The Federated States of Micronesia

Yap State Biodiversity Strategy and Action Plan

2026–2030

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Yap Biodiversity Strategy and Action Plan

Foreword

The biodiversity of Yap is central to who we are as a people. It shapes our culture, supports our livelihoods, and sustains the systems that allow our communities to thrive. From our agroforests and mangroves to our reefs and lagoons, the relationship between people and the natural environment in Yap has long been guided by knowledge, stewardship, and respect. Maintaining this relationship is essential to ensuring the well-being and resilience of our State.

This updated Yap State Biodiversity Strategy and Action Plan (BSAP) provides a clear and structured framework to guide our efforts over the coming years. It builds on the foundations of previous plans, taking into account both the progress made and the challenges that remain. While strong systems of traditional resource management continue to influence how biodiversity is used and protected in Yap, we must also respond to various pressures, including climate change, changing land use, and increasing demands on natural resources. This plan reflects the need to strengthen and adapt our approach in response to these realities.

The Yap BSAP is aligned with national, regional, and international commitments, ensuring that our actions contribute to the broader goals of the Federated States of Micronesia while remaining grounded in the specific context of Yap. It recognizes that healthy ecosystems are fundamental to food security, water availability, and climate resilience, and that effective conservation must be closely linked with sustainable development and community wellbeing.

This revised plan is the result of a highly collaborative process that brings together State and municipal government representatives, traditional leaders, community members, and non-governmental organizations. Their contributions have ensured that the BSAP reflects both technical knowledge and the lived experience of those who depend most directly on Yap's natural resources. I extend my sincere appreciation to all who have contributed their time, insight, and commitment to this process.

The development of this plan has also been supported through ongoing collaboration with our partners within the FSM Department of Resources & Development. Continued coordination between State and National institutions will be critical to effective implementation over the coming years.

The Yap BSAP 2026–2030 represents an important step forward in strengthening how we manage and protect our biodiversity. Its success will depend on sustained commitment, shared responsibility, and continued cooperation across all levels of government and society. Through this collective effort, we can ensure that Yap's natural heritage is conserved and continues to support our people now and into the future.

I hereby endorse the Yap State Biodiversity Strategy and Action Plan 2026–2030.

Francis Itimai
Governor, State of Yap

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The development of this plan was made possible through the generous financial supportprovided through the GEF Global Biodiversity Framework Early Action Support.

The Yap BSAP revision process was coordinated and facilitated by Island Insights, with many people from a great number of organizations, both governmental and non-governmental, and communities contributing to the consultation and validation workshops, and providing essential additional information. It is these people that have made the development of this Yap BSAP possible:

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The Yap BSAP document was prepared by the Islands Insights team comprising Dr Iain Hall, Anne McDonald, Dr Erika Salazar, Tamara Greenstone Alefaio, Vanessa Fread, Julia Bolton, and Oriana Fernandez.

Part 1: Introduction[1]

Yap is the western-most state within the Federated States of Micronesia and is unique in the FSM in having metamorphic rock derived from tectonic activity and associated soils similar to continental areas, as well as old volcanic soils. The islands and atolls of eastern Yap are younger and made of limestone. Home to 10,739 people, the state-wide population density of Yap is 216 per sq. mile (FSM Division of Statistics, 2023).

Yap is culturally unique within the FSM for its stone money, stone pathways and traditional village meeting houses. Much of the land and even near shore areas have been modified through landscape architecture for food production purposes. The island once supported a very dense population that greatly influenced the landscape and cultural patterns. The traditional agricultural system of Yap is the most diverse in the FSM and incorporates ditching and landscape architecture to manage water flow through both shifting and site-stable systems. The species and variety-rich tree garden/taro patch agroforests of Yap represent a well-developed system of permaculture.

The average annual wage (real, i.e. adjusted for inflation) in Yap for the fiscal year 2022 was $4,804, below the national average of $5,594 (FSM Division of Statistics, 2023). Much of the population remains dependent on the land and sea for food, with approximately 95% of households engaging in at least one subsistence activity (agriculture and forestry, handicraft and home production, livestock and aquaculture, or fishing, hunting and gathering), slightly higher than the national average of 77% (FSM Office of Statistics, Budget, Overseas Development Assistance and Compact Management, 2014).

The FSM is a constitutional democracy, operating at national, state, municipal and traditional levels, with most power delegated to the four states by the national constitution. The State Government of Yap contains the usual executive, legislative and judicial branches, and is the only state to constitutionally provide for a traditional leadership branch to State Government with its Councils of Chiefs. The state government holds jurisdiction over coastal waters up to 12 nautical miles from land. Beyond this, the National government has jurisdiction over the remainder of the EEZ, i.e. from 12 nautical miles to 200 nautical miles from land.

Systems of land ownership and tenure differ across the four states of the FSM. Land ownership in the FSM is limited to citizens of the FSM only, with land lease terms varying by state (US Department of State, 2017). In Yap, the majority of land and near-shore marine areas are privately owned, and utilization of these areas is under traditional control. Resources have historically been subject to a complex system of allocation that saved Yap from the 'tragedy of the commons', where resources available to all are used up or destroyed. Today the traditional system is fading or being modified in response to the availability of new technologies and opportunities for commercial exploitation of natural resources and income from foreign investment seeking long-term leases. The traditional system nonetheless sets a cultural precedent for the management of people's use of resources.

The FSM experiences a tropical climate, with consistently warm weather driven by the north-east trade winds. The average annual temperature in Yap between 1991 and 2020 was 81.5°F (NOAA NCEI, 2025). There is little variation throughout the year, with the high islands being generally hot and humid. Rainfall across the FSM is generally plentiful, with Yap receiving an annual average of approximately 123 inches based upon 1991–2020 records. (NOAA NCEI, 2025).

The FSM is strongly affected by the El Niño Southern Oscillation (ENSO), which has a particularly forceful influence on minimum air temperatures during the wet season (Australian Bureau of Meteorology and CSIRO, 2011). El Niño is also associated with reduced rainfall during the dry season. La Niña years are associated with extremely high tides in the FSM, which can lead to seawater inundation of crops and freshwater supplies (Fletcher & Richmond, 2010). The FSM is also vulnerable to extreme weather-related events, particularly typhoons, storm waves, flooding, landslides and drought.

Air and sea surface temperatures in the FSM are increasing, with waters around the FSM warming by approximately 0.11°C per decade in the eastern regions of the country and by 0.8°C per decade in the western regions since 1970 (Australian Bureau of Meteorology and CSIRO, 2011). Under a high emissions scenario, temperature increases greater than 2.5°C by 2090 are projected with high confidence for the FSM, with a similar temperature increase projected for the ocean surface (Australian Bureau of Meteorology and CSIRO, 2011).

Rainfall data show no significant changes over time in Yap. That being said, historical projections have suggested that annual rainfall may increase, somewhere in the range of >5% and >15% by 2090 depending upon the model used and the specific location within the FSM (Australian Bureau of Meteorology and CSIRO, 2011). Increasingly intense rainfall events, particularly when following drought conditions, are increasing sedimentation run-off and coastal erosion, which in turn impacts essential marine ecosystems, such as seagrass meadows, and in turn marine productivity (Houk et al, 2013).

