

Talakhaya Integrated Watershed Management Plan – 2020



ROTA, CNMI



Prepared for the CNMI Division of Coastal Resources Management under the Bureau of Environmental and Coastal Quality with support from the U.S. Department of Commerce's National Oceanic and Atmospheric Administration and U.S Department of Agriculture's Natural Resources Conservation Service.



7.2.1. Financial Resources

Funding for watershed management planning efforts – on-going planning, strategic action implementation, monitoring, education and outreach – can come from a range of sources including Federal, State, local, and private entities. Funding mechanisms will include contracts, private funds, community grants, cost-share agreements, and volunteer efforts. The previous CRI funding was distributed primarily between the annual revegetation project and for limited watershed planning efforts, with additional support for education and outreach. It is expected that funding for the revegetation project will continue for the next three years (2020-2022) through the U.S. Forest Service Landscape Scale Restoration Grant and the Forest Stewardship Program.

The Talakhaya watershed, Sabana Wildlife Area, adjacent coral reef ecosystems are priority management areas for CNMI. The TWMP recommends a multiple funding source approach that links specific funding sources both with defined projects and the relevant management agency. The following list of funding resources can be directed towards projects and agencies in relevant timeframes.

7.2.2. Specific Funding Resources

National Oceanic and Atmospheric Administration

Primary contacts: CNMI Coral Reef Management Liaison, USCRTF local Point of Contact (DCRM Director), NOAA CRCP office, NOAA OCM Pacific Islands Region manager

- *Coral Reef Conservation Program (CRCP)* – Funding and cooperative agreement assistance for coral reef conservation activities. CRCP priorities have been refined and redirected in 2018 to refocus program investments on three existing pillars which include the most pressing threats to coral reefs: land-based sources of pollution, sustainable fishing management, and climate change; and a new fourth pillar: restoration. Much the current DCRM efforts are funded through CRCP, including staff, capacity building, monitoring, and evaluation as well as outreach and education. Talakhaya continues to be important for CNMI, so it is important to seek a fraction of the annual CRCP funds to continue approved projects.
 - The State and Territorial Coral Reef Conservation Cooperative Agreements sustain coral reef management and monitoring in the states and territories, including CNM. The competition runs biennially. Applications can request between \$200,000 – \$900,000 per proposal. The average award size is \$500,000 per year.
 - The Non-Governmental Organization (NGO) Partnership Coral Reef Conservation Cooperative Agreements provide funding to NGOs with specialized experience in supporting the ongoing coral reef conservation efforts of state and territorial partners. This competition runs every 2 to 4 years. Applications can request between \$100,000 – \$700,000 per year (approximately \$100,000 per state or territory).
 - https://coralreef.noaa.gov/conservation/funding_welcome.html

Two nearly identical proposals were submitted by both DLNR and DPW to utilize USDA-NRCS Emergency Watershed Protection Program funds to clear debris above the main culverts to limit wet-season clogging. The duplicate proposals slowed down the process and after realizing neither local agency had DUNS numbers (required for the allocation of funds), the \$19,000 earmarked for the project by NRCS was unable to be disbursed and the project fell through.

Example 1: Funding Challenges (2019)

- *Coastal and Marine Habitat Restoration Grant (CMHR)* – The Community-based Restoration Program supports restoration projects that use a habitat-based approach to rebuild productive and sustainable fisheries, contribute to the recovery and conservation of protected resources, promote healthy ecosystems, and yield community and economic benefits. DFW is the most relevant agency to seek funds under this grant given their role in managing endangered species.
 - Eligible applicants are institutions of higher education, non-profits, commercial (for profit) organizations, U.S. territories, and state, local and Native American tribal governments. The annual grant competition includes a pre-proposal deadline in January with final proposals due in April. Applications can request between \$100,000 – \$900,000 per year (with an average award of \$100,000 per project).
 - Examples of previously funded projects that would be applicable for Talakhaya include addressing sediment from unstabilized dirt roads and reducing land-based sediment runoff in the watersheds (e.g. erecting fencing, removing feral goats from the landscape, and revegetating riparian corridors with native trees and shrubs).
 - <https://www.fisheries.noaa.gov/grant/coastal-and-marine-habitat-restoration-grants>
- *Coastal Zone Management Programs (CZM)* – CZM works with coastal states and territories to address some of the most pressing coastal issues, including climate change, ocean planning, public access enhancement, and planning for energy facilities and development. CZM projects can include green infrastructure construction, water quality assessments, coastal hazards planning, resilience planning, improved wetland and watershed management, and culvert vulnerability assessments.
 - The Coastal Zone Enhancement Program provides incentives to states to enhance their state programs within nine key areas: wetlands, coastal hazards, public access, marine debris, cumulative and secondary impacts, special area management planning, ocean and Great Lakes resources, energy and government facility siting, and aquaculture. The annual grant is for eligible projects under Section 309 strategies with funding ranging from \$70,000 – \$300,000.
 - The Coastal Nonpoint Pollution Control Program (CNPs) ensures that participating states have the necessary tools to prevent and control polluted runoff. Areas for funding under Section 6217 include staffing, monitoring and evaluating implementation, and implantation of on-the-ground priority management projects on both public and private lands. Funding amount is stipulated by territory and EPA approval. CNMI currently does not participate in this program.
 - <https://coast.noaa.gov/czm/about/>

