



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: GEF

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PART I: PROJECT INFORMATION

Project Title:	Safeguarding biodiversity from invasive alien species in the Federated States of Micronesia		
Country(ies):	Federated States of Micronesia	GEF Project ID: ¹	9917
GEF Agency(ies):	UNDP	GEF Agency Project ID:	6004
Other Executing Partner(s):	FSM Department of Resources & Development	Submission Date:	1 September 2017
		Resubmission Date:	20 September, 2017
GEF Focal Area(s):	Biodiversity	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>		Corporate Program: SGP <input type="checkbox"/>
Name of parent program:	n/a	Agency Fee (\$)	393,443

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-2 Program 4: Prevention, Control and Management of Invasive Alien Species Outcome 4.1: Improved management frameworks to prevent, control, and manage IAS Indicator 4.1: IAS management framework operational score	GEFTF	4,141,509	18,766,262
Total Project Cost		4,141,509	18,766,262

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Components	Finance Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Institutionalizing a governance framework for IAS prevention, control and enforcement across member states; and in collaboration with other Micronesian nations. <i>Outcome indicators will be confirmed and their baselines and targets will be determined during the PPG.</i>	TA	1.1 National biosecurity governance framework strengthened, institutionalized and aligned with relevant Pacific initiatives. <i>1. High risk IAS prevented from entering FSM, as measured by XX% increased score in GEF IAS Tracking Tool.</i> <i>2. XXX% increase in biosecurity investment by state.</i>	1.1.1 National Biosecurity Strategy developed to institutionalize IAS governance and biosecurity enforcement across national and state governments, including its sustainable financing. 1.1.2 IAS legislative framework reviewed and revised, taking account of new 2017 Biosecurity Act, and measures identified to address: <ul style="list-style-type: none"> ▪ application of Biosecurity Act 2017 through regulations at national and state levels; ▪ marine biosecurity shortfalls; and ▪ responsibilities of landowners and producers (farmers, fisherfolk etc.) to report presence of IAS and control their spread in accordance with new IAS protocols and policy guidelines. 1.1.3 FSM Quarantine Services	GEFTF	500,000	2,680,895

¹Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

²When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT guidelines](#).

³Financing type can be either investment or technical assistance.

			<p>expanded into Biosecurity Authority with enhanced quarantine services and enforcement capacities, cost recovery system in place for entry port inspections, new IAS Extension Service role and effective national-state coordination mechanism.</p> <p>1.1.4 Costs/benefit analyses of the economic impacts of priority IAS on biodiversity, food security, livelihoods, health, and production systems (e.g. agriculture, fisheries) versus preventative measures to eradicate or control such species.</p>			
<p>2. Raising awareness and strengthening capacity in IAS prevention and management</p> <p><i>Outcome indicators will be confirmed and their baselines and targets will be determined during the PPG.</i></p>	TA	<p>2.1 Awareness of IAS impacts (adverse and beneficial) and importance of biosecurity raised across multiple sectors, including agriculture, forestry, fisheries, health, tourism, transport, finance and planning, to complement capacity building programme.</p> <p>3. <i>Awareness of IAS increased by XX% by end of project, as measured by surveys of arrivals and departures at entry ports</i></p>	<p>2.1.1 IAS Communications Strategy prepared during project inception phase to identify mechanisms and media for raising awareness about IAS, with accompanying Action Plan of events, coordination and other initiatives, and educational materials for reaching out to relevant sectors. Strategy will take into account: gender equity and other social inclusion issues, identified in the Gender Strategy and Action Plan (appended to Project Document); and the planned Biosecurity Information System (Output 2.3.1).</p>	GEFTF	1,644,294	7,149,053
		<p>2.2 Capacity to safeguard biodiversity from IAS impacts strengthened in terrestrial and marine ecosystems and in agricultural and fishery production systems, as measured by:</p> <p>4. <i>XX% increase in capacity of IAS Officers using UNDP Capacity Development Scorecard.</i></p> <p>5. <i>No. certified IAS Practitioners (%female) working in State Cadres by end of project.</i></p>	<p>2.2.1 Modular Biosecurity Training Programme on IAS management and compliance designed, mainstreamed across relevant sectors (agriculture, environment, fisheries, health, tourism) and institutionalized.</p> <p>2.2.2 IAS Practitioners, trained and certified by College of Micronesia in respective States, operationalized under a new national-state IAS Coordination Office to support communities in eradication⁴, control and management of IAS.</p>			
		<p>2.3 Knowledge assembled, applied to awareness raising and capacity building programmes, and readily accessible to inform IAS management at state,</p>	<p>2.3.1 Web-based Biosecurity Information System (BIS) developed and networked via mobile apps to support identification, screening monitoring and enforcement of IAS inspections at international, inter- and</p>			

⁴ Note: The GEF grant may cover planning, training and development of technical techniques for IAS eradication but, in line with GEF policy. However, GEF will only support targeted eradication: "... in specific circumstances where proven, low-cost, and effective eradication would result in the extermination of the IAS and the survival of globally significant species and/or ecosystems." Thus, eradication considered appropriate but not within these criteria will need to be covered by cofinancing.

		<p>national and Pacific levels, as measured by:</p> <p>6. <i>No. IAS recorded in BIS with images for ID, geospatial locations and dates of observation.</i></p> <p>7. <i>No. bona fide records of IAS received annually via mobile apps.</i></p>	<p>intra-state entry points by air and sea to and within FSM, with readily accessible guidance on biosecurity legislation, regulations and policy.</p> <p>2.3.2 Mobile application developed to enable producers (farmers, fisherfolk, aquaculturalists), landowners, government agencies, NGOs and members of public to identify IAS, register sighting locations and seek technical support.</p> <p>2.3.3 Set of knowledge products compiled and disseminated via multi-media, including the BIS.</p>				
<p>3. Demonstrating best practices in safeguarding biodiversity and food production systems from IAS</p> <p><i>Outcome indicators will be confirmed and their baselines and targets will be determined during the PPG.</i></p>	TA	<p>3.1 IAS inspection and enforcement protocols operational and enhanced at key international, inter -state air and sea ports, as measured by:</p> <p>8. <i>Effectiveness of port surveillance measured by total and ratio of detections to inspections per IAS officer, using disaggregated data for passengers and cargo.</i></p> <p>9. <i>Sustainability of port surveillance measured by percentage of operational costs recovered from entry ports in each state.</i></p>	<p>3.1.1 Basic IAS quarantine facilities and fumigation equipment (fixed and portable) provided and operational in all airports and seaports of States, with clear protocols developed and documented (including health and safety procedures) and technicians/officers trained in their use and maintenance.</p> <p>3.1.2 All international air and sea ports of entry adequately staffed and equipped for inspection of cargo and passenger baggage, with access to Biosecurity Information System, in cooperation with immigration, customs, health and EPA officials.</p>	GEFTF	1,800,000	8,042,682	
		<p>3.2 IAS safeguard protocols operational in agricultural, agroforestry and natural terrestrial and marine systems to identify IAS and to prescribe and enforce eradication or controlled management, measured by:</p> <p>10. <i>Absence of any new island introductions of known high risk IAS (by state).</i></p> <p>11. <i>XX% (by state) of farmers/ households engaged in IAS detection, prevention and management.</i></p> <p>12. <i>XX% (by state) increase in yields of terrestrial and marine production systems.</i></p>	<p>3.2.1 IAS Extension Service established in partnership with College of Micronesia and operational in each State to support farmers, landowners and fisherfolk in IAS identification and management measures to eradicate or contain them.</p> <p>3.2.2 IAS safeguards mainstreamed across agriculture, fisheries, tourism and other sectors engaged in GEF-5 ‘Ridge to Reef’ project and operational in land/seascapes and associated network of 40 protected areas.</p>				
Subtotal (US\$)						3,944,294	17,872,630
Project Management Cost (PMC)						197,215	893,632
Total Project Cost						4,141,509	18,766,262

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: n/a

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	FSM Department of Resources & Development	Grants	1,000,000
Recipient Government	FSM College of Micronesia	Grant	550,000
Recipient Government	Chuuk, Kosrae, Pohnpei and Yap State Governments	Grants	8,501,269
CSO	Conservation Society of Pohnpei, Micronesia Conservation Trust, The Nature Conservancy and others	Grants	8,714,993
Total Co-financing			18,766,262

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS ^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	GEFTF	Federated States of Micronesia	Biodiversity	n/a	4,141,509	393,443	4,534,952
Total GEF Resources					4,141,509	393,443	4,534,952

a) Refer to the [Fee Policy for GEF Partner Agencies](#). [Note: Table D is based on a total GEF Grant (LOE Amount) of \$4,753,952, of which \$933,506 has been re-allocated from the Land Degradation Focal Area to the Biodiversity Focal Area (\$3,820,446) under the marginal adjustment flexibility mechanism.