[1] Where recent, authoritative data were available through established national, regional, or global sources, these have been incorporated. Data sets lacking recent updates retain values from the previous Yap BSAP (2018) to avoid introducing unsupported estimates.

Of particular importance to the FSM, owing to reliance on near-shore coastal fisheries and the low-lying nature of many of its islands, are ocean acidification and sea level rise. In the case of ocean acidification, this is projected to rise throughout the 21st century resulting in reductions in the available form of calcium carbonate necessary for coral growth (Australian Bureau of Meteorology and CSIRO, 2011). As regards sea level, models suggest a rise of approximately 2–6 inches by 2030, and of approximately 8–24 inches by 2090 under a high emissions scenario (Australian Bureau of Meteorology and CSIRO, 2011). A 2010 study using the Coastal Module of the integrated Climate Framework for Uncertainty, Negotiation and Distribution assessment model suggested that a 1-meter sea-level rise by 2100 would incur damage costs in excess of 5% of GDP in the FSM (Anthoff et al, 2010).

A number of sectors within the FSM economy are recognized as being vulnerable to climate change, including fisheries, agriculture and tourism (FSM Department of Finance and Administration, 2018). These three sectors are all dependent upon a healthy environment and thriving biodiversity, which are themselves also considered highly vulnerable to climate change (FSM Department of Finance and Administration, 2018).

Yap State Vital Statistics

Geography	
Location	7°–10° N, 137°–148° E
Number of islands	138 (four closely associated islands form Yap Proper, plus 134 low coralline islands and atolls)
Land area	49.7 sq. miles
Forest (including agroforest)	26.8 sq. miles (17,176 acres)
Non-forest vegetation	7.9 sq. miles (5,078 acres)
Cropland	0.02 sq. miles (14 acres)
Urban (including urban cultivated)	1.6 sq. miles (1,020 acres)
Other (including water)	0.8 sq. miles (516 acres)
Ocean area	> 100,000 sq. miles
Climate	
Annual average temperature (1991–2020)	81.5°F
Annual average rainfall (1991–2020)	123 inches
Demographics	
Population (2021 estimate)	10,739
% of total FSM population	14%
Population density	216 per sq. mile
Economics	
Average annual wage (real)	$4,804
% households involved in subsistence activity	95%
% contribution to national total household income	14.8%

Part 2: Biodiversity in Yap[2]

Biodiversity across the FSM is incredibly rich, with FSM recognized as part of the globally important Polynesia-Micronesia biodiversity hotspot (CEPF, 2007). There are two terrestrial and one marine ecoregion identified in the FSM. These represent exceptional examples of specific habitats that contain the most distinctive biodiversity for that habitat type. The terrestrial ecoregions comprise the Yap Tropical Dry Forests ecoregion and the Carolines Tropical Moist Forests ecoregion, which includes the Remetau Islands of Yap as well as the whole of Chuuk, Pohnpei and Kosrae states (OneEarth, 2025). Much of the Yap Islands State ecoregion is open savanna with secondary tropical dry forest. It contains two endemic bird species (with Yap cicadabird potentially being elevated from a subspecies to a separate endemic species), while also being home to a number of species with restricted ranges (OneEarth, 2025). In terms of marine biodiversity, the FSM is part of the East Caroline Islands Marine Ecoregion and contains some of the largest coral atoll complexes in the world (Spalding, 2007).

The waters of the FSM are home to 1,221 species of fish. Of these, 1,070 are associated with the extensive reef system (Froese & Pauly, 2018). In fact, the wider Micronesia region is estimated to contain 4% of the world's coral reefs, with reefs a defining feature of the FSM. The basis of the reefs, the corals themselves, are incredibly diverse in the waters of the FSM, with both soft and hard/stony corals extensively represented. The International Union for Conservation of Nature (IUCN) Red List of Threatened Species lists 436 species of coral in the FSM's waters, 153 of which are considered to be endangered and 26 vulnerable (IUCN, 2025).

The FSM also supports approximately 36.3 sq. miles of mangrove forest across the islands, approximately 4.1 sq. miles of which are in Yap (Donnegan et al, 2011). Approximately 13% of Yap's vegetation consists of mangroves (Falanruw et al. 1987), and research shows that they sequester 33% of the carbon removed from the atmosphere by Yap's vegetation (Donato et al. 2012, 2011).

Indeed, much of the FSM is covered with forests, and while Yap is no exception with an estimated 26.8 sq. miles/57% of the islands forested, it also contains more non-forest vegetation than any of the other states, with approximately 6.4 sq. miles of savanna or other scrub or grassland (Donnegan et al, 2011). Upland forest covers 12.1 sq. miles of Yap, with swamp forest covering 62 acres and agroforest covering 10.5 sq. miles (Donnegan et al, 2011). Cropland accounts for only approximately 14 acres of land in Yap, and areas classified as 'urban cultivated' account for 299 acres (Donnegan et al, 2011). It should be note that the limited area mapped as cropland is not indicative of limited food production as most traditional food production occurs in agroforests, "urban cultivated" areas, taro patches and in shifting gardens that can't be discerned on aerial or satellite imagery.

It is recognized that a number of threats to the biodiversity of Yap, and the entire FSM, exist. These threats, which have been identified at a national level and are relevant to Yap State, are broadly categorized as climate change, environmental conversion and degradation from unsustainable land use, over-exploitation of resources, pollution from solid waste and land-based sources, the proliferation of invasive alien species, and infrastructure development that often proceeds without adequate environmental impact assessments (Kingsford et al., 2009).

In light of these threats, since the introduction of the first Yap BSAP in 2004, significant developments toward comprehensive biodiversity conservation in Yap and throughout the FSM have been undertaken, with a network of strong partnerships having been built between governments at all levels, academic and research institutions, international, regional, national and state-based non-governmental organizations and community-based organizations. The multitude of initiatives that has been undertaken demonstrates the recognition of the importance of biodiversity conservation.

Perhaps the most significant conservation initiative to come about since the initial Yap BSAP was drafted is the establishment of the Micronesia Challenge. In 2006 the FSM, along with the Republic of the Marshall Islands, the Republic of Palau, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), developed and committed to the Micronesia Challenge, which had the dual aims of conserving 30% of near-shore resources and 20% of forest resources across Micronesia by 2020. This initiative has now evolved into the more ambitious Micronesia Challenge 2030, with an expanded goal for the "*effective management of 50% of marine resources and 30% of terrestrial resources by 2030*." This goal encapsulates the initial conservation goals and sees the incorporation of additional goals related to sustainable livelihoods, fisheries management, and climate resilience (Micronesia Challenge, 2024).

Recently, the nation has operationalized the Protected Areas Network (NPANPF), which is designed to facilitate the national government's delivery of assistance to its states in the protection of significant areas of biodiversity, key habitats, and other valuable resources. The NPANPF is designed to augment efforts at the state, municipal, and community levels throughout the country to achieve conservation and climate change adaptation goals, which broadly reflect the country's participation in the Micronesia Challenge, the United Nations Convention on Biological Diversity, and the United Nations Framework Convention on Climate Change.

