State and Private Forestry Fact Sheet

Marshall Islands 2019

Investment in State's Cooperative Programs

Program	FY 2018 Final
Community Forestry and Open Space	$0
Cooperative Lands - Forest Health Management	$0
Forest Legacy	$0
Forest Stewardship	$0
Landscape Scale Restoration	$0
State Fire Assistance	$0
Urban and Community Forestry	$0
Volunteer Fire Assistance	$0
Total	**$0**

NOTE: This funding is for all entities within the state, not just the State Forester's office.

The "State"-Wide Assessment and Resource Strategy (SWARS) identifies the Marshalls' highest priorities for forest resource management and needs for assistance from the United States Department of Agriculture (USDA) Forest Service (FS). State assessments and resource strategies are integral to the Forest Service's State and Private Forestry (S&PF) Redesign and required as an amendment to the Cooperative Forestry Assistance Act (CFAA), as enacted in the 2008 Farm Bill. Each "State" is required to complete a State Assessment and Resource Strategy within two years after enactment of the 2008 Farm Bill (June 18, 2008) to receive funds under CFAA. The 2008 Farm Bill also made the Republic of the Marshall Islands eligible for CFAA programs that are available to states, territories and commonwealths of the USA.

The Marshalls SWARS thus includes two components to the assessment and planning required by the S&PF Redesign approach to identify priority forest landscape areas and highlight work needed to address national, regional, and state forest management priorities:

State-wide Assessment of Forest Resources--provides an analysis of forest conditions and trends in the state and delineates priority rural and urban forest landscape areas.
State-wide Forest Resource Strategy--provides long-term strategies for investing state, federal, and other resources to manage priority landscapes identified in the assessment, focusing where federal investment can most effectively stimulate or leverage desired action and engage multiple partners.

The Marshalls' SWARS is thus organized around the Marshalls' own priority issues with respect to forests. Issues were defined by the advisory group to the "state" forester of the Marshall Islands Ministry of Natural Resources and Commerce as a way of organizing the goals and strategies most relevant to the island and to the SWARS. "Cross-cutting considerations" were also recognized by the Ministry key issues.

Program Goals

- Conserve Working Forest Landscapes: Identify and conserve high priority forest ecosystems and landscapes and actively and sustainably manage forests.
- Protect Forest from Harm: Identify, manage, and reduce threats to forest and ecosystem health
- Enhance Public Benefits from Trees and Forests: Protect and enhance water quality and quantity, assist communities in planning for and reducing forest health risks, maintain and enhance the economic benefits and values of trees and forest, protect, conserve, and enhance wildlife, connect people to trees and forests, and engage them in environmental stewardship activities, manage and restore trees and forests to mitigate and adapt to global climate change

Key Issues

- Biodiversity: Conservation of biodiversity in the Marshalls concerns terrestrial native species, especially endemic species and including migratory birds; traditional cultivars; and sustainable land management to protect the biodiversity and productivity of the species-rich marine environment. Concern from this issue is rooted in efforts to reconnect with traditional culture; interest of external scientists; and international commitments including the Micronesian Challenge.
- Food Security and sustainable livelihood: Agro-forests are a source of subsistence goods and commercial products. Many Marshallese suffer from malnutrition and diabetes that could partially be addressed with increased agro-forest production. Marshallese family incomes are low; agro-forest production can reduce the need for purchases and bring in cash income.
- Coastal reinforcement: Coastal forests are those on the beach crest above high tide mark. Their root systems reinforce the beach "berm" or crest. To an extent, they can resist coastal erosion, maintain berm height, and therefore minimize the occurrence of "overtopping" (surge of high seawater into depressed interior areas). However, extreme events can always wash away forest, berms and even entire sections of sandy islands.
- Coastal forests have been thinned and removed in many urban and rural areas, so their restoration and maintenance in their natural state is a "no-regrets strategy" and a first line of defense against the effects of sea level rise.
- Urbanization: Urbanization is a result of migration and the adoption of Western patterns of living. A large proportion of the Marshalls' population is now concentrated on a few urban islands, with resulting reductions in forest cover and separation of people from the tangible and cultural benefits of forests.
- The following cross cutting considerations are recognized as threats constraints and limitations that affect more than one of the key issues listed above: Climate change, Freshwater Resources, capacity-building, Invasive Plant species, Pest and Diseases.