E. PROJECT PREPARATION GRANT (PPG)

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$200,000*					PPG Agency Fee: 19,000		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee(b)	Total c = a + b
UNDP	GEFTF	Federated States of Micronesia	Biodiversity	n/a	200,000	19,000	219,000
Total PPG Amount					200,000	19,000	219,000

* **Note:** \$200,000 is requested because it is essential to include all four states in project, based on risks to globally significant biodiversity and high re-invasion potential unless standards and levels of enforcement of IAS safeguards are consistently high across all states. Hence, the need to consult closely with respective states to understand their context and secure their engagement. This will incur higher travel costs (Yap State is 2,777 km from Kosrae State) and more days in the field for PPG team, being equivalent for example to developing 4 child projects in four different provinces in China.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets*
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	24,986 ha

* **Note:** The project will target FSM's existing and proposed network of 40 protected areas (total area: 24,986 ha), of which 10,033 ha is terrestrial (landscape) and 14,953 ha is marine (seascape). Maps of these sites are shown in Annex 1. There will also be benefits through enhanced IAS management and biosecurity across agricultural landscapes. These will be estimated during PPG phase.

PART II: PROJECT JUSTIFICATION

- 1. *Project Description*** The Federated States of Micronesia (FSM) comprises a vast region of some 607 islands, spanning a distance of about 2,700 km and encompassing over 2.6M km of the Western Pacific Ocean. FSM, which occupies a total land area of 708.36 km², lies within the part of Micronesia known as the Caroline Islands and includes four states: Yap, Chuuk, Pohnpei and Kosrae (**Annex 1**). It is an independent nation, while maintaining strong ties with the United States under a Compact of Free Association. The population is estimated to be 105,000 (mid-2015)⁵: approximately 50% live on Chuuk, 33% on Pohnpei, 10% in Yap and 7% in Kosrae, based on census data from 2010⁶.
- The oceanic islands of FSM are home to some of the most biologically diverse forests and coral reefs in the world. The proximity of Micronesia to the Indo-Malayan region and the relative nearness between the islands themselves enabled the high islands and reefs to act as bridges for the migration of terrestrial and marine species. The distance between islands also separated individual populations causing, in some cases, the creation of new species. The islands of the eastern Carolines are more isolated from continental landmasses. Consequently, the total number of species decreases from west to east but the proportion of endemic species increases eastwards. Globally significant features include: the world's deepest trench (Mariannas); among the world's most endangered rainforests on the peak of Mt Winpot (Chuuk State); the largest green turtle (*Chelonia mydas*) rookery in the insular Pacific; globally rare montane cloud forests at just 450 m on Pohnpei and Kosrae; and a diversity of marine ecosystems from high volcano islands with fringing and barrier reefs to coral atolls including Chuuk Lagoon, among the world's largest (3,130 km²) and deepest (60 m).⁷
- Invasive alien species (IAS) are the greatest threat to biodiversity in the Pacific Islands, contributing to the loss of native species including endemics and traditional varieties of crops, and impacting on food security and tourism. Moreover, the threat has increased as island nations develop, resulting in greater mobility among people, goods, and supplies. Pacific ecosystems are among the world's biodiversity hotspots and these face some of the highest extinction rates in the world. Many species are found only in the region, including 2,189 species that are single-country endemics. Of these species, 5.8% are already extinct or exist only in captivity, and a further 45% are at risk of extinction. IAS are the largest cause of extinction of single-country endemics in the Pacific⁸.
- FSM is no exception and in the last 150 years over 457 new plants have been introduced to the FSM, which amounts to 37% of the 1,239 described species of terrestrial flowering plants and ferns⁹. Of the 782 native plant species, over 200 species are known to be endemic. Introduced species account for 22% of plants in Kosrae, 40% in Pohnpei, 37% in Chuuk and 39% in Yap. Native terrestrial mammals are limited to six taxa of fruit bats, of which five are endemic, and the rest are introduced: three rat species, mouse, Philippine deer, and domesticated animals including livestock⁹. A total of 231 species of birds are recorded in Avibase, of which 15 species are endemic and 13 are introduced. The latter include pheasants, doves, parrots, munias and the Eurasian Tree Sparrow (*Passer montanus*)¹⁰. Amphibians are not native to FSM and the only species is the introduced marine/cane toad (*Rhinella marina* syn: *Bufo marinus*)¹¹. Of the 27 species of reptiles, five are endemic and two are likely to have been introduced⁹.
- Agroforestry, which accounts for 35% of FSM's landscape, is an important expression of the cultural heritage that contributes significantly to the nation's wealth of biodiversity. There are many varieties and cultivars of staple food crops, such as 55 banana, 133 breadfruit and 171 yam cultivars for Pohnpei alone¹², all of which are potentially important for food security and more so in the face of climate change.
- A significant number of FSM's introduced plant and animal species have proved to be invasive, becoming increasingly widespread with increasing movement of people, goods and supplies between islands within and beyond Micronesia. Of the 130 Areas of Biodiversity Significance identified in FSM at the beginning of this Millennium, IAS were assessed as being a

⁵ 2015 UN Demographic Yearbook

⁶ 2010 FSM-wide census of population and housing: preliminary counts. Office of Statistics, Budget and Economic Management, Overseas Development Assistance and Compact Management, Palikir, Pohnpei, FSM.

⁷ TNC (2002), *A Blue Print for Conserving the Biodiversity of the Federated States of Micronesia*.

⁸ SPREP (2016), Use economic analysis to battle invasive species. Apia, Samoa.

⁹ Falanruw, M.C. (2002). Terrestrial biodiversity of the Federated States of Micronesia.

¹⁰ <http://avibase.bsc-eoc.org/checklist.jsp?region=FM&list=howardmoore> (accessed 25 May 2017)

¹¹ <http://www.amphibiaweb.org/index.html> (accessed 25 May 2017)

¹² FSM (2010), Fourth National Report to the CBD

major threat in 12 (9%) of such sites⁷. More recently in 2015, IUCN SSC Invasive Species Specialist Group identified some 600 alien species recorded in FSM that are considered invasive or potentially invasive, with the majority being terrestrial plant species¹³.

7. In addition to invasive species established in FSM, there are numerous other species that threaten to arrive and become established. Examples of significant concern include Brown Tree Snake (*Boiga irregularis*), Little Fire Ant (*Wasmannia auropunctata*) and Coconut Rhinoceros Beetle (*Oryctes rhinoceros*). These and many other alien species are already established in one or more Pacific countries or island groups having trade and other ties with FSM, posing elevated risks of being introduced if appropriate management measures are not taken and maintained¹⁴.