[2] Where recent, authoritative data were available through established national, regional, or global sources, these have been incorporated. Data sets lacking recent updates retain values from the previous Yap BSAP (2018) to avoid introducing unsupported estimates.

In working to achieve the Micronesia Challenge marine and terrestrial targets, government and non-government partners across the FSM have championed the creation of new terrestrial and marine protected areas to support resilient ecosystems, better able to withstand the impacts of climate change and marine protected areas have proven to be one of the best ways to protect diverse and healthy marine ecosystems and coral reef communities. As of January 2022, these efforts have ensured that 6,684 km^2 (30%) of the marine environment and 96 km^2 (15%) of the terrestrial environment are under effective management (Micronesia Challenge, 2024). Yap has placed 11% of its marine resources and 0.4% of its terrestrial resources under effective management (Micronesia Challenge, 2024).

The FSM National and State governments and their numerous partners are also working towards sustainable financing for protected areas. This includes the FSM's Micronesia Challenge Endowment Fund, administered by the MCT and valued at $6.42M as of January 2024 (Micronesia Challenge, 2024).

Part 3: Background to the Yap Biodiversity Strategy and Action Plan

Development Process for the Revised Yap BSAP

The Yap BSAP revision process consisted of extensive desk research, in-person consultations, and a subsequent validation process, as described below.

Initial, extensive research was undertaken to provide latest-possible data and information regarding the status of biodiversity within the FSM as a whole, and Yap State, and the pressures it is under.

The Objectives and Actions as defined in the prior Yap BSAP were taken out to consultation, and a multi-stakeholder group was engaged in a three-day workshop to review the BSAP for ongoing relevance, identifying what progress had been made, where additional efforts were needed under current Objectives and Actions, where new actions were required, and what costs might be associated with implementation of individual Actions. These groups comprised officials from State and Municipal governments, regional, state and community NGO representatives, technical experts, scientists, researchers and educators.

In addition to these consultations, a interviews with women were held to ensure that the different interactions with and observations of biodiversity experienced by women in Yap were understood and incorporated into the revised BSAP.

Following this process, all feedback was collated and combined into a revised document. This document was circulated to a select group from the original consultations, who then convened for a further two-day validation workshop.

This process was part of a wider set of consultations undertaken as part of the revision of the FSM National Biodiversity Strategy and Action Plan (NBSAP). The revision of the NBSAP took account of each of the states' revised BSAPs, as well as being consulted upon separately. By following this process, it is intended that the NBSAP and individual state BSAPs are mutually supportive and reflect each other.

Part 4: The Yap State Biodiversity Strategy and Action Plan

Vision

We are mindful that our environment and our natural resources are all important, for they are the foundation of our economies, our cultures, and our identities as Pacific Islanders." (Declaration of the First Micronesian Traditional Leadership Conference, 1999).

We, the people of Yap State are mindful that our culture, economy and very lives are dependent on our biodiversity. Our islands are small and dear, and there are limits to how much they can be exploited. There are, however, no limitations to making Yap better and better. We aspire to understand and protect our biodiversity and to continue to improve conditions for life on Yap.

We seek to maintain a partnership and balance with Yap's biodiversity. We do not want to become obligatorily dependant on the world's economic system for our lives, but desire to retain the option to live according to our own values and to be able to subsist on our own natural resources should we chose to do so. In order to maintain this basic freedom for Yapese people, it is necessary to maintain the integrity of Yap's living ecosystem.

As we become better stewards of our biodiversity, we will develop ways to sustainably use our natural resources to enable us to participate in the world's economic system. As we achieve economic development that is ecologically sustainable, we will become one of the most modern nations of the world of the future when the way a country cares for its biodiversity is the highest art.

We wish to retain the wisdom and enhance the skills of our island culture heritage, to live with respect for one another and with a reverence for life on our islands amid clean flowing waters, green healthy lands and a productive marine system that contributes to the health of the world environment.

Goal

The overall goal of the Yap BSAP is to "Take Care of Yap" in keeping with the mandate of Traditional Leadership at the Yap State Summit (1996).

This goal will be achieved through:

- Integration of biodiversity conservation and sustainable development
- Securing traditional empirical knowledge and technologies and enhancing it with modern science into a neo-traditional system of natural resource management suitable for today's context
- Development of local capacity to manage natural resources on a sustainable basis
- Community-based approaches
- Taking a precautionary approach (maintaining the "wisdom in the basket")

Information presented in this BSAP

The Yap Biodiversity Strategy and Action Plan is structured around seven Objectives:

- Objective 1. Institutional Arrangements ("Getting our act together")
- Objective 2. Secure and Enhance Traditional Knowledge (Build on what we already know)
- Objective 3. Inventory and Monitoring ("Counting our blessings" and identifying problems)
- Objective 4. Biosecurity – Addressing Invasive Species and Other Threats to Biodiversity
- Objective 5. Managing Pollution
- Objective 6. Environmental Awareness, Research and Capacity Building
- Objective 7. Stewardship Programs and Environmentally Sustainable Industries

Indicators for each Action under these Objectives are identified to support implementation.

Estimated annual costs are provided to achieve each Action. These are based upon the selection of annual funding brackets for each Action through the consultation process. These funding brackets were:

- <$5,000
- $5,000–$25,000
- $25,000–$50,000
- $50,000–$100,000
- >$100,000

Costs are defined as 'minimum' as it is understood that many Actions may require funding that far exceeds the $100,000 value included in the upper cost bracket.

Each cost is identified as requiring 'new' funds, use 'existing' funds, or a 'mix' of new and existing funds.

While specific constraints are noted under each Action, it is acknowledged that limited technical capacity and insufficient or short-term funding remain overarching constraints affecting implementation across all Objectives within the Yap BSAP.

Implementation and Monitoring

Monitoring the implementation of the Yap BSAP is an essential part of ensuring ongoing activity and progress towards its Goals and Objectives. This must be balanced with resource capacity to undertake full-scale monitoring across the entirety of the suite of State BSAPs and NBSAP.

It is the intention that the Yap BSAP will undergo a mid-term review. This will be supported by annual check-ins, which will utilize a checklist approach to enable reporting during the mid-term review. These will be coordinated by the Director of Yap State Department of Resources and Development.

During the mid-term review, updates on the Implementation Actions will be provided by the Chiefs of Divisions within the Department and relevant NGOs, and the status of each will be recorded in line with CBD reporting standards (i.e. Achieved / On track to achieve / Progress made but at an insufficient rate / No significant progress / Not applicable / Unknown). Any challenges faced will also be recorded. Additional data for assessing indicators will be provided by the Director of the Department of Resources and Development and the Chiefs of Divisions.

It is anticipated that monitoring data will be stored by National Government in a way that is accessible to the State Government. Responsibility for updating monitoring data will lie primarily with Yap State Department of Resources and Development and Yap Environmental Protection Agency.