U.S. Forest Service

Primary contacts: Rota Forester, CNMI State Forester, Pacific Island Liaison (Region 5)

- *Forest Stewardship Program (FSP)* – Provides assistance to owners of forest land where good stewardship, including agroforestry practices, will enhance and sustain multiple forest resources and contribute to healthy and resilient landscapes. FSP projects fall under three categories: assisting landowners to actively manage their land and related resources, keeping land in a productive and healthy condition for present and future owners, and increasing the economic benefits of land (timber harvesting, for example) while conserving the natural environment. DLNR-Forestry is currently working with USFS to secure revegetation project funding for 2020 of approximately \$60,000.
 - The FSP depends on the development of Forest Stewardship Management Plans (which is currently under development in CNMI). Some applicable elements in Talakhaya for funding resources beyond revegetation include promoting soil stability and water quality, providing

diverse habitats, forest-oriented recreational activities, and streamside management zones as well as wetland restoration, fire management, cultural site protection, invasive species control, and carbon sequestration.

- USFS funding stipulates out planting **only** trees rather than the previously used soil-securing grass species for the annual revegetation project
- <https://www.fs.fed.us/managing-land/private-land/forest-stewardship>
- *Landscape Scale Restoration Grant (LSR)* – A competitive grant program that promotes collaborative, science-based restoration of priority forest landscapes and furthers priorities identified in State Forest Action plans to address large-scale issues such as wildfire risk reduction, watershed protection and restoration, and the spread of invasive species, insect infestation and disease. CNMI Forestry has previously received LSR funding for mangrove area monitoring, terrestrial forest monitoring and invasive forest ant management. On Rota, an application for 2021 and 2022 LSR funding is currently under review by USFS to continue funding the annual revegetation project.
 - Landscape Objectives for successful projects address: reducing the risk of uncharacteristic wildfires; improving fish and wildlife habitats, including for threatened and endangered species; maintaining and improving water quality and watershed function; mitigating invasive species, insect infestation, and disease; o improving important forest ecosystems; measuring ecological and economic benefits including air quality and soil quality and productivity. Pacific island agency projects that are successful and are less than \$200,000 per project will be funded via set-aside funding of up to \$300,000 and can indicate a multi-year implementation timeframe, up to three (3) years. Funding, however, will be delivered in the fiscal year of the application.
 - USFS funding stipulates out planting **only** trees rather than the previously used soil-securing grass species for the annual revegetation project.
 - <https://www.fs.fed.us/managing-land/private-land/landscape-scale-restoration>

Environmental Protection Agency

Primary contacts: CNMI Division of Environmental Quality, EPA Region 9 CNMI Program Manager, EPA Pacific Islands Contact Office

- *Clean Water Act (CWA) Section 319 Grant Program* – Territory funding that supports a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects and monitoring to assess the success of specific nonpoint source implementation projects. Projects fall under two main categories, addressing nonpoint source pollution or watershed-based planning that stipulates the need for integrating total-maximum daily loads into plan implementation. DEQ is the main recipient of previous §319 funds and would be the primary agency responsible for seeking future funds with regards to Talakhaya watershed management and Sabana source water protection.
 - Funding is awarded by EPA to states in accordance with a state-by-state allocation formula that EPA has developed in consultation with the states. Proposals are developed in consultation with EPA representatives at the beginning of the year with project approval dependent on feasibility and legality of activities. Project funding can be incorporated into current monitoring efforts and provide technical assistance in determining TMDLs. EPA encourages NPS monitoring programs to coordinate with current efforts and relevant agencies with technical capacity.
 - <https://www.epa.gov/nps/319-grant-program-states-and-territories>