8. For example, in relatively nearby Guam, the Brown Tree Snake has resulted in 10 of 13 native forest bird species, nine of 12 native lizard species and at least two mammal species becoming extinct in the wild, as well as the loss of breeding seabird populations from the main island. Direct economic impacts include: approximately 180 power outages caused by Brown Tree Snake at a cost of US\$ 1-4 million per year: poultry and egg productions losses: and reduced viability of niche markets such as bird watching; and up to UA\$ 48,000 per year in treating snake bite. Meanwhile, Hawaii spends \$76,000 annually searching for this snake when reported through its early detection system. If this snake became established in Hawaii, tourism losses are predicted at US\$ 0.5-1.5 billion annually. Economically more devastating is the Little Fire Ant in Hawaii, where an immediate expenditure of \$8 million (0.01% GDP) over the next 2-3 years plus follow-up prevention, monitoring and mitigation measures is needed to reduce control costs by US\$ 5.5 billion, economic damages by US\$ 538 million, human sting incidents by 2.2 billion and pet sting incidents by 762 million over the next 35 years.⁸

9. Within a global context, IAS are among the five principal direct drivers of biodiversity loss, the others being habitat disturbance, pollution (especially nutrient loading), over-exploitation, and, increasingly, climate change. Island ecosystems, in particular, are afflicted by a cascading set of extinctions and ecosystem instabilities due to the impact of IAS. They are particularly vulnerable to such invasions as communities of species have evolved in isolation and often lack defenses against predators and disease organisms. Furthermore, as the invaded communities become increasingly altered and impoverished, vulnerability may increase to new invasions¹⁵. Subsequent to 2010, progress in meeting the CBD Aichi Biodiversity Target 9, which relates specifically to IAS¹⁶, has been ‘insufficient’ on a global scale with respect to identifying and prioritizing IAS and their pathways, and controlling or eradicating priority species; and there has been ‘no significant overall progress’ with respect to preventing the introduction and spread of IAS¹⁷.

10. Much of this global context applies to the FSM, with IAS and their pathways identified to a limited extent, a few initiatives underway to control or eradicate species but negligible progress overall in preventing the introduction and spread of alien species. Increased awareness and understanding terrestrial and aquatic tenure patterns are fundamentally key to IAS management.

11. Invasive species affect all aspects of society, including the protection and use of natural resources. Established IAS of concern are numerous in FSM and include: Mile-a-Minute (*Mikania micrantha*), Cane Toad (*Rhinella marina*), various rat species (*Ratus* spp.), feral pigs (*Sus scrofa*) and feral cats (*Felis catus*)¹⁸, with respect to biodiversity; and whiteflies and mealy bugs with respect to staple crops¹² (food security). A list of 15 priority IAS is provided in **Annex 2**.

12. However, solid economic analyses concerning the adverse impacts (actual and potential) of these priority IAS in FSM are lacking or not readily available. Some anecdotal information includes the following:

- Human disease vectors, especially mosquitoes, are a concern as more resources are being spent in this regard. Yap is thought to be more impacted than the other states.

¹³Compile and Review Invasive Alien Species Information for the Federated States of Micronesia and its constituent states Chuuk, Kosrae, Pohnpei and Yap. Unpublished draft report for the Secretariat of the Pacific Regional Environmental Programme, 2015. 31 pp. Invasive Species Specialist Group, Pacific Regional Office, Auckland, NZ.

¹⁴Stanford, J. (2015), *Federated States of Micronesia National Invasive Species Strategy and Action Plan*. Secretariat of the Pacific Regional Environmental Programme (SPREP), Apia.

¹⁵Secretariat of the Convention on Biological Diversity (2010), *Global Biodiversity Outlook 3*.

¹⁶**Aichi Biodiversity Target 9:** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

¹⁷Secretariat of the Convention on Biological Diversity (2014), *Global Biodiversity Outlook 4*.

¹⁸*FSM National Strategy and Biodiversity Action Plan 2002*.

- Pests seriously impacted citrus production in Kosrae several decades ago. Citrus canker was identified there in the late 1990s, which finished off what remained of their citrus export market.
- There have been recent outbreaks of various white flies.
- Kosrae has a termite, newly identified in the last 5 years, which is impacting coconuts.
- The Little Fire Ant (*Wasmania*) has recently arrived in Yap, based on samples of a small ant collected and identified as *Wasmania* in August 2017. It is thought to have arrived via one or more used vehicles shipped from overseas. The extent of the spread is currently unknown but this illustrates the scale of the IAS problem and in this case potentially severe repercussions.

13. The States have a significant degree of autonomy, with ownership of land and water varying between them. In Kosrae and Pohnpei, land is both privately and state owned, while aquatic areas are managed by the state as public trusts. In Chuuk, most land and aquatic areas are privately owned and acquired through inheritance, gift or, more recently, purchase. In Yap, almost all land and aquatic areas are owned or managed by individual estates and managed in traditional ways. Such tenure systems have a critical bearing on the strategies and actions required to sustainably manage and protect the natural resources of these islands. Responsibility for environmental issues is shared between the national and individual state governments.

14. **The long-term solution sought by the project** is to safeguard biodiversity in terrestrial and marine ecosystems and in agricultural and fisheries production systems in the FSM from the impacts of IAS by strengthening the institutionalization and enforcement of biosecurity measures across all sectors of government, the private sector and civil society. Everyone has a responsibility as natural barriers to the spread of invasive species are thwarted by the movements of people, their goods and supplies. Hence, there is a need for mainstreaming detection and management of IAS through multi-sectoral approaches.

15. Effective management of IAS is fundamentally about collective responsibility in minimizing the likelihood of alien species being introduced to individual islands and their territorial waters within FSM, and in controlling their spread from areas where they have become established. Sometimes, it may be possible to eradicate IAS and such action may be economically justifiable in cases of endemic and/or endangered native species (including agrobiodiversity) being at risk of extinction and wider food security and health issues.

16. **Barriers that need to be addressed** to manage the problems introduced by IAS are:

- (i) **inadequate enabling and institutional framework, in terms of policy and legislation, coordination mechanisms, and communication and information systems at national and state levels**, to prevent the introduction of new IAS to FSM and to eradicate or control existing IAS.

The institutional framework, mechanisms and systems are in their infancy, requiring considerable development, consolidation and harmonization. There is a Micronesia Regional Invasive Species Council (RISC) and invasive species taskforces have been established in respective states (iSTOP, CIST, YIST and KIST). Each taskforce has developed its own IAS Action Plan, which have since been updated and incorporated into a *National Invasive Species Strategy and Action 2016-2021* (NISSAP) for FSM (refer to paragraphs 18, 19). Thirteen IAS have been identified at national and state levels for priority actions that range from preventing their introduction to FSM or individual states to controlling their spread or in one case possible eradication (**Annex 2**). Emergency Response Plans (ERPs) have been drafted for just a few IAS (invasive ant, exotic fruit flies, Coconut Rhinoceros Beetle and Brown Tree Snake) and these await endorsement. However, government and states have lacked adequate resources to implement their respective action plans and to some extent apply the legislation.

FSM is not a member of the International Maritime Organization¹⁹ and, therefore, has not signed up to the International Convention for the Control and Management of Ships' Ballast Water and Sediments (Ballast Water Management Convention), adopted in 2004 with the aim of preventing the spread of harmful aquatic organisms from one region to another by establishing standards and procedures to manage and control of ships' ballast water and sediments. However, FSM seeks to comply with this and other relevant conventions through provision of technical assistance on maritime-related issues from regional Pacific organisations of which it is a Member State, notably: SPC's Economic Development Division (<http://edd.spc.int/>), SPREP's Strategic Priorities of Biodiversity and Ecosystems Management (<http://www.sprep.org/Biodiversity-and-Ecosystems-Management/bem-overview>) and

¹⁹IMO has 172 Member States; Micronesian members are the Marshall Islands and Palau.