A full review and revision of the BSAP will be undertaken after five years, in 2030. This will follow a similar process of consultations and validation that have been utilised in the current revision. This review will provide an opportunity for major progress, changes or developments to be recorded and considered for inclusion in the next revision of the BSAP and will ensure that all Objectives and Actions remain relevant and reflect the challenges and unmet needs of Yap's biodiversity at that time.

Objective 1. Institutional Arrangements

Progress to date

Progress under this Objective has been mixed, with active coordination through the Environmental Stewardship Consortium (ESC) alongside limited progress on several planned actions. Overall efforts have focused on inter-agency networking and information sharing, with uneven implementation across actions.

The ESC has been established and is very active, supported by the Environmental Protection Agency, with relevant agencies and stakeholders meeting quarterly. However, the ESC operates without dedicated funding and relies on members' own resources, with participation drawn from existing agencies. Some capacity-building activities have progressed but remain constrained. Technical assistance for geographic information systems has been provided under a land degradation project. Broader coordination of sustainable development programming has not been prioritized, and activities are largely driven by donor funding requirements rather than a coordinated state program.

Several actions were not progressed, including establishing an online information-sharing platform, developing sustainable development indicators, formally defining roles and responsibilities across organizations, and establishing a Coordinated Project Review Process. While engagement with traditional leaders has taken place through ESC briefings and quarterly meetings, structured expansion of these consultations has not progressed.

Overall, progress under this Objective reflects functioning coordination through the ESC, alongside significant gaps in prioritization and follow-through on several planned actions.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Identify an appropriate champion to reinvigorate the Environmental Stewardship Consortium as a body to bring together all agencies and groups undertaking biodiversity-related programs and activities, or establish a Yap-wide environmental non-governmental organization as an appropriate alternative	• Champion appointed and formally endorsed by relevant authority or stakeholder group by end 2026 • Environmental Stewardship Council or alternative NGO re-established and meeting at least twice per year	$5,000 – $25,000 (new)	• Available people • Engagement
Set up an online platform for information sharing between participants in the Environmental Stewardship Consortium (or alternative body) and with appropriate agencies and organizations	• Operational online platform with regular content updates (e.g., quarterly) during the BSAP lifecycle • Number of agencies or organizations contributing data or updates through the platform per year	> $100,000 (new)	• Technical capacity

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Develop a research database overseen by the Environmental Stewardship Consortium and provide recommendations based on analysed research data	• Database established during the BSAP lifecycle • Recommendations developed based upon research data per year	> $100,000 (new)	• Technical capacity • Maintenance funding
Appoint a contractor to develop indicators of sustainable development	• Contractor appointed and workplan approved during the BSAP lifecycle • Set of state-level sustainable-development indicators completed and adopted during the BSAP lifecycle	> $100,000 (new)	• Funding source • Technical capacity
Train local personnel to coordinate with current geographic information system (GIS) staff and to act as a coordinator for activities under the Convention for Biological Diversity and the Micronesia Challenge	• Number of local personnel trained and certified to carry out coordination tasks per year • Number of state reports or submissions completed through the CBD/Micronesia Challenge frameworks per year	> $100,000 (new)	• Trainee availability
Develop and prioritize a climate resilient and sustainable development program	• Program document finalized and endorsed by relevant government authority during the BSAP lifecycle • Number of activities implemented under the program per year	> $100,000 (new)	• Prioritization • Technical capacity • Equipment
Engage individual to assess policies and protocols of partners and agencies to identify gaps and overlaps and undertake an assessment of project overlaps with accompanying recommendations	• Champion appointed and coordination framework drafted during the BSAP lifecycle • Mapping of agency roles completed and duplication issues identified and addressed during the BSAP lifecycle	> $100,000 (new)	• Expert availability
Identify 5-year priorities under this BSAP	• Priorities identified by end 2027 • Evidence of progress towards priorities per year	$5,000–$25,000 (new)	• Technical capacity
Increase consultations with traditional leaders to at least twice a year	• Number of consultations held annually with traditional leaders	$5,000 – $25,000 (new)	• Engagement • Coordination

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• Record of formal recommendations from consultations being incorporated into ESC or state planning processes per year		
Establish a Coordinated Project Review Process (CPRP) via-Resolution to provide a clear and orderly process for community involvement and environmental review of proposed projects including bioprospecting, research projects, foreign investment and long-term leases, and proposals for unsustainable fishing ventures such as the Live Reef Food Fish Trade (LRFFT) that targets spawning aggregations of fish	• Resolution establishing Coordinated Project Review Process issued and publicly available during the BSAP lifecycle • Number of proposed projects reviewed through the Coordinated Project Review Process per year • Proportion of proposed projects receiving environmental clearance per year • Align with sustainable fisheries policy and Yap PAN regulation	$5,000 – $25,000 (new)	• Staff turnover • Political will

Objective 2. Secure and Enhance Traditional Knowledge

Progress to date

Progress under this Objective 2 has focused on documenting traditional knowledge and supporting its continued practice, with more limited progress in formally integrating traditional approaches with modern management and scientific frameworks.

Documentation of traditional land and sea use is ongoing, including incorporating culturally significant areas into area plans, and documenting oral traditions and traditional practices through the Historic Preservation Office. Progress in integrating traditional approaches to resource management has been uneven. While some marine protected area and resource management plans exist, most communities do not yet have formal management plans, and project-level integration of local practices remains inconsistent.

Systematic linkage of project results to scientific frameworks and secure funding remain unresolved. Support for traditional knowledge transmission continues through traditional skills programs, youth engagement, and cultural classes in schools, with elders prioritized in passing on knowledge.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Continue to document traditional use of the land and sea on Yap to provide context for local projects as appropriate to individuals, families, and communities	• Number of communities, families, or sites with traditional land and sea use documented and archived per year • Extent of traditional use documentation referenced in local project planning or approvals annually	$25,000–$50,000 (new)	• Sensitivity regarding documentation of traditional knowledge • Technical capacity
Document and evaluate ways of integrating traditional controls on resource exploitation with modern management practices	• Number of communities with management plans in place per year • Number of communities per year with management plans that integrate traditional knowledge	>$100,000 (new)	• Transportation costs and logistics • Community prioritization • Feasibility
Link projects results with scientific principles where appropriate, so that they may be further enhanced to provide viable and locally relevant alternatives for the future	• Number of project reports explicitly linking outcomes to scientific principles or evidence per year • Examples of project designs adapted or improved based on documented scientific findings per year	$50,000–$100,000 (new)	• Prioritization • Technical capacity • Awareness

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Support additional personnel to aid in the collecting and documenting of traditional knowledge and arts, and support expert traditional practitioners so that they may continue to practice and pass on their knowledge and skills with that knowledge held by elders a priority	• Personnel recruited and in post during the BSAP lifecycle • Volume of traditional knowledge, skills, or arts documented per year	$50,000–$100,000 (new)	• Sensitivity regarding documentation of traditional knowledge

Objective 3. Inventory and Monitoring

Progress to date

Progress under Objective 3 in Yap has been uneven, with advances in protected area establishment and mapping, alongside significant gaps in staffing, data coverage, and systematic biodiversity analysis. Recruiting a Protected Area Network (PAN) Coordinator has been challenging.