Forest Facts and Accomplishments

Selected Facts	Value
Population	67,182
Acres of Forest Land	44,460
Acres of Nonindustrial Private Forest Land	0
Number of NIPF Landowners	0
Acres of Federal Land Under State Fire Protection	0
Acres of Private Land Under State Fire Protection	0
Number of Rural Fire Departments	0
Cities and Towns	33
Forest Based Employment	0
Economic Impact of Forestry (by rank)	0
State Forestry Budget (All Sources)	0

FY 2018 Accomplishments	Value
Landowners Receiving Educational or Technical Assistance	150
Acres Covered by New or Revised Forest Stewardship Plans	0
Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	0
Volunteer Fire Departments Assisted	0
State Fire Communities Assisted	0
Coop Forest Health Acres Protected	10
Forest Legacy Project Acquisitions	0
Communities Provided Urban Forestry Program Assistance	0
Population Living in Communities Provided Urban Forestry Program Assistance	0
Urban Forestry Volunteer Assistance	0

Program Highlights

Forest Stewardship

A pilot study for agroforestry inventory monitoring in the Marshall Islands using small Unmanned Aircraft Systems funded under Forest Stewardship grant was commence in October 2018. The main objective of the of the project is to collect cm-scale imagery and three-dimensional georeferenced spatial data over a 100 hectare study area locate on western Arno Atoll using a sUAS platform and to assess the accuracy of sUAS- derived forest inventory metrics against field data collected from subplot within the study area.

Metrics include individual tree counts and locations, species identification, tree heights, and crown diameters. Particular emphasis on coconut and pandanus trees.

In addition to the above mentioned project, the project on Breadfruit and Pandanus was successful completed, in partnership with the College of the Marshall Islands (CMI), Land Grant. Pandanus and Breadfruit trees were distributed and planted on Majuro and Kwajalein. Land owners were respective with the project and asking more trees aside from Breadfruit and Pandanus. Trainings were conducted to the local farmers, schools, and the community- teaching Majuro and Kwajalein community about the importance of tree planting.

Two Nursery have been erected to do a new project of growing green manure for soil improvement program. Food trees were planted in the nursery for future distribution. Also, the project was able to run 12 gardens sites in different schools on Majuro, including the Marshalls College. Schools garden in the outer islands of Marshalls are still on-going activities.

Overall, with the fully support from USDA- FS Forest Stewardship Program to the RMI Region, the land owners, schools, and individual households were benefit from the project. The project is also ensure that building capacity its among the short-term and long-term continues activities. Even the project is successful end, the project is working with other RMI related projects to make the project sustainable.

Landscape Scale Restoration

In 2018 the first 10 year re-measurement was conducted of the Forest Inventory and Analysis (FIA) plots established in the RMI in 2008. During this time an additional 20 new plots were installed as part of the Micronesia Challenge (MC) initiative. The FIA project was undertaken as a partnership between U.S Forest Service (USFS), Pacific Northwest Research Station, Resource Monitoring and Assessment Program (PNW-RMA), the RMI Ministry of Natural Resources and Commerce (NRC), the Research Corporation of the University of GUAM (RCUOG), the Micronesia Challenge (MC) and the Micronesia Conservation Trust (MCT). With all these project partners, the FIA team were able to measured 85 research plots across 13 atolls in the RMI. In addition to this, there will be a FIA/ MC data Analysis Workshop, which will be commencing around March 2019- to work through the FIA database, learning to queries, understanding the computer program and come up with important questions the RMI wants to get from the FIA data. The RMI FIA data will be available in a public database this year 2019 and a country summary report will be published sometimes thereafter.

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