sections in the Bureau of Environmental and Coastal Quality (BECQ)-DCRM, as well as in the BECQ-Division of Environmental Quality (DEQ), the Environmental Protection Agency (EPA) funded partner agency. BECQ Staff have familiarity working with past DCRM fellows, and enjoy welcoming new faces into the Bureau while appreciating the work that may be accomplished from having the additional capacity. The Watershed Coordinator, GIS Specialist, Land Use Planners, Outreach Coordinator, Permitting and Enforcement Section, various staff from DEQ, and the NOAA Liaison will be willing to provide their knowledge and assistance as it relates to their roles and responsibilities. The Fellow will also be able to leverage the close community bonds that members of the Bureau have with stakeholders and other government partners in a small island setting, in order to network and acquire pertinent information to complete their planning objectives and goal. Additionally, the Fellow will have the opportunity to work with federal and regional partners to present their findings, as well as learn about wetland management in other jurisdictions and as it is applicable at the federal level.

Office Environment

DCRM staff is required to clock in during regular working hours from 7:30am to 4:30pm with an hour lunch break. As being present in the office is a requirement for all CNMI government employees, DCRM expects that the fellow will honor this requirement. Flexibility for time worked on events during weekends or as necessary will be at the discretion of the DCRM Director.

Project Partners

As mentioned earlier, wetlands management has overlap with other CNMI Resource Agencies aside from DCRM and BECQ-DEQ. The Division of Fish and Wildlife, and the Division of Parks and Recreation within the Department of Land and Natural Resources also have much overlap, as well as the Department of Public Lands. There will be opportunities for the Fellow to conduct outreach and work with other organizations and academic institutions, as well as the federal government as it pertains to their scope of work.

Cost-Share Description

DCRM intends to provide the \$15,000 (\$7,500/FY) fellowship match through funding generated through program income or funds from the program's open cooperative agreement. DCRM will work with OCM on details of this arrangement.

DCRM will provide the fellow with their own computer and work station, in the DCRM office. This will include a personal computer equipped with the Microsoft Office Suite, ArcGIS, a CNMI government email address, and all necessary office equipment and supplies. DCRM will coordinate with the Fellow prior to their arrival to secure any resources for the Fellow's project, and the Fellow may request specific items as needs arise.

The Fellow will have access to shared equipment including scanners, a fax machine, projectors, office printers and map plotter, GPS/GNSS units, waterproof cameras, office laptops, and office vehicles. Boat support is also available, and travel arrangements as pertinent to work duties may also be arranged. The DCRM office will provide for all secretarial and administrative support that is necessary for the Fellow to complete his or her work. Through the position with DCRM, the Fellow will have access to all local government offices, data, and trainings that may be provided. DCRM will work closely with the Fellow to identify any trainings or events that the Fellow may seek participation in, and budget them accordingly with the Work Plan and fellowship match.

Strategic Focus Area

This proposed project addresses the strategic goals of *Healthy Coastal Ecosystems and Resilient Coastal Communities*.

Wetlands are valuable areas that provide ecosystem services which are beneficial for both the natural and human environment, but are often disregarded because they are difficult to develop, and may not always have the aesthetic allure as other areas do for recreation. For example, Susupe Lake wetland on Saipan was designated as a wildlife park, but there has been little draw for the average person to use the lake recreationally. However, it provides habitat for endangered species, and numerous communal benefits such as freshwater, as well as carbon and pollutant sequestration.

Some of the ecosystem services that The Wolfs Company (2019) estimated in an economic valuation of CNMI wetlands was that they provide \$4.8 million in value from pollutant and sediment capture and \$2.3 million for water supply to Rota and Tinian, amongst other benefits. Overall tangible benefits to the local population were estimated at about \$10.7 million annually, and an additional \$18.3 million through long-term storage of carbon. Indirectly, conversion of wetlands affects coral reefs and other important ecosystems, and in turn increase pressure from climate change and coastal hazards. Wetlands are an invaluable resource that deserve proper management and a comprehensive update to plan ahead, but can only be completed by a coordinated effort among resource agencies, and with the special level of expertise and facilitation to guide that consensus.