Some progress has been made in expanding and demarcating protected areas. New marine protected areas have been identified, including one new site in Gachpar, alongside existing sites in Riken, Reey, and Tamil. Terrestrial protected area demarcation has included the Weloy terrestrial protected area, the Tamil watershed, and several mangrove protected areas.

GPS-based mapping has been used to develop maps, though land management mapping does not currently integrate layers for relevant communities, and capacity is limited to a single staff member. Limited progress has been made in biodiversity inventories and data analysis. Forest inventory analysis is ongoing, but broader species inventories within natural communities have not advanced due to funding limitations and delays in technical reporting. Data management and analysis remain weak. A tree species database exists within the forestry sector, but there is no equivalent database for marine biodiversity. Development of an official list of rare species has not progressed, with limited documentation beyond a small number of identified species.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Comprehensively inventory species within natural communities and incorporate species information into a geographic information system (GIS)	• Number of species inventoried and entered into GIS database per year • GIS layers completed for terrestrial and marine biodiversity distribution during the BSAP lifecycle	>$100,000 (mix)	• Technical capacity
Update maps with regard to species incidence	• Maps updated with new species occurrence data during the BSAP lifecycle • Updates completed according to schedule	$50,000 – $100,000 (new)	• Political will
Analyse data to identify trends and/or pattern	• Annual analytical reports highlighting trends in biodiversity published • Number of management recommendations arising from analysis produced per year	>$100,000 (new)	• Available technical support
Establish and maintain a Yap State biodiversity database, including rare species, with information to be shared with leadership and communities	• Database established and functional during the BSAP lifecycle • Frequency of data updates (e.g., quarterly or annually) • Official list of rare species published during the BSAP lifecycle	>$100,000 (new)	• Equipment • Ongoing technical capacity for maintenance

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• Number of community outreach sessions conducted per year		
Recruit a Protected Area Network Coordinator	• Coordinator recruited and officially appointed by end 2026 • Annual reports produced under the coordination of the appointed officer	$50,000 – $100,000 (new)	• Funding source
Continue to certify new marine protected areas	• Number of new marine protected areas certified per year • Percentage of Yap's nearshore area under certified protection per year	>$100,000 (mix)	• Political will • Technical capacity
Demarcate terrestrial protected areas appropriately	• Number of terrestrial protected areas with clear boundaries mapped and endorsed per year • Area (hectares) of terrestrial ecosystems demarcated and recorded in GIS per year	>$100,000 (new)	• Technical capacity
Continue regular surveying and mapping of terrestrial and marine communities and protected areas	• Number of survey events conducted annually across ecosystems • Survey data publicly shared or incorporated into Yap's environmental database	>$100,000 (new)	• Technical capacity
Develop maps of current patterns within Yap's lagoon, and develop indicators for influence of land run-off	• Publication of maps during the BSAP lifecycle • Reports of monitoring, based on turbidity, published annually	>$100,000 (new)	• Coordination

Objective 4. Biosecurity – Addressing Invasive Species and Other Threats to Biodiversity

Progress to date

Progress under this Objective has been mixed, with strong activity in invasive species coordination and emergency response, steady progress in wildfire awareness and preparedness, and more limited advancement in enforcement and regulation of unsustainable natural resource exploitation.

Invasive species management has seen notable progress. The Yap Invasive Species Taskforce is active and functioning. It meets regularly, conducts annual reporting, and has implemented priority actions, with the successful eradication of Imperata grass achieved. An invasive species "swat team" has been established and deployed during emergency outbreaks. Regional collaboration has also progressed through work with Palau, Guam, FSM, and the Marshall Islands, including equipment support provided in 2024. Awareness and prevention activities related to invasive species have continued, though progress varies. Public awareness efforts are ongoing but constrained by limited resources and uneven leadership support. Surveys of invasive species, pests, and diseases have been conducted, including FSM-wide assessments and species checks, though funding gaps and the need for updated assessments remain. Efforts to introduce invasive species control measures for inter-island shipping and to establish a comprehensive state-level invasive species data collection system have shown little progress, with gaps in policy authority and implementation.

Community wildfire prevention plans are in place and actively followed, particularly during drought periods when restrictions on fire use are enforced and public announcements are issued by EPA. Public awareness programs featuring "Smokey Fruit Bat" and "Ngobchey Smokey Bear" are ongoing and highly visible, with outreach conducted through schools, festivals, media, and seasonal campaigns.

Progress on addressing unsustainable exploitation of natural resources has been limited overall. Some positive progress has been made in agriculture-related sustainability actions. A State seed bank has been established, supporting food security through climate-resilient crop varieties, and documentation of agricultural crop varieties is ongoing. No new development plans integrating climate considerations have been developed, and ecosystem-based climate adaptation measures have been identified but remain insufficiently implemented due to funding and capacity constraints.

Overall, progress under this objective reflects strong coordination and response capacity for invasive species and wildfire management, contrasted with persistent challenges in enforcement, data systems, and regulation of unsustainable natural resource use.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Utilize the Yap Invasive Species Taskforce as the main entity supporting invasive species management	• Evidence that taskforce meets regularly and maintains an active workplan • Number of coordinated response activities implemented per year	>$100,000 (new)	• Coordination • Technical capacity
Conduct a public awareness program to acquaint people with invasive species and their dangers	• Number or awareness raising activities per year • Percentage of surveyed participants demonstrating increased awareness of invasive species	>$100,000 (new)	• Outer island accessibility • Leadership endorsement

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Work with quarantine offices in Palau and Guam to develop effective prevention of invasive species entering Yap, e.g. pre-screening for invasive species	• Formal agreements or protocols established with Palau and Guam quarantine offices during the BSAP lifecycle • Number of shipments or passengers screened using agreed prevention measures per year	$50,000–$100,000 (mix)	• Outer island quarantine capacity • Coordination
Introduce and enforce invasive species control measures on inter-island shipping	• Number of vessels inspected for invasive species per quarter • Documented compliance rate with control protocols	$50,000–$100,000 (new)	• Technical capacity
Establish a list of invasive species indicators to be collected at the state level	• List of standardized indicators approved and adopted by Yap State during this BSAP lifecycle • Data collection forms and protocols developed and in use during this BSAP lifecycle	$50,000–$100,000 (new)	• Prioritization
Prioritize lists of invasive species threats to Yap and develop a program to address them	• Prioritized invasive species list published and reviewed annually • Number of targeted species with active management or eradication programs per year	>$100,000 (new)	• Baseline data • Technical capacity
Implement a program to control and/or eradicate Yap's two worst invasive species and to monitor results via a geographic information system (GIS) and public participation	• Control or eradication program initiated for top two priority species during this BSAP lifecycle • Monitoring data entered into GIS and progress reported publicly each year	>$100,000 (new)	• GIS capacity • Monitoring capacity • Capacity training
Organize an invasive species emergency invasive response team for emergency response	• Emergency response team established and trained during this BSAP lifecycle • Number of emergency response drills or real deployments conducted per year	>$100,000 (existing)	• Rapid response funding
Develop a strategy for combating an outbreak of invasive vines following natural disasters	• Post-disaster vine management strategy completed and endorsed during this BSAP lifecycle	>$100,000 (new)	• Post-disaster response capacity