Environmental Monitoring & Governance (<http://www.sprep.org/Environmental-Governance-Monitoring/overview>) initiatives and the Pacific Islands Forum Secretariat (<http://forumsec.org/>).

Very recently, a new Biosecurity Bill has been enacted into Law, with FSM's President signing Congressional Act No.19-102 into Public Law (PL. No.19-174) on April 28, 2017. New regulations are due to be developed to repeal and replace the Plant & Animal Quarantine Regulations (first introduced in 1966 and most recently amended in 2000). Provisions will include: coordination of responses to IAS at regional, national and state levels; creation of a biosecurity register; memoranda of understanding between key stakeholders; and issue of import permits and prohibition of imports. However, its scope is considered to be somewhat limited: for example it does not address aquatic IAS, either freshwater or marine.

Systematic recording of the status and distribution of IAS using a GIS to inform and prioritise interventions is limited to the US Forest Service Program for Forest Health, for which georeferenced data are collected from sites monitored in each state.

- (ii) lack of awareness and understanding about IAS**, their identification, modes of introduction and spread, biodiversity conservation and socio-economic impacts (including loss of revenue) and their management in terms of reporting, monitoring and eradication/control measures.

There is some awareness and understanding about IAS among the general practitioners but more focused outreach is needed across all sectors of the government, private enterprises and civil society, as highlighted in the National Invasive Species Strategy and Action Plan (NISSAP)¹⁴. At the national level, for example, there is little or no publicity about IAS of priority concern in ports of entry/exit, hotels and guest houses, schools and other educational establishments, providing information on species identification, biodiversity and socio-economic impacts, modes of spread or transfer and contact details for reporting sightings and flouting of enforcement regulations. At state levels, outreach among schools and communities is almost non-existent and biosecurity does not feature in the school curriculum. Raising awareness and understanding about IAS will be crucial in securing public and political support for many of the interventions proposed for this project, particularly when it comes to sustainable financing of biosecurity. For example, the public, both residential and visiting, will need to be supportive of cost-recovery of border security measures to prevent introductions of IAS because ultimately they will be paying for such security.

- (iii) limited operational capacity, in terms of human resources trained in IAS identification and management deployed throughout FSM with adequate facilities, equipment and access to information, to implement prevention, management and enforcement measures, as well as to reach out to farmers, fisherfolk and other owners, users and/or producers of plant and animal products impacted or threatened by IAS.**

Operational capacity is limited to a skeleton staff at the main entry points in each State to address the introduction of IAS but virtually no presence in the field to tackle the spread of established invasives. A total of 18 biosecurity officers, under the supervision of two senior officers based in the Department of Resources & Development, are deployed in each State to safeguard ports of entry and exit from likely incursions and spread of pests and diseases of concern including IAS. Technical 'know-how' in biosecurity work is limited, including a lack of diagnostic capability in species identification and management. Facilities and equipment are also very limited and such facilities as did exist in Pohnpei (laboratory and fumigation chamber) are currently dysfunctional. Further details about operational capacity are given below (Section I.1.2).

2) Baseline scenario or any associated baseline projects

17. A blueprint for conserving FSM's biodiversity was designed in 2002, based on the identification of 130 Areas of Biological Significance (ABS)²⁰. This plan underpins the current network of 35 terrestrial and marine protected areas²¹ that cover some 7% (4,474 ha) and 2% (4,068 ha) of the land and lagoon areas, respectively, of the High Islands. A further 5,738

²⁰ *A blue print for conserving the biodiversity of the Federated States of Micronesia*, 2002, FSM National and State Governments, The Nature Conservancy, U.S. Forest Service, UNDP-Global Environment Fund, US Department of the Interior.

²¹ FSM does not have a national or State registers of protected areas, Existing protected areas are defined as those with legal status, or declared and managed by a community and in the process of being legally recognized by their respective State. Proposed protected areas are those identified during the preparation of the R2R Project, based on expert inputs from the stakeholder group; they relate closely to ABS; and they are sites where community willingness to create protected areas is high²².

ha of terrestrial and 14,555 ha of marine areas are proposed for protection under the ongoing Ridge to Reef Project²². Maps of this network of existing and proposed protected areas are provided in **Annex 1**.

18. There is a considerable body of information about invasive species in FSM and the rest of Micronesia²³, as well as in other parts of the Western Pacific, focusing on individual species, identification, control measures and some prioritization for control. However, much less is recorded about IAS distribution and status, and monitoring is limited and to a large extent ad hoc in FSM (and elsewhere). Much of this information is available in the various strategies, action plans and emergency response plans that have been prepared over the last decade or so by the respective State Invasive Species Taskforces, notably:

- *Chuuk Invasive Species Taskforce Strategic Action Plan 2008-2010 (Draft) and Emergency Response Plan for Brown Tree Snake (Draft)*
- *Kosrae Invasive Species Action Plan and Emergency Response Plan for Brown Tree Snake (Draft)*
- *Invasive Species Taskforce of Pohnpei Strategic Action Plan 2013-2017 and Emergency Response Plan for Brown Tree Snake (Draft), Emergency Response Plan for Coconut Rhinoceros Beetle (Draft)*
- *Yap Invasive Species Taskforce Strategic Action Plan 2009-2012 and Emergency y Response Plan for Brown Tree Snake (Draft), Emergency Response Plan for Coconut Rhinoceros Beetle (Draft)*

19. Much of this earlier ground work has been collated, updated and incorporated into a *National Invasive Species Strategy and Action 2016-2021 (NISSAP)* for FSM under the aegis of a regional GEF project²⁴ to develop a regional coordinating approach to managing IAS. The NISSAP draws on the earlier *Guidelines for invasive species management in the Pacific: a Pacific strategy for managing pests, weeds and other invasive species* (SPREP 2009) and its implementation is designed to ensure that Aichi Biodiversity Target 9 is met by 2020 (see paragraph 32). It is also linked to a regional biosecurity plan for Micronesia and Hawaii²⁵, with specific sections on FSM and its individual states. In spite of the considerable efforts in developing strategies and action plans for IAS and emplacing overarching structures at state, national and regional levels in Micronesia, on the ground action is limited mainly to border control operations to prevent new introductions. There is little or no presence in the field to monitor and control the spread of established IAS.

20. FSM Quarantine Services, within the Department of Resources and Development, is responsible for border control of the official points of entry (i.e. post offices, air and sea ports), working in collaboration with the island States of the nation. The existing Plant and Animal Quarantine Regulations (2000) regulations provide for the prevention of the introduction and further spread of injurious insects, pests and diseases including IAS into the FSM. They also provide procedures and conditions to ensure safe movement of plants and animals and their products into, out of and within the FSM; and to fulfill international obligations in preventing the movement of pests in international trade and traffic. FSM Quarantine Services' budget is meagre, approximately US\$ 441,000 or 35% of the Department of Resources & Development's operational budget for 2017 fiscal year (US\$ 1,259,931²⁶).

21. FSM Quarantine Services collaborates closely with other border control agencies through its State Field Offices (e.g. Immigration, Customs, State Environmental Protection Agencies and Sanitation Offices). Nationally, the existing Memorandum of Understanding with the State Agriculture Agencies ensures close collaboration as far as border control and other administrative issues are concerned. Moreover, the inter-departmental agencies are tasked with control, eradication and other IAS management activities through their membership of the relevant Invasive Species Taskforces (Yap - YIST; Chuuk - CIST; Pohnpei - iSTOP; Kosrae - KIST). In addition to this inter-departmental cooperation, the State Forestry Agencies manages their respective Forest Health Program under the US Department of Agriculture's Forest Service Cooperative Program, which focuses on invasive alien plant species at the State jurisdictional level.