- *Healthy Watershed Consortium Grant (HWCG)* – The program supports working forest and ranchland protection, innovative finance in collaboration with water utilities, and capacity for local and regional watershed groups. Projects will be either healthy watershed program development projects or local demonstration/training projects. Funding for each sub-award may range from \$50,000 to \$150,000 per project. No HWCG funds have been previously awarded to projects in the CNMI and it is necessary for agencies (DEQ and DCRM) work closely with the Region 9 EPA representative in order to pursue any future funds.
 - Examples of projects include development of state, interstate, or tribal healthy watersheds strategies or plans that employ a systems-based, integrated approach to protection; environmental flows assessments; and public outreach and education on the importance of protecting healthy watersheds. For local demonstration/training projects, examples include protection of forested drinking water sources in headwaters, restoration of hydrologic connectivity, development of local conservation zoning and easement program plans.
 - <https://www.epa.gov/hwp/healthy-watersheds-consortium-grants-hwcg>
- *Environmental Finance Centers (EFC)* – Deliver targeted technical assistance to, and partner with states, tribes, local governments, and the private sector in providing innovative solutions to help manage the costs of environmental financing and program management. CSUS offers project support in a number of topics including stormwater data assessments, small community capacity assistance, stormwater management funding, water resources modeling, resiliency planning, and training materials of all kinds. While there are no specific details on funding sources, connecting with the EFC would provide added benefits and support for continued watershed management activities.
 - Region 9 focuses on supporting and improving the capabilities of the region by providing resource tools and on-site training and technical assistance related to financing and planning of environmental and public health programs in areas such as drinking water, wastewater, stormwater, groundwater, and solid waste management.
 - <http://www.efc.csus.edu/>
- *Water Infrastructure Finance and Innovation Act (WIFIA) Program* – Accelerates investment in the national water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. WIFIA is most relevant to CUC and DPW for infrastructure related activities, yet these funds have never been investigated on Rota.
 - Plans that can be funded by WIFIA include drought prevention, reduction, or mitigation projects; development phase activities, including planning, preliminary engineering, design, environmental review, revenue forecasting, and other pre-construction activities; and construction, reconstruction, rehabilitation, and replacement activities. \$5 million is the minimum project size for small communities (population of 25,000 or less), however funds exist as loans and must be paid back to the federal government.
 - <https://www.epa.gov/wifia>

USDA Natural Resources Conservation Service

Primary contacts: Saipan District Conservationist, NRCS-USDA Pacific Islands Area State Office

- *Agricultural Conservation Easement Program (ACEP)* – Helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements. While there are both viable wetlands and agricultural land areas in Talakhaya that would qualify for ACEP, the historical land ownership issues in CNMI has made

landowners hesitant to enter into such contracts. NRCS representatives from Saipan have brought up the program in past presentations, yet few landowners have voiced interest. Direct contact with landowners in Talakhaya who are not actively using their land could help facilitate the expansion of this program.

- Easements fall under either Wetland Reserves or Agricultural Land, with enrollment contracts lasting 30-years, with payments ranging from 50–100% of the value of the easement based on contract stipulations. Application inquiries can be made at the local USDA Service Center in Saipan.
- <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/acep/>
- *Conservation Stewardship Program (CSP)* – Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resource concerns. CSP provides two possible types of payments through five-year contracts: annual payments for installing new conservation activities and maintaining existing practices; and supplemental payments for adopting a resource-conserving crop rotation. CNMI NRCS office is interested in expanding this program throughout the islands.
 - Applicants may include individuals, legal entities, joint operations, or Indian tribes that meet the stewardship threshold for at least two priority resource concerns. Application deadline for the annual project is in May for following year funding. Application inquiries can be made at the local USDA Service Center in Saipan. All CSP contracts will have a minimum annual payment of \$1,500.
 - <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/csp/>
- *Emergency Watershed Protection* – Allows communities to quickly address serious and long-lasting damages to infrastructure and to the land. The Emergency Watershed Protection Program authorities offer NRCS the flexibility to act quickly to help local communities cope with adverse impacts resulting from natural disasters. Natural disasters need to be federally declared, such as Typhoon Yutu, in order to qualify for Emergency Watershed Protection funding. DLNR and DPW previously sought funds from this program for culvert construction and stream clearing, however the grant was unsuccessful.
 - Potential projects include: Remove debris from stream channels, road culverts and bridges; reshape and protect eroded streambanks; correct damaged or destroyed drainage facilities; establish vegetative cover on critically eroding lands; repair levees and structures; repair conservation practices. In case of future disasters, the NRCS office in Saipan should be contacted to determine eligibility for projects.
 - <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/landscape/ewpp/>
- *Environmental Quality Incentives Program (EQIP)* – Provides technical and financial assistance to producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion, and improved or created wildlife habitat. CNMI NRCS representatives have been actively working with farmers and ranchers on Rota to implement EQIP, however, there remains minimal focus on Talakhaya landowners.
 - Farmers, ranchers, and forest landowners who own or rent agricultural land are eligible. EQIP assistance can be used on all types of agricultural operations, including: Conventional and organic; Specialty crops and commodity crops; Forestry and wildlife; Historically underserved

farmers; and Livestock operations. Application inquiries can be made at the local USDA Service Center in Saipan. Payments are determined by the type and size of implemented projects.

