



State and Private Forestry Fact Sheet Federated States of Micronesia 2024



Investment in State's Cooperative Programs

Program	FY 2023 Estimate
Community Forestry and Open Space	\$0
Cooperative Lands - Forest Health Management	\$40,000
Forest Legacy	\$0
Forest Stewardship	\$50,000
Landscape Scale Restoration	\$0
State Fire Assistance	\$0
Urban and Community Forestry	\$267,000
Volunteer Fire Assistance	\$0
Total	\$357,000

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

The Federated States of Micronesia (FSM) comprise a vast region of over 600 islands spanning 1,678 miles. It is in the western Pacific in the Caroline Islands, north of the equator, east of Palau and west of the Marshall Islands. The FSM is an independent nation that includes four States: Yap, Chuuk, Pohnpei, and Kosrae. The islands are recognized as part of the globally important Polynesia-Micronesia biodiversity hotspot. They support unique and diverse ecosystems with a variety of environmental resources, including many endemic trees and species rich with historic biocultural uses.

The FSM maintains strong ties with the United States, with which it has a Compact of Free Association. Of the country's population, 50% live on Chuuk, 33% on Pohnpei, 10% in Yap and 7% in Kosrae. The States have a significant level of autonomy with ownership of land and aquatic areas varying between States. In Kosrae and Pohnpei, land is both privately and state owned, with aquatic areas managed by the States and public trusts. In Chuuk, most land and aquatic areas are privately owned and acquired through inheritance, gift, or more recently, by purchase. In Yap, almost all land and aquatic areas are owned or managed by individual estates and usage is subject to traditional control.

Responsibility for environmental issues is shared between the State and National Governments. Each State strives to control development and manage natural resources through the creation of land use plans, coastal zone plans, legislation, and regulations. The National Government provides guidance and technical assistance to the States when needed and requested. This report highlights the goals, objectives, and activities of each USDA Forest Service program implemented with partners and agencies of each island state and National Government. At this time, all the federal program grants are awarded directly to the States' implementing agencies for program activities.

Program Goals

- ?Agriculture Sector Strategic Goal 1: Maintain and facilitate a well-resourced and properly focused agriculture sector operating within a stable and consistent policy framework.
- ?Agriculture Sector Strategic Goal 2: Increase production of traditional farming systems for household nutritional needs, for traditional needs, and for cash incomes.
- ?Agriculture Sector Strategic Goal 3: Increase the volume of commercially viable surpluses to be marketed by the private sector into local and regional markets.
- ?Agriculture Sector Strategic Goal 4: Promote environmentally sound and sustainable agricultural production.
- ?Environment Sector Strategic Goal 1: Increase environmental considerations, including climate change, within national policy and planning, as well as in all economic development activities.
- ?Environment Sector Strategic Goal 2: Reduce fossil fuel energy use by converting to renewable energy sources to minimize the emission of greenhouse gases.

- ?Environment Sector Strategic Goal 3: Enhance the sustainable use of FSM's biological resources and ensure that the benefits derived are shared fairly amongst all stakeholders.
- ?Environment Sector Strategic Goal 4: Manage and protect the Nation's natural environment through effective conservation of the marine, freshwater, and terrestrial ecosystems.
- ?Environment Sector Strategic Goal 5: Improve environmental awareness and education and increase public involvement in conserving the natural resources of FSM.
- ?Environment Sector Strategic Goal 6: Establish effective biosecurity (border control, quarantine, and eradication) programs to effectively protect biodiversity from impacts of non-native, invasive species.
- ?Environment Sector Strategic Goal 7: Enhance the technical capacity of the environmental sector to support environmental programs in-house.

Key Issues

- ?Coastal Stabilization: Threats to coastal stabilization include development along coastlines, harvesting of mangroves for fuel, dredging for sand and coral, and preference for artificial seawalls. Residents of high islands are increasingly moving inward because of coastal erosion and shifting weather patterns due to climate change. These movements are contributing to habitat fragmentation and degradation due to the increasing demand for housing and infrastructure.
- ?Food security & resilience: Climate change, developmental pressure, and invasive pests are impacting the resiliency of traditional agroforestry systems that provide food to communities across the islands. In particular, the number and volume of coconut trees has significantly decreased in every state due to the coconut rhinoceros beetle (CRB). Outbreaks of the whitefly have impacted agriculture production and the black sock fungal disease (*Phellinus noxius*) has been affecting native forest trees.
- ?Watersheds (high islands): Watersheds provide important ecosystem services that include access to abundant clean freshwater. Negative impacts of degraded watersheds are accelerated erosion, poor water quality, landslides, siltation of rivers and nearshore marine, and increased flooding downstream.
- ?Production and sustainable harvesting of forests: Population growth and economic pressure have led to over cutting of trees for firewood. Beyond climate change and storm impacts, the most major factors contributing to a loss of mangroves in all four States includes human impacts from new developments, as well as harvesting and removal (through girdling or ringbarking) for wood products and open channels for boat transportation.
- ?Invasive Species: FSM hosts over 500 invasive plant species, 62 invasive animals, one invasive fungus, and various bacteria and diseases which are contributing to the decline of native species, degrading ecosystems, and declining food security.
- ?Climate Change: Shifting weather patterns are affecting the health of the environment by decreasing precipitation, increasing drought, rising sea-levels leading to coastal erosion and salt contamination, and an increase in weather-related events. These impacts threaten FSM's population, the majority of which depends on the country's ecosystems for their livelihoods, both for subsistence and as sources of income.
- ?Wildfire: Mainland Yap experiences chronic wildfires on years with dry periods and acute wildfires that burn valuable forest lands. On two occasions in the last 40 years, at least 22% of Yap has been burned during drought periods.