22. Under the Compact of Free Association agreed between the US and FSM, the US Federal Agency provides a range of services, including the USDA Forest Service, APHIS-Wildlife Services and National Resource Conservation Service

²² PIMS 5179: Implementing an integrated "Ridge to Reef" approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the FSM (2015-2020). Project Document.

²³ The Micronesia region encompasses five sovereign, independent nations: the Federated States of Micronesia, Palau, Kiribati, Marshall Islands, and Nauru; as well as three U.S. territories in the northern part: Northern Mariana Islands, Guam, and Wake Island.

²⁴ Prevention, control and management of invasive alien species in the Pacific Islands, GEF-UNEP project executed by SPREP.

²⁵ United States Department of the Navy, 2015. *Regional Biosecurity Plan for Micronesia and Hawaii*, Vols I-IV. University of Guam and Secretariat of the Pacific Community (Eds).

²⁶ http://www.cfsm.fm/iframe/19th%20Congress/LAWS/PUBLIC_LAW_19-118.pdf

(NRCS), all of which are under the US Department of Agriculture. The USDA Forest Service Cooperative Grant is approximately US\$ 100,000 annually; and USDA NRCS has a staffed office in Pohnpei. Although not specifically focused on biosecurity concerns, a level of support is provided in IAS management. For example, USDA Forest Service has assisted with pest/disease surveys and control of breadfruit disease (Black Sock, *Phellinus noxius*) and provided training in Coconut Rhinoceros Beetle and Little Fire Ant by the Universities of Guam and Hawaii, respectively. The USDA Forest Service also provides Yap with a forester and Invasive Species Coordinators for each state; and USDA NRCS provides technical assistance in IAS. The US Department of Interior is active in FSM, under a compact agreement administered by the Office of Insular Affairs and, together with the Department of Defence, supports management efforts on Guam to prevent Brown Tree Snakes from leaving the Island; as well as regional response capacity.

23. At the regional level, the FSM Government benefits from technical cooperation and assistance on IAS issues from regional partners, notably the Micronesia Regional Invasive Species Council (RISC), Secretariat of the Pacific Community (SPC) with its office in Pohnpei, Secretariat of the Pacific Regional Environment Programme (SPREP) and the Pacific Invasives Learning Network (PILN).

24. Government at national and state levels is clearly concerned about their limitations in addressing biosecurity issues, what with rapidly rising levels of air and boat traffic due to tourism, trade and movements of labour (immigration/emigration), increasing risks of invasive species spreading from Guam (e.g. Brown Tree Snake, rhinoceros beetle and rats) to the relatively nearby islands of Chuuk and Yap and from there to the rest of FSM; and the continuing, mostly uncurbed, spread of IAS that have become established in the wild. The confirmation in August 2017 of the presence of the Little Fire Ant present in Yap is even more alarming.

25. The new Biosecurity Law is a welcome and timely initiative that will provide a significantly improved legal framework for addressing many of these challenges but its application and enforcement will require an injection of resources to increase and sustain FSM Department of Resources & Development's institutional capacity and operational budget to fulfill its mandate on biosecurity, while also mainstreaming the sharing of responsibilities for controlling IAS across other sectors of government and more widely across civil society.

3) the proposed alternative scenario, GEF focal area²⁷ strategies, with a brief description of expected outcomes and components of the project,

26. The **project objective** is: to safeguard biodiversity in terrestrial and marine ecosystems and in agricultural and fisheries production systems from the impacts of invasive alien species in the Federated States of Micronesia. The **three components** of the project address: the legal framework and institutionalization of IAS prevention and management in Component 1; raising awareness and strengthening capacity in IAS prevention and management, underpinned by a Biosecurity Information System, in Component 2; and strengthening the operationalization of Quarantine Services to prevent IAS introductions and creating a new Extension Service to manage established IAS in Component 3. Component 2, in particular, will build on the various recent IAS strategies and guidance, providing a vehicle for their implementation.

Challenges addressed in the project's design include: (i) the long-term financial sustainability of IAS management and enforcement of biosecurity protocols; and (ii) the need to reach out to landowners and those working the land and sea who harvest/produce food that may be susceptible to invasive pests and diseases. Thus, the design emphasizes shifting some of the onus of controlling and managing IAS from government: (i) to those responsible for introducing such species (e.g. travelling members of the public including visitors, transport sector (e.g. freight and haulage companies); and (ii) to those who own, farm, and/or harvest land or sea that has been colonized by IAS.

27. Component 1: Institutionalizing a governance framework for IAS prevention, control and enforcement across member states and in collaboration with other Micronesian nations

This component is focused on developing and expanding the institutional capacity to apply and further strengthen the governance framework for IAS in order to safeguard terrestrial and marine ecosystems, including agricultural and marine production systems, from the impacts of IAS. Key elements comprise:

- Developing a National Biosecurity Strategy to institutionalize IAS governance and biosecurity enforcement across national and state governments, as well as cooperate with other nations in Micronesia through existing mechanisms

²⁷ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

such as RIC, SPC, SPREP and PILN [**Output 1.1.1**]. This Strategy will outline how the new Biosecurity Act will be applied and enforced. It will include the organizational development, restructuring and coordinating mechanisms necessary for the Department of Resources and Development to fulfill its mandate under the Act and provide the overarching vision and strategic context for the various outputs identified in this proposal. Institutionalization at state level will be realized through the establishment of multi-sectoral Biosecurity Councils under the respective governors and legislatures of each state. Each Council will be supported by its respective existing IAS Taskforce. Membership of IAS taskforces will be reviewed to ensure that each is appropriately representative of key stakeholder groups, including the national Quarantine Services Unit. Sustainable financing mechanisms will be an important part of this strategy, as will be how to institutionalize the modular Biosecurity Training Programme (see Output 2.2.1).

A key to financial sustainability will be the development of a cost recovery system for the entire border biosecurity apparatus, based on ‘users pay’ principles that are aligned to travel and trade. This will be informed by an analysis of what it costs to operate routine day-to-day screening services. An additional schedule of fees will be applied to any activities above and beyond standard operational procedures; and this schedule will be advertised so that importers and others can inform themselves of the costs in advance, for example, of conducting a risk assessment for the proposed importation of a novel species or taxon from a novel entry point. Such procedures should be in place at national and state levels and, ideally, for intra-state travel and trade between relatively isolated islands within states that have a known level of traffic between them, for example: between the outer island groups of Fais/Ulithi and Woleiai and the main island group of Yap State; between Pringelap and Pohnpei islands in Pohnpei State; and between the numerous islands/ island groups in Chuuk State.

- Feeding into this Strategy will be a review of what regulations, protocols and safeguards at national and state levels are needed to support the application of the new Biosecurity Act 2017. The review will also identify and assess remaining gaps in such areas as: marine and freshwater biosecurity; and harnessing the support of government agencies, corporate sector and civil society to define, acknowledge and undertake their share and responsibilities in controlling invasions by IAS. [**Output 1.1.2**]
- In order to fulfill its mandate with respect to the new Biosecurity Act, 2017, the Department of Resources & Development and its Quarantine Services Unit will need to progressively increase its staff resources using a competencies-based approach that is underpinned by sustainable financing mechanisms. The Quarantine Services Unit will be expanded into a fully fledged Biosecurity Authority with enhanced capacity to cover a full range of services that include: (i) inspection, interdiction, final disposition determination, treatment and quarantine at international and interstate air and sea ports; along with (ii) monitoring and controlling the spread of priority IAS that impact significantly on endemic and threatened native species, ecosystem functioning and food production in terrestrial, freshwater and marine environments [**Output 1.1.3**]. The latter will be achieved by a new Extension Service. Among its key roles will be coordination with state governments and their local communities, other Pacific nations and regional or Pacific-wide IAS initiatives.