- <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/>
- *Healthy Forest Reserve Program (HFRP)* – Helps landowners restore, enhance and protect forestland resources on private lands through easements and financial assistance. HFRP aids the recovery of endangered and threatened species under the Endangered Species Act, improves plant and animal biodiversity and enhances carbon sequestration. Similar to ACEP, this program has not been implemented in CNMI although it would be ideally suited in Talakhaya given the presence of multiple endangered species in the watershed including on privately owned land.
 - The HFRP provides financial assistance in the form of easement payments and costs-share for specific conservation action completed by the landowner including both 10-year restoration agreements and 30-year or permanent easements for specific conservation actions. Application inquiries can be made at the local USDA Service Center in Saipan.
 - <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/forests/>
- *Regional Conservation Partnership Program (RCPP)* – Promotes coordination of NRCS conservation activities with partners that offer value-added contributions to expand the collective ability to address on-farm, watershed, and regional natural resource concerns. Once projects are selected, NRCS works with partners to set aside a certain pool of funding for an awarded project. RCPP projects must be carried out on agricultural or nonindustrial private forest land or associated land on which NRCS determines an eligible activity would help achieve conservation benefits. This program is not currently being implemented in the CNMI.
 - RCPP projects may include a range of on-the-ground conservation activities implemented by farmers, ranchers and forest landowners. These activities include: land management/land improvement/restoration practices; land rental; entity-held easements; United States-held easements; and Public works/watersheds. Contact the NRCS office in Saipan to find out more information on the RCPP.
 - <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/rcpp/>

National Fish and Wildlife Foundation (NFWF)

Primary contacts: NFWF Western Regional Office, specific grant RFP staff members

- *Coral Reef Conservation Fund (CRCF)* – A competitive grant program administered on behalf of the NOAA Coral Reef Conservation Program by the National Fish and Wildlife Foundation (NFWF), implements a long-standing public-private partnership that was created to support coral reef conservation projects both domestically and internationally. Projects are considered under the following categories: 1) assessment and prioritization efforts in order to identify priority reef tracts for conservation action, 2) implementation of priority activities identified in watershed management plans, marine protected area plans or fisheries management plans, 3) fill specific gaps in coral conservation and management, and 4) establish case studies, or models, that help address common coral reef threats in island jurisdictions.
 - Grants will be awarded to reduce land-based sources of pollution, advance coral reef fisheries management, support recovery and resiliency of coral reef systems and improve watershed management planning. This is an annual competition running between January and March of each year. Average grant awards range from \$40,000 – \$150,000. Applications can cover up a 12 – 18-month period.

- Priority will be given to management needs for reef tracks and adjacent watersheds that have been prioritized by the U.S. Coral Reef Task Force and Talakhaya has **not** been identified as a USCRTF priority watershed.
- <https://www.nfwf.org/coralreef/Pages/home.aspx>
- *National Coastal Resilience Fund (NCRF)* – The program will capitalize on extensive threat and vulnerability assessments and regional/local coastal planning efforts that are completed to date and focus investments on advancing prioritized projects through feasibility assessment and site design and supporting implementation and project restoration. Given the scope and flexibility with both project design or restoration project funding, this grant should be high on the list for potential sources for Talakhaya TWMP implementation.
 - While there is no minimum or maximum limit on the size of grants under this focus area, grants are expected to average around \$125,000 for “project site assessment and preliminary design” projects, \$250,000 for “final project design and permitting”, and between \$1,000,000 – \$3,000,000 for restoration and monitoring depending upon the scale and scope of the project
 - <https://www.nfwf.org/coastalresilience/Pages/home.aspx>
- *Emergency Coastal Resilience Fund (ECRF)* – Related to the NCRF program. Established to increase the resilience of coastal communities located within federally declared disaster areas impacted in 2018 including Typhoon Yutu. The fund supports conservation projects that strengthen natural systems at a scale that will protect coastal communities from the future impacts of storms, floods and other natural hazards.
 - The ECRF seeks to fund shovel-ready projects to improve community resilience and recovery both in and around impacted areas. Projects may include, but are not limited to, marsh, beach and dune restoration, living shorelines, stream restoration, including aquatic connectivity projects that reduce flood risk, and innovative stormwater management. Grants are expected to average around \$125,000 – \$250,000, depending upon the scale and scope of the project.
 - <https://www.nfwf.org/coastalresilience/emergency/Pages/home.aspx>