Forest Facts and Accomplishments

Selected Facts	Value	FY 2023 Accomplishments	Value
Population	106,941	Landowners Receiving Educational or Technical Assistance	362
Acres of Forest Land	148,924	Acres Covered by New or Revised Forest Stewardship Plans	0
Acres of Nonindustrial Private Forest Land	69,500	Acres in Important Forest Resource Areas Covered by New or Revised Stewardship Plans	0
Number of NIPF Landowners	1,000	Volunteer Fire Departments Assisted	0
Acres of Federal Land Under State Fire Protection	0	State Fire Communities Assisted	17
Acres of Private Land Under State Fire Protection	29,312	Coop Forest Health Acres Protected	0
Number of Rural Fire Departments	4	Forest Legacy Project Acquisitions	0
Cities and Towns	39	Communities Provided Urban Forestry Program Assistance	6
Forest Based Employment	0	Population Living in Communities Provided Urban Forestry Program Assistance	16,572
Economic Impact of Forestry (by rank)	0	Urban Forestry Volunteer Assistance	0
State Forestry Budget (All Sources)	0		

Program Highlights

Urban and Community Forestry

The Urban and Community Forestry (U&CF) Program has been a great opportunity for the Division of Natural Resource Management (NRM), Department of Resources and Development (R&D) for Pohnpei State Government as well as the communities who have benefitted from the program's financial and technical assistance. This year, the program funded the nursery at Pohnpei Forestry where NRM employees propagate and distribute seedlings to organizations, schools, communities, and individual landowners who wish to plant more trees. The grant cycle 2022-2023 has three main highlights: the Sokehs mangrove rehabilitation project, signage for the mangrove protected areas, and the Nan Madol vegetation control team. The Sokehs mangrove rehabilitation project followed the Ridge to Reef approach and was implemented in March 2022. With the help of the NRM office, the communities adjacent to the project site received technical assistance in site assessment, seed collection, and replanting. NRM conducted quarterly monitoring, and unfortunately the latest results in mid-year 2023 showed that the rehabilitation was unsuccessful due to the high tide. The plan is to replant the site again and anchor the propagules to prevent them from getting washed away. For the mangrove signage, three communities (Pwudoi, Enipein, Senpehn) had three billboard signs installed December 2023 at each designate area. 24 smaller boards that will be installed around May 2024 at the perimeter of each protected site for general education. At Nan Madol, the vegetation control team consist of 8 individuals who keep the sacred place safe and maintained from overgrown trees and mangroves. Training for the 8 individuals was done by Master Arborist Kevin Eckert in January 2023 on tree work and safety precautions with proper equipment for safety measurements. Nan Madol is an archaeological site and a popular place for tourists to sight-see and swim, but, most importantly, it is a significant place for Pohnpeians.

Yap State Multi-Program Success

Planting timber lots and managing timber had always been a challenging issue in Yap. The island is approximately 98 km² where tropical timber plants grow naturally, and the number and the rate they grow along with other plants and animals create an environment that provides essential ecosystem services and adequate provisions. This equilibrium has long been challenged when wildfires start occurring, it contributes to the expansion of the savanna and spreading of invasive, in-turn, they spread wildfire reducing the area where these plants can grow and thrive. Getting private landowners to plant timber plants has always been a challenge because many tropical timber plants are known to grow naturally, and many people assume that there are a lot of them in the forest. Recently in early 2000, a mobile sawmill was introduced, and slowly milling of naturalized plants was started again since WWII. The readily available mobile sawmill and continued increasing price of imported lumber forced many private-land owners to mill naturally growing timber plants including those deep in the forests and/or gullies again. The

increasing demand for timber plants and low interest in planting timber plants were major issues. However, forestry outreach and consultations with private land owners and communities triggered interest in growing timber plants including planting timber plants on the savanna. The shift in the public interest is evident when looking at the highest volume of plants propagated at the state nursery for various forestry works, including clients who just want a timber plant in their yard. With the assistance from the USFS (Region 5), the trend is slowly been reversed, and the private landowners are starting to plant and asking "How much a three feet diameter-at-breast-height plant is worth?"; showing that there is a change in the private landowners' perception and more people are planting timber plant.

Contact Information



FSM Department of Resources and Development

Marlyter Silbanuz
FSM Agriculture Program Manager
 P.O. Box PS-12
 Palikir, Pohnpei, FM 96941
 011-691-320-5133
msilbanuz@fsmrd.fm

**US Forest Service
 Pacific Southwest Region**

Kathleen Stearns Friday
Forest Legacy/Stewardship Program Manager
 USDA Forest Service
 1323 Club Drive
 Vallejo, CA 94592
 808-785-5197
kathleen.friday@usda.gov