The Extension Service will be community-based, operating at municipality levels, to provide technical support to landowners, farmers and fisherfolk on the identification and management of IAS. Such information will be publicly available via the new Biodiversity Information System (refer to Output 2.2.1), for which a mobile application is proposed to enable members of the public, as well as relevant government and private sectors, to better inform themselves, as well as provide a reporting facility (e.g. crowd sourcing) to assist national and state governments in monitoring the status and distribution of IAS.

- Very little information is available on the economic losses caused by IAS but impacts of pests and diseases on agriculture, forestry and marine/aquaculture production and supply chains are likely to be significant. The results of cost/benefit studies of priority IAS regarding their impacts versus interventions to reduce such impacts will inform the Biosecurity Strategy, training programme and project interventions, with respect to prioritization of screening and inspection procedures at entry ports and the work of the Extension Service. [**Output 1.1.4**]

28. Component 2: Raising awareness and strengthening capacity in IAS prevention and management

This component concerns raising awareness of IAS among all relevant government and corporate sectors, as well as civil society and visitors from overseas; together with strengthening the capacity of national and state governments, private sectors and individual custodians and managers of land and sea to safeguard native biodiversity, their ecosystems and

production systems from IAS. It includes knowledge management through the development of a national Biosecurity Information System, which will contribute knowledge for awareness raising, training and capacity building purposes under this component and to IAS prevention or spread under Component 3. Measures comprise:

- An IAS Communications Strategy and Action Plan will be developed at the start of the project to guide awareness raising among the different government and corporate sectors, civil society and visitors from overseas [**Output 2.1.1**]. This will also draw upon the Gender Strategy and Action Plan that will be included in the Project Document. The scope of the Communication Strategy will embrace communication between PMU and its implementing partners, existing or newly established mechanisms and platforms to support multi-sector collaboration on specific activities and associated deliverables (outputs), awareness raising about IAS (including the project's role) and outreach initiatives, and access to information and knowledge about IAS and their control and management (e.g. identification of IAS, biosecurity guidelines for border control, manuals for managing IAS in terrestrial and aquatic ecosystems). It will be accompanied by an Action Plan that will identify what should be communicated, to whom (which stakeholder groups), by what means and at what point during project implementation. This Action Plan will be reviewed and updated annually. The Strategy will be closely linked to the Biosecurity Information System and associated mobile application [**Outputs 2.3.1-2**].
- Development, implementation and institutionalization of a modular Biosecurity Training Programme in identification, monitoring, and prevention and control of the introduction and spread of IAS (including eradication) for Quarantine Services and partner agencies in sectors such as agriculture, forestry, fisheries, marine resources, tourism, port authorities, health, customs and immigration. The Training Programme will be operational within each state and build capacity commensurate with the expansion of Quarantine Services into a fully operational national Biosecurity Authority that is decentralized, as appropriate, and aligned with Biosecurity Councils established in each state. It will be developed in collaboration with the College of Micronesia in respective states, with modules tailored to cover the range of sector interests. The scope of the training programme will be sufficient to cover the needs of the project across multiple sectors, engaging with policy makers, enforcement agencies, and practitioners at community, commercial and government levels. The program will be modular, so that: (i) it can be tailored to meet specific interests according to sector and needs; and (ii) it can link up with existing training activities and related initiatives in a synergistic rather than duplicative manner. A training of trainers approach will be adopted wherever possible in the interests of sustainability, as for example in the case of enhancing the capacity of professionals in agriculture and tourism sectors. [**Output 2.2.1**]
- The College of Micronesia will be supported by the project to develop and operationalize a Certificate course in IAS Management for 'IAS Practitioners' in the respective states, based on taught and practical work over the course of one year. It is proposed to establish an IAS Extension Service²⁸, coordinated by a national-state IAS Coordination Office under the proposed national Biosecurity Authority and comprising cadres of certified IAS Practitioners and trainees within each state. Each state IAS Cadre will comprise members representative of every municipality and operate a central state-level call centre, manned voluntarily by trainees (students) undertaking their Certificate in IAS Management and supervised professionally by paid, certified IAS Practitioners. Callers will be able to obtain free advice about IAS over the telephone/mobile; and, if deemed necessary, followed up by a visit from a certified IAS Practitioner mobilized from their municipality in order to identify/confirm the presence of IAS and agree on management prescriptions in compliance with biosecurity protocols. Trainees will gain experience from certified IAS Practitioners by accompanying them in the field. [**Output 2.2.2**]
- A web-based knowledge management system will provide crucial support to the existing Quarantine Services Unit and emerging Biosecurity Authority in all aspects of their work, including: identification and monitoring the distribution of IAS; inspections and seizures of IAS at ports of entry, guidance on IAS governance and enforcement, management and eradication; networking within the biosecurity fraternity; and awareness raising among the other government sectors and the wider public. [**Output 2.3.1**]

²⁸This concept of an Extension Service, operating at municipality level and comprising a cadre of certified and trainee Practitioners in IAS Management, could be expanded and applied to other themes within the agricultural (and fisheries) sector, such as sustainable land and sea management, agro-chemical pollution and soil erosion. Generic outcomes would be: stronger working relations between government and educational sector; jobs for young people in their home/rural areas; and, hence, capacity building at community level. This initiative also links to Output 1.1.2, placing responsibility for IAS management on individual landowners and producers of food.

- It is also proposed to invest in the development of a smartphone application to enable landowners, farmers, government agencies, conservation NGOs and even visitors to access reliable information on the identification and distribution of IAS; and in return submit records, photos and reports of sightings and other observations on IAS. Such an application would link directly to the web-based Biosecurity Information System and call centre staff and volunteers would review the incoming information and follow up accordingly. Potentially, such an initiative could provide a vehicle for crowd-sourcing data to monitor the distribution of IAS for management purposes. Such an example is Plant Tracker, an initiative of government agencies in the U.K. (<http://www.plantracker.org.uk>). The feasibility of developing a mobile application for IAS will be explored during the PPG and followed up early on in project implementation with a review of other existing applications, such as Leaf Snap and iNaturalist. Regional and Pacific-wide interests among partners in developing such an application will also be explored to ensure that flexibility its further development is accomodated within the design. A service provider might be interested in funding such an application, particularly if the application came with a free sim card handed out to all incoming visitors to FSM. **[Output 2.3.2]**
- A range of knowledge products will be compiled including: best practice guidelines, based on experience gained and lessons learnt from Outcomes 3.1 and 3.2; training modlues, IAS identification guides, health and safety protocols associated with IAS interventions; and other materials compiled into a handbook for IAS practitioners; cost-benefit studies; and other significant outputs. **[Output 2.2.3]**
- **Note:** Both the Biosecurity Information System and its smartphone application might also be designed to be readily transferable elsewhere within Micronesia with respect to the IAS database of taxonomic names, species images and locations.

29. Component 3: Demonstrating best practices in safeguarding biodiversity and food production systems from IAS

This component is focused on demonstrating the practical application of the various outputs from Components 1 and 2 through a suite of measures to operationalize the National Biosecurity Strategy (Output 1.1.1), in line with priorities identified in the NISSAP and state IAS strategic action plans and emergency response plans, by: preventing the introduction of IAS through inspection and enforcement at international, inter-state and intra-island (within states) ports of entry; and managing the spread of established IAS in the wider land and seascape through control and eradication interventions. Measures comprise:

- Provision of adequate quarantine facilities and fumigation equipment (fixed and portable) at key international, inter-state and inter-island air and sea entry points. A tentative list of such equipment, costed at about US\$ 185,000, has been compiled by Quarantine Services. **[Output 3.1.1]**
- Quarantine Services expanded: officers deployed at all main international and inter-state air and sea ports of entry, adequately informed and equipped to identify IAS and, as necessary, fumigate incoming goods or quarantine living plants and animal. Offices will have ready access to the Biosecurity Information System, through their mobiles and/or other means. **[Output 3.1.2]**
- IAS Extension Service, comprising cadres of IAS certified Practitioners and trainees enrolled with the College of Micronesia in respective states, operationalized at municipality levels to advise and support landowners, farmers and members of the public in IAS identification and management. During project implementation and as part of formulating a National Biosecurity Strategy, this Extension Service will be examined in more detail to identify additional means of financing it over the long term, taking into account experience gained and lessons learnt. Other options to consider might include IAS insurance schemes or taxation of agricultural produce to provide such a service. **[Output 3.2.1]**
- IAS safeguards developed; mainstreamed across agriculture, fisheries, tourism and other sectors engaged in the GEF-5 FSM Ridge-to-Reef Project; and operationalized in selected priority protected areas as part of the land and seascape management regime planned by that project **[Output 3.2.2]**. This proposed project will provide an IAS filter to the GEF-5 project, which has not been designed to address IAS impacts (refer to paragraph 41) but will have multi-sector coordinating mechanisms in place, providing tangible opportunities for synergies between the two projects. Additional support will be provided by the IAS Extension Service.

30. The FSM Department of Resources and Development will be responsible for implementing the proposed project, supported by implementing partners within each of the States as indicated below:

National/State	Government Agency Implementing Partners
FSM	Department of Resources and Development (Implementing Partner)* Division of Resource Management and Development (i) Agriculture <ul style="list-style-type: none"> • Quarantine Services: Kosrae, Pohnpei, Chuuk and Yap Field Offices (ii) Marine Resources Unit
Kosrae State	Kosrae Island Resource Management Authority (focal point)
Pohnpei State	Department of Resources and Development (focal point)
Chuuk State	Environmental Protection Agency (focal point) Department of Agriculture (terrestrial sites) Department of Marine Resources (marine sites)
Yap State	Department of Resources and Development (focal point)

*Note that a new Biosecurity Authority is proposed, requiring some minor re-structuring within DRD.

31. The proposed project is aligned with the goal of the GEF-6 Biodiversity Strategy: to maintain globally significant biodiversity and the ecosystem goods and services it provides to society, through contributing both to conserving biodiversity and maintaining habitats in protected areas and to its conservation and sustainable use in production landscapes and seascapes. It is focused on the prevention of new alien species from being introduced to FSM via air and sea ports, and on eradicating or at least controlling priority IAS established in protected areas and in production systems. Thus, the project will contribute directly to the following focal area of the GEF-6 Biodiversity Strategy: BD-2 Program 4: Prevention, Control and Management of Invasive Alien Species.

32. It will also address three of the Aichi Biodiversity Targets through improved awareness about and responsibility towards the introduction and control of IAS by generating and disseminating knowledge and demonstrating best practice in managing IAS that threatens biodiversity in protected areas and in production landscapes and seascapes, including genetic diversity, and food security more widely. These targets are:

- **Aichi Biodiversity Target 9:** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.
- **Aichi Biodiversity Target 12:** By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- **Aichi Biodiversity Target 13:** By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

33. In terms of the UN 2030 Agenda for Sustainable Development, the project will contribute primarily to Sustainable Development Goals (SDGs) 14 and 15, as well as SDGs 2 and 5 to a more limited extent:

- **Goal 2:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture;
- **Goal 5:** Achieve gender equality and empower all women and girls;
- **Goal 14:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development;
- **Goal 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

34. The global benefit of the project will be reduced threats from IAS across 24,986 ha of protected areas, comprising 27 existing (7,598 ha) and 13 new protected areas (17,388 ha), in respect of GEF's replenishment target of 300 million hectares of improved management of landscapes and seascapes. The project's global benefit will embrace 10,033 ha of terrestrial landscape and 14,953 ha of seascape that is the subject of a GEF-5 ridge to reef project (refer to paragraph 41). This global benefit will be generated as a result of the project's suite of measures focused on preventing the introduction of IAS

through: increased awareness among the travelling public and inspection of passengers and goods at international, inter-state and inter-island (within states) ports of entry; and managing the spread of established IAS in the wider land and seascape through control and eradication interventions by land owners and managers (including farmers) supported by the new Extension Service (refer to paragraph 29). These statistics need to be reviewed during the PPG, as core target areas (i.e. protected areas) have only been broadly identified to date and no consideration of their surrounding landscape or seascape has been taken into account as yet. Likewise, specific target species, habitats and ecosystems that will benefit from project interventions will be identified during the PPG. They will certainly include target sites within the two ecoregions of global priority for conservation, Yap Tropical Dry Forest and the Carolines Tropical Moist Forest that embraces Kosrae, Pohnpei, Chuuk and the easternmost islands of Yap. The former ecoregion includes at least eight plant species, Yap monarch (*Monarcha godeffroyi*), Yap fruit bat (*Pteropus yapensis*) and Soong blind snake (*Ramphotyphlops adocetus*) that are all endemic to Yap. The latter includes unique montane cloud forests having the lowest elevation in the world, 13 endemic bird species, including the critically endangered Pohnpei mountain starling (*Aplonis pelzeni*), and three molluscs critically endangered on account of predation by introduced rats (*Rattus exulans* and *R. norvegicus*) and flatworm (*Platydemus manokwari*), of which two are endemic to Pohnpei (*Partula emersoni* and *P. guamensis*).

35. The GEF increment will be crucial to financing the interventions necessary to shift the current baseline from one of having limited border controls in place to prevent the introduction of IAS, little or no presence on the ground to eradicate or manage established IAS, and a moderately comprehensive set of IAS strategies and action plans that lie dormant due to lack of funds to a scenario of strengthened capacity in prevention and management of IAS across the FSM. Major investments are necessary to expand the existing Quarantine Services into a Biosecurity Authority, create a new Extension Service, support stakeholders with access to knowledge about IAS, their identification and management, and a nation-wide GIS to monitor their distribution and status. Benefits to local livelihoods will be examined in more detail and quantified during the PPG, particularly in relation to food security for which there is an indicator provided. The increment to be achieved from the additional GEF funds is summarized in the Table below.

Summary of baseline scenario	Summary of GEF scenario	GEF increment by project end
<ul style="list-style-type: none"> • Large body of information exists on IAS, including strategies, action plans and emergency response plans that lack funds to be implemented. • New Biosecurity Bill enacted into Law in April 2017, with provisions for coordination of responses to IAS at regional, national and state levels; creation of a biosecurity register; memoranda of understanding between key stakeholders; and issue of import permits and prohibition of imports. Limitations concern marine and freshwater biosecurity; and harnessing the support of government agencies, corporate sector and civil society to share in the responsibilities for controlling IAS. • FSM DRD directs 35% (US\$ 441,000) of operations budget to IAS activities. Its Quarantine Services is responsible for border control of official entry points but limited capacity: only interstate /international traffic screened. • Quarantine Services cooperate with state agencies and IAS Taskforces in each state. • Some additional IAS support forthcoming from USDA via its US Forest Service and NRCS. • Regional cooperation includes RISC, SPC, SPREP and PILN. 	<ul style="list-style-type: none"> • Biosecurity Authority emerges from Quarantine Services and includes new Extension Services to provide technical support to those own and/working in land/seascapes. • Biodiversity and livelihoods safeguarded from impact of IAS in terrestrial and marine ecosystems and in agricultural and fisheries production systems throughout FSM. • Sustainable financing mechanisms designed and operationalized to ensure full cost recovery of IAS border security at entry ports. • Transparent monitoring system established to track status and distribution of IAS, as well as monitor inspections at entry ports. 	<ul style="list-style-type: none"> • Quarantine Services evolved into fully functional, capable and financially secure Biosecurity Authority. • Onus (cost) of controlling and managing IAS shifted from government to those engaged in trade and travel by cost recovery system in place at entry ports; and shared by government with those owning/ harvesting land or sea resources. • Biosecurity governance structure is fully developed, institutionalized and mainstreamed across sectors (e.g. agriculture, tourism etc.) in wake of 2017 Biosecurity Law. • IAS Extension Service established and biodiversity safeguarded within 17,388 ha of protected areas amidst land/seascapes. • Local livelihoods benefit from a range of ecosystem goods and services, including improved food security – to be quantified during PPG after confirming target areas. • Web-based Biosecurity Information System (BIS) built and accessible to all IAS stakeholders, including mobile application for use in field. • Regional cooperation strengthened and supported by BIS, with potential for mainstreaming across Micronesia.