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• Number of affected areas restored using the strategy after major events per year		
Conduct surveys of invasive species, as well as other pests and diseases	• Number of terrestrial and marine surveys conducted per year Number of new or confirmed invasive species recorded per year	>$100,000 (new)	• Technical capacity • Equipment
Facilitate funding for the Invasive Species Coordinator to participate in cross-agency and international invasive species, pest and disease networks	• Funding secured annually for coordinator participation • Number of regional or international meetings attended by coordinator per year	$50,000–$100,000 (new)	• Political will • Travel funding
Request assistance from The Pacific Community (SPC) to enable the continuation of a neutering and spaying program to manage the population of cats and dogs	• Formal request submitted and assistance secured from SPC during this BSAP lifecycle • Number of animals treated annually under the spay/neuter program	$50,000–$100,000 (new)	• Availability of veterinarians
Establish a mechanism for relevant agencies to maintain oversight of and enforce the sustainable use of natural resources, and prevent illegal harvesting, hunting, sale, purchase, or export of natural resources	• Number of outreach and awareness activities undertaken per year • Number of sustainability assessments conducted prior to commercialization or export approvals per year • Percentage of proposed resource uses meeting sustainability criteria per year	>$100,000 (new)	• Awareness • Enforcement • Equipment
Implement the ban on, and enforce regulations regarding, commercial export of in-shore/near-shore marine resources	• Survey to identify level of exports undertaken during the BSAP lifecycle • Recorded inspections or enforcement actions confirming compliance with the export ban per year • Survey to measure public awareness on high risk/threatened marine species	$50,000–$100,000 (mix)	• Coordination • Technical capacity

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Raise awareness on importance of trees, especially large living trees, to prevent unnecessary cutting of limited large living trees	• Number of awareness raising activities per year • Numbers of people reached through awareness raising per year	<$5,000 (new)	• Engagement • Willingness to change behavior
Evaluate and update the existing system requiring permits for all research in Yap (not just anthropological research) and ensuring the sharing of all research data (in line with national Access and Benefits Sharing frameworks)	• Number of permits issued per year • Annual documentation of research data	$5,000–$25,000 (new)	• Political will • Prioritization
Communicate status of natural resources to communities to ensure their sustainable use	• Number of community surveys undertaken per year, and analysis of results • Number of outreach activities per year • Number of newly managed areas within communities per year	$5,000–$25,000 (existing)	• Political will at all levels • Prioritization
Establish a state seed bank for Yap State	• Number of plants distributed from the State seed bank per year	$50,000–$100,000 (new)	• Direct funding availability
Document, coordinate, and share information regarding all varieties of agricultural crops such as yam, bananas etc. to help ensure continuation of local agrobiodiversity and agricultural practices	• Number of surveys undertaken per year • Establish a database	$50,000–$100,000 (new)	• Prioritization • Political will
Further develop a wildfire plan and ensure community wildfire prevention plans are followed	• Updated wildfire management plan adopted and distributed during the BSAP lifecycle • Number of communities implementing wildfire prevention plans per year	$25,000–$50,000 (mix)	• Enforcement • Community engagement
Continue conducting the wildfire public awareness program featuring Smokey Fruit Bat	• Number of outreach or education events conducted annually • Increase in community awareness or participation in wildfire prevention as measured by annual surveys	$25,000–$50,000 (existing)	• Community engagement
Conduct regular Incident Command System (ICS) training to ensure preparedness to address emergencies such as large wildfires, oil spills, and typhoons	• Number of ICS training sessions held per year • Number of trained responders certified under ICS per year	$50,000–$100,000 (mix)	• Awareness

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Continue to support community-level natural resource management planning to ensure comprehensive planning is undertaken by new communities	• Number of community plans developed per year	$5,000–$25,000 (new)	• Political will at all levels • Community engagement
Establish and implement a project and development review process to ensure appropriate reviews of projects take place	• Process established during the BSAP lifecycle • Number of project reviews undertaken per year	$25,000–$50,000 (new)	• Political will • Funding
Ensure coastal road building and related development consider the interface of saltwater and freshwater with proper eco-engineering so that changes of waterflow detrimental to crops and marine ecosystems are avoided	• Number or development plans reviewed per year	>$100,000 (new)	• Prioritization • Number of water flow mitigation activities per year

Objective 5. Managing Pollution

Progress to date

Progress under this Objective has been uneven, with functioning regulatory processes in place alongside limited advancement in data systems, planning coordination, and some infrastructure-related actions. Earthmoving regulation enforcement is ongoing through established permitting and review processes led by the Environmental Protection Agency. Environmental impact assessments are applied where required, site inspections are conducted prior to permitting, and landowner authorization is required before earthmoving activities proceed.

Progress in mapping earthmoving and dredging activities remains limited, with information held in paper form and not yet integrated into a geographic information system. Household water catchment systems have been implemented through multiple water security and adaptation projects in a number of communities, with some initiatives completed or nearing completion. Wastewater management regulations are in place, including requirements for pig pens to be set back from shorelines. Solid waste management has progressed through assessments conducted under the PROPER project, while public awareness activities on pollution prevention continue at limited frequency.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Strengthen enforcement of earthmoving regulations by the Environmental Protection Agency	• Number of site inspections and enforcement actions conducted annually • Percentage of projects found compliant with earthmoving regulations per year	$5,000 – $25,000 (mix)	• Political will • Land disputes
Map earthmoving and dredging activities, incorporating this information into a geographic information system (GIS) database	• GIS database established with mapped sites of earthmoving and dredging activities during the BSAP lifecycle • Number of new or updated records added to the GIS per year	> $100,000 (new)	• Technical capacity • Funding for technical expert
Enhance mitigation measures to minimize impacts of dredging	• Feasibility study or technical report on dredging alternatives completed during the BSAP lifecycle • Number of pilot projects trialling alternative materials or methods during the BSAP lifecycle • Additional mitigation measures identified and implemented (e.g. Silt mesh) during the BSAP lifecycle	>$100,000 (new)	• Political will • Funding
Develop and implement a storm water management system, informed by those developed in other countries, e.g. Palau	• Stormwater management plan developed and approved by state authorities during the BSAP lifecycle	–	• Political will • Willingness to adopt measures

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• Number of sites implementing stormwater management infrastructure per year		
Develop and implement household water catchment systems based upon successful project experiences	• Number of households with functional water catchment systems installed per year • Volume of water collected per year • Reduction in post-disaster water imports per year	> $100,000 (mix)	• Weather conditions • Transportation • Funding
Establish and implement wastewater (sewage, laundry etc.) management regulations	• Wastewater management regulations enacted and enforced during the BSAP lifecycle • Percentage of households or institutions compliant with wastewater standards per year	> $100,000 (mix)	• Technical capacity
Enhance solid waste management regulations	• Updated solid waste regulations adopted and implemented during the BSAP lifecycle • Quantity of solid waste diverted from open dumping to managed collection or recycling systems per year	> $100,000 (new)	• Technical capacity • Increase in population
Conduct public awareness programs regarding the prevention and management of pollution in Yap at least twice a year	• Number of pollution-awareness activities conducted annually • Measured increase in public awareness levels through post-program surveys	$50,000 – $100,000 (mix)	• Staff turnover
Assess, implement, and promote alternatives to Styrofoam importation and use in Yap	• Policy or regulation introduced restricting Styrofoam use and imports during the BSAP lifecycle • Number of local businesses adopting biodegradable or reusable alternatives per year	$5,000 – $25,000 (new)	• Non-compliance with existing law
Engage technical expertise to help identify dangerous waste materials	• Expert engaged during the BSAP lifecycle • Report on dangerous waste materials	>$100,000 (new)	• Expert availability • Funding
Enhance and enforce chemical waste regulations	• Enhanced regulations in place during the BSAP lifecycle • Number of violations prosecuted per year	$50,000–$100,000	• Technical capacity • Political will

Objective 6. Environmental Awareness, Research and Capacity Building

Progress to date

Progress under this Objective has been strongest in public and community awareness, with more limited advancement in formal education integration, research coordination, and long-term capacity development.

Public awareness activities are ongoing across multiple agencies, covering invasive species, forestry, watersheds, pollution, water quality, and natural disasters. Outreach is delivered through radio announcements, daily bulletins, school engagement, and inter-agency information sharing, with the Environmental Stewardship Consortium (ESC) providing a platform for coordination. Formal environmental education shows limited progress. Yap-focused environmental units exist at early childhood level, but broader curriculum development and teacher training need revision and expansion. Introduction of the Yap BSAP at secondary level has not yet been implemented.

Progress in learning from research remains limited. Research activities occur within forestry and marine sectors, largely driven by funding requirements, but research planning is reactive, baseline data are limited, and priority research needs are not clearly defined. Actions to establish a biodiversity research permit and tracking system and to create opportunities for Yapese participation in research have not progressed and require integration under the Coordinated Project Review Process.

Capacity development efforts are mixed. Scholarship support exists, but student tracking and coordination between offices need improvement. On-the-job training programs have been implemented intermittently, with some ending due to funding constraints, while limited vocational training has restarted. Efforts to increase the number of professional natural resource stewards have begun but remain insufficient, requiring better coordination across programs and stronger integration into education and training pathways.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Implement timely (at least twice a year) public awareness campaigns on relevant matters, such as invasive species, natural disasters, pollution, and the importance of Yap's biodiversity	• Number of awareness campaigns and events undertaken per year	$50,000–$100,000 (new)	• Willingness to change behaviour • Private schools not included in activities
Improve environmental awareness amongst Outer Island leadership and communities	• Number of outer island community engagements undertaken per year • Measured impact of community engagements using surveys	>$100,000 (new)	• Transportation costs and logistics • Leadership and community engagement
Write an environment book and have it integrated into the educational curriculum	• Book written during the BSAP lifecycle • Book incorporated into educational curriculum during the BSAP lifecycle	$25,000–$50,000 (new)	• Private schools not included in activities

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
			• Current education system (not local)
Provide information on the Marine Resources and Coastal Management Plan, and other stewardship plans	• Number of awareness activities conducted per year • Number of people engaged in awareness activities per year	$25,000–$50,000 (new)	• Manpower • Capacity and funding
Establish a calendar of environmental events to be rolled out on an annual basis	• Calendar produced and distributed annually • Number of events implemented as scheduled per year	$25,000–$50,000 (new)	• Development and production funding • Capacity and funding to hold events
Introduce secondary level students to the Yap BSAP, and link biodiversity with sustainable development	• Percentage of secondary schools incorporating BSAP content into curricula during the BSAP lifecycle • Data demonstrating student understanding of biodiversity–sustainable development linkages per year	>$100,000 (new)	• Prioritization • Teaching time • Curriculum development capacity
Support holistic information flow to communities, addressing gaps in understanding between communities and high-level discussion and decisions, including establishing a process for regular communication with the Councils of Pilung and Tamol	• Communications strategy developed and implemented during the BSAP lifecycle • Number of community awareness events held per year • Number of participants in awareness events per year	$25,000–$50,000 (new)	• Community engagement • Leadership engagement
Revive and resource the Local Marine Areas Network (LMAN) consisting of representatives appointed by the Councils of Pilung and Tamol, and provide the LMAN with information on opportunities for projects and other training to support their communities	• Number of LMAN meetings held per year • Number of actions undertaken under the LMAN per year • Number of training opportunities provided to LMAN members per year • Number of LMAN members partaking in at least one training session per year	$50,000–$100,000 (new)	• Engagement

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Utilize the existing government news brief service and website to disseminate environmental news and information	• Number and frequency of environmental updates published per year • Monthly website analytics	$5,000–$25,000 (new)	• Consistency of delivery • Verification of information
Define research needs and integrate these under a Coordinated Project Review Process (CPRP)	• Research needs list developed and approved by relevant authorities during the BSAP lifecycle • Number of research proposals reviewed under the CPRP process	$25,000–$50,000 (new)	• Technical expertise
Establish a biodiversity research permit and tracking system as part of the Coordinated Project Review Process, and strengthen coordination with the National Government and the Environmental Stewardship Consortium to enable State enforcement and ensure biodiversity research contributes to ecologically sustainable development	• Biodiversity research permit and tracking system operational and managed by state authorities during the BSAP lifecycle • Number of permit applications coming down from National Government per year • Number of research permits issued, tracked, and closed each year, with submission of findings	$25,000–$50,000 (new)	• Coordination • Political will
Develop and implement a system for providing opportunities for members of the Environmental Stewardship Consortium and other Yapese citizens to be employed as apprentices and associates to visiting scientists, to help develop local capacity and inform the public of the nature of ongoing research and its relevance to life on Yap	• Number of apprentices or associates placed with visiting research teams per year • Number of post-project public briefings or community presentations conducted by local project participants	$25,000–$50,000 (new)	• Awareness • Political will
Identify students interested in natural resource fields and assist them where possible in obtaining scholarships, track their progress and provide opportunities for internships on Yap during their studies, and assist them in finding employment upon completion of their education	• Number of students supported through scholarships, internships, or placement programs per year • Percentage of returning graduates employed in natural resource–related roles in Yap per year	$25,000–$50,000 (new)	• Staffing limitations • Capacity to track students
Establish a program of on-the-job training for those involved in natural resource management	• Number of people entering and completing the program • Number of employers participating in the program • Number of on-the-job training sessions conducted	$50,000–$100,000 (new)	• Coordination between organizations • Awareness • Engagement • Funding

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• Number of participants completing training and applying acquired skills within state or community programs		
Increase the number of professional natural resource stewards	• Number of professional natural resource steward positions filled in-state per year • Number of graduates/certified trainees placed into steward roles per year	$25,000–$50,000 (new)	• Limited career pathways

Objective 7. Stewardship Programs and Environmentally Sustainable Industries

Progress to date

Progress under Objective 7 has been mixed, with advances in stewardship planning, protected area management, and community-led conservation, alongside slower progress in enforcement, data systems, and implementation of some land and marine management tools.

The State-Wide Fisheries Management Plan is in development but is behind schedule. Species protection measures, including fishing closures, size limits, and closed seasons, are in place, and many community marine protected area management plans exist. However, enforcement of export controls for in-shore and near-shore marine resources remains weak, with no comprehensive system in place at ports or airports.

Institutional arrangements for marine stewardship have seen some progress. Assessments of enforcement arrangements have been conducted, and review processes for new commercial marine industries are in place through state investment screening. The Environmental Stewardship Consortium provides a platform for coordination and information sharing. Land stewardship progress has been uneven. Ridge-to-reef connectivity has been incorporated into planning, land-use identification has advanced using existing data, and traditional land-use practices continue to guide management. However, development of formal terrestrial management areas, enforcement through a Coordinated Project Review Process, and implementation of land stewardship guidelines remain limited. Watershed outreach activities emphasize traditional management and stream maintenance, while GIS capacity exists but is constrained by staffing and limited use of available technology.

Critical areas for protection are increasingly addressed through community-led stewardship planning, with terrestrial and marine areas of biological significance now incorporated into the Protected Area Network. Efforts to increase the number of professional natural resource stewards show some progress through community, cultural, and education initiatives but remain insufficient. Emerging work on environmentally sustainable industries, including water management and carbon-related initiatives, has begun but lacks coordination and adequate support.

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Complete and implement the Marine Resources and Coastal Management Plan (MRCMP)	• Plans developed during the BSAP lifecycle	>$100,000 (new)	• Staff turnover • Logistical and implementation costs • Limited technical capacity
Establish and implement programs that regulate fishing seasons, designate fishing zones and protected areas, especially to protect routes of spawning aggregations and sites of spawning, set species specific lower and upper size restrictions and minimize the use of small nets	• New Marine Spatial Planning Law in place during the BSAP lifecycle • Fisheries database in place during the BSAP lifecycle • Fish Aggregating Devices (FADs) in place during the BSAP lifecycle • Align with PAN Regulation	>$100,000 (new)	• Technical expertise regarding FADs • Enforcement • Political will
Collect catch and export data with relevant legislation passed to control the export of in-shore and near-shore marine resources	• Budget allocated by Government or other sources during the BSAP lifecycle	$25,000–$50,000 (new)	• Political will • Enforcement

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
	• System in place to track catches and exports during the BSAP lifecycle • Legislation endorsed during BSAP lifecycle • Centralized database server for commercial data established during the BSAP lifecycle		• Funding
Environmental Stewardship Consortium to assess all new commercial industry ventures to ensure they are sustainable and viable, utilizing the precautionary approach	• Environmental Stewardship Consortium is formalized to function as a State-level technical committee during the BSAP lifecycle • Environmental Stewardship Consortium Strategic Action Plan is endorsed during the BSAP lifecycle • Number of new commercial ventures assessed and outcome recorded per year	$25,000–$50,000 (new)	• Leadership engagement • Political will
Continue to support activities at the community level that connect land and marine areas	• Number of engagements with communities per year • Number communities engaged per year • Number of newly managed areas per year	$50,000–$100,000 (new)	• Political will • Lack of interagency collaboration
Develop minimum resource management criteria for communities to reach to receive MC Endowment funding for activities and to ensure existing guidelines are followed	• Minimum criteria developed and implemented during the BSAP lifecycle	$50,000–$100,000 (new)	• Identification of leads within State Government and traditional leadership
Define the best uses for different categories of land on Yap, including watersheds, and establish a program to assist landowners to utilize their lands in the best way, ensuring they are meeting the minimum resource management criteria	• Land-use 'best use' categorization completed and endorsed during the BSAP lifecycle • Number of landowners receiving technical support for sustainable land use	>$100,000 (new)	• Technical capacity • Consistent funding and technical expertise
Ensure earthmoving regulations are adhered to and projects are assessed under the Coordinated Project Review Process (CPRP)	• Proportion of projects reviewed under the CPRP process per year • Number of enforcement or compliance checks conducted annually	$5,000–$25,000 (new)	• Political will • Coordination

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Provide information and guidance regarding agriculture, agroforestry, recommended species for planting, including fruit tree species, tree farming and management of native forests to communities in response to community needs and to support development of village and municipal plans	• Agriculture and agroforestry guidance developed during the BSAP lifecycle • Number of communities engaged in information sharing per year • Number of village or municipal plans referencing the guidance per year	$50,000–$100,000 (existing)	• Community engagement • Follow-through following engagement • Limited funding
Identify sources of technical expertise to support the maintenance of the geographic information system (GIS)	• Numbers of individuals trained per year • Maps for all GIS layers produced during the BSAP lifecycle	$50,000–$100,000 (new)	• Technical capacity • Staff turnover • Limited funding and technical capacity
Continue to protect species, communities, processes and systems that are unique to Yap or critical to the functioning of Yap's ecosystems	• Number of species and ecosystems mapped and legally designated for protection during the BSAP lifecycle	–	• Enforcement capacity • Incomplete species data
Continue to survey terrestrial and marine Areas of Biological Significance (ABSs), and develop stewardship plans for these	• Surveys completed during the BSAP lifecycle • Number of stewardship plans developed during the BSAP lifecycle	>$100,000 (new)	• Technical capacity
Continue to develop and support natural resource stewardship, including traditional stewardship practices, through engaging youth in specific education and educational programs	• New curriculum developed during the BSAP lifecycle • Materials produced in local languages during the BSAP lifecycle • Number of teachers trained per year • Number of youth engaging with educational activities per year	>$100,000 (new)	• Political will • Department of Education engagement
Develop a technical assistance and incentive program to assist individuals, groups, and communities to undertake projects that simultaneously improve living conditions for people and other biodiversity	• Program document approved during the BSAP lifecycle • Number of projects supported per year	$50,000–$100,000 (new)	• Coordination • Sustained funding

Implementation Actions	Action-specific indicators	Estimated annual cost (and type)	Constraints
Assess feasibility of utilizing water funds as a possible source of income generation for sustainable water management, and undertake capacity assessment of untapped water lenses	• Feasibility consultation conducted by Water Authorities with consumers/users during the BSAP lifecycle • Water lens assessment conducted during the BSAP lifecycle	>$100,000 (new)	• Technical expertise • Baseline data
Investigate prospects and qualifications for earning carbon credits and carbon marketing to support forest conservation, especially for mangroves	• Assessment undertaken during the BSAP lifecycle, and output published	>$100,000 (new)	• Technical capacity • Availability of suitable consultants

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