Federal Emergency Management Agency (FEMA)

Primary contacts: FEMA Region IX office (Grant Division)

- *Pre-disaster Mitigation Grant Program (PDM)* – Designed to assist States, U.S. Territories, Federally-recognized tribes, and local communities in implementing a sustained pre-disaster natural hazard mitigation program. The goal is to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding in future disasters. In addition to providing planning assistance, this grant can fund “Resilient Infrastructure” projects at the community level. FEMA has had an increased presence in CNMI since Yutu, which provides more opportunities to leverage these funds.
 - Funding for this annual grant are based on the activity type (planning vs. projects) with no grants exceeding \$575,000. As a small, impoverished community, projects in CNMI are eligible for up to a 90% Federal cost share for their mitigation planning and project sub-applications in accordance with the Stafford Act.
 - <https://www.fema.gov/pre-disaster-mitigation-grant-program>
- *Hazard Mitigation Grant Program (HMGP)* – Hazard mitigation measures are any sustainable action taken to reduce or eliminate long-term risk to people and property from future disasters. The HMGP supports cost-effective post-disaster projects and is the longest running mitigation program among

the three FEMA grant programs. FEMA provides up to 75% of the funds for mitigation projects while the remaining 25% can come from a variety of sources.

- There are a number of qualifying mitigation projects including: hazard mitigation planning, aquifer storage and recovery, floodplain and stream restoration, flood diversion and storage, or green infrastructure methods may support communities in reducing the risks associated with the impacts of flood and drought conditions. Local governments should contact their State Hazard Mitigation Officer to inquire about potential HMGP funding with applications accepted on a rolling basis.
- <https://www.fema.gov/hazard-mitigation-grant-program>
- *Flood Mitigation Assistance Grant Program (FMA)* – Provides funding to states, territories, federally-recognized tribes and local communities for projects and planning that reduces or eliminates long-term risk of flood damage to structures insured under the NFIP. FMA funding is also available for management costs. FEMA requires state, tribal, and local governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance.
 - Funding for this annual grant are based on the activity type (planning vs. projects) with \$100,000 available per applicant for mitigation planning as well as upwards of \$200,000 for community flood mitigation projects.
 - <https://www.fema.gov/flood-mitigation-assistance-grant-program>

Every year, prior to the start of the revegetation season in the summer, BECQ employees (traditionally the Watershed Coordinator) would submit requests from multiple vendors for materials including seeds, plastic seedling bags, and tree-carrying shoulder bags. None of these items can be sourced locally, amounting to more than \$10k in shipping costs and multiple months of delay, despite ordering from the same vendors every year. Multiple funding sources will increase this issue.

Example 2: Funding Challenges (2019)

Other Potential Funding Sources

- *Private funding* – Private land owners could fund strategic actions on their lands (e.g. agricultural entities, resorts). In most cases the recommended actions will benefit the local environment as well as contribute to the health of the larger ecosystem. This seems unlikely for most landowners on Rota, even larger landowners like the Rota Resort. However, in coordination with NRCS programs, landowners may be more likely to contribute their own funds for projects.
- *Tourism Tax/Fee* – It has been discussed in the CNMI government for the potential introduction of a tourism tax, similar to that levied by Palau. A local tax on ‘luxury items and services’ or occupancy’ could fund infrastructure, services, and programs related to improving water quality and coral reef health. Additionally, the initiative would be beneficial to the tourism industry. CNMI House Bill 21-72, HS1, passed unanimously (2019) which would create a \$10 entrance fees for tourists visiting Marpi public land sites (e.g. The Grotto).
- *Rota Conservation Fund* – Surveys and interviews conducted on Rota demonstrated that there is some willingness-to-pay for the conservation of water resources. Results determined that a voluntary fee of approximately \$5/month would be widely accepted by residents, as long as the money was managed by a non-government agency. Assuming only 500 residents pay the fee all twelve months, about \$30,000 would be available for conservation projects. Implementation of

such a fee would take significant political action, yet would provide local ownership over both natural resources and conservation projects.

- *Guidebook of Financial Tools: Paying for Environmental Systems* – For additional ideas and options for leveraging various mechanisms (including taxes, fees, loans, grants, lowering costs, and public-private partnerships) refer to the following 2008 EPA document:

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100179D.PDF?Dockey=P100179D.PDF>