6) *innovation, sustainability and potential for scaling up.*

36. **Innovation** is addressed in three main ways: (i) transferring or sharing responsibility to/with those responsible for introducing IAS into FSM via its air and sea entry points, by recovering the costs of inspections through entry port taxes - this also has a sustainability dimension [**Output 1.1.2**]; establishing an Extension Service comprising a community-based cadre of IAS Practitioners, trained and certified under a collaborative scheme with the College of Micronesia, to provide support in rural areas (and seascapes) to control IAS having significant impacts on biodiversity and production systems [**Outputs 2.1.3 and 3.2.1**]; and (iii) introducing a smartphone application, linked to a web-based Biodiversity Information System, to enable the IAS fraternity, civil society and visitors to identify IAS for a wide range of purposes and to report sightings of them in being introduced via entry ports and in the wild [**Output 2.2.2**]. Further details can be found under these respective outputs.

37. **Sustainability** is crucially important in terms of ensuring that capacity building and financing of interventions are institutionalized by and preferable before the end of the project. Co-financing from government and conservation NGOs amounts to US\$ 18,766,262, with NGOs contributing 46% of this total. The co-financing budget indicates a certain level of sustainability within government agencies and this should be examined more closely during the PPG to identify the level of financing currently budgeted annually for biosecurity. Opportunities with the private sector will be further explored during the preparation of the project document. The project has been designed to ensure that training in biosecurity is institutionalized by government and in collaboration within the educational sector. A further element of sustainability has been included in the design by providing potential employment opportunities for those trained as IAS Practitioners to apply their newly acquired knowledge and skills within an IAS Extension Service. Cost recovery is identified as a key mechanism of sustaining an adequate level of screening and inspection of visitors, luggage and freight at entry ports, which will involve significant changes in awareness and attitude.

38. **Potential for upscaling** post-project is high in the following areas: (i) establishing a presence at all ports of entry (initially it will only be possible to prioritize the main air and sea ports); (ii) upscaling IAS management interventions from a selection of priority protected areas (to be determined during the PPG) to the entire network of 40 PAs; and, likewise, (iii) upscaling from a selection of production agricultural systems (farms) to entire land and seascapes. There will be plenty of scope and opportunity to replicate the experience gained and lessons learned from this project to other nations within Micronesia.

2. **Stakeholders**

Will project design include the participation of relevant stakeholders from [civil society organizations](#) (yes /no) and [indigenous peoples](#) (yes /no)?

Stakeholder	Role and Potential Involvement in Project
President's Sustainable Development and Climate Change Council	Set up under Presidential Executive Order (10 March 2017) to Establish the Council on Climate Change and Sustainable Development, this coordinating Council advises and makes recommendations to the President on climate change and sustainable development issues concerning FSM, with special reference to overseeing global environmental responsibilities and obligations including CBD, CCD and FCCC.
FSM Department of Resources & Development (DRD)	Comprises Agriculture, Fisheries and Tourism Units. Mandate includes fisheries development, including aquaculture and mariculture, and conservation; agricultural development, including quarantine regulations; and tourism policy and information. Quarantine is the responsibility of FSM Quarantine Services, within the Agriculture Unit, and there are Field Stations in each State. DRD will be the Implementing Partner for this project.
Office of Environment & Emergency Management	GEF Operational Focal Point. Mandate includes environment protection and disaster management responsibilities.
College of Micronesia (COM) - FSM	COM-FSM operates through its Cooperative Research & Extension Services on campuses within each state, with funding from FSM and State governments, as well as special project funding from US Department of Agriculture. Key program areas are aquaculture, small island agricultural systems and food, nutrition and health. Potential opportunity to contribute to awareness raising among farming and aquaculture sector; and to support provision and institutionalization of IAS training within member States. Key role in developing and implementing training programme.
Chuuk State Department of Agriculture	Control and eradication of terrestrial pests; CIST member; Implementing Partner at state level.

Chuuk State Department of Marine Resources	Control and eradication of aquatic pests; CIST member; Implementing Partner at state level.
Chuuk State Environment Protection Agency	Pesticide training, management and control; focal point for biodiversity and climate change activities; CIST Member; Implementing Partner at state level.
Kosrae Island Resource Management Authority (KIRMA)	Semi-autonomous agency that is the focal point for biodiversity and climate change. Its scope covers environmental protection, marine conservation and surveillance, forestry and GIS-related programs. Includes Environmental Education, Permitting and GIS, Forestry and Wildlife, Invasive Species and U&CF, and Marine Conservation and Surveillance divisions; KIST member; Focal Point; Implementing Partner at state level.
Kosrae State Department of Resources and Economic Affairs	State Agency with Agriculture and Marine Resources divisions; KIST members; Implementing Partner at state level; Implementing Partner at state level.
Pohnpei State Department of Resources & Development	State Agency and focal point for biodiversity, with Agriculture, Forestry and Marine Conservation divisions; iSTOP member; Implementing Partner at state level.
Pohnpei State Office of Fisheries & Aquaculture	Responsible for state marine resources development; iSTOP member; Implementing Partner at state level.
Pohnpei State Environment Protection Agency (EPA)	Semi-autonomous agency and focal point for climate change, covering environmental protection and serving as the regulatory agency for sanitation in Pohnpei State
Yap State Department of Resources & Development	Focal point for biodiversity. Its Division of Agriculture & Forestry (DAF) covers agriculture, livestock, and forests. Works closely with FSM Quarantine Services on export inspections and leads in the case of a terrestrial response; Division of Marine Resources Management manages IS in marine systems; YIST member; Implementing Partner at state level.
Yap State Environment Protection Agency	Semi-autonomous agency, which handles environment protection for Yap State; YIST member; Implementing Partner at state level.
Micronesia Conservation Trust	Non-government organization, which supports biodiversity conservation and related sustainable development for the people of Micronesia and operates within the jurisdiction of the Micronesia Challenge, one of its partners. Likely implementation support in field.
The Nature Conservancy - Micronesia	International non-government organization partner in conservation, which is a supporting partner to the Micronesia Challenge. Likely implementation support in field.
Conservation Society of Pohnpei	Pohnpei NGO managing education, marine and terrestrial programmes that include invasive species eradication. Serves as environment advocate for local communities and partners with local government agencies on biodiversity initiatives; Coordinator for Micronesia Chapter of Locally Marine Managed Areas; iSTOP Vice-Chair. Likely implementation support in field.
Island Food Community of Pohnpei (IFCP)	Pohnpei NGO that promotes research into indigenous food crops impacted by IAS, the identification of control measures, prioritization of management interventions and dissemination of acquired knowledge. Potential implementation support in field.
FSM Women's Council and State Chapters	Programs in conservation, education, health and cultural preservation – potential for IAS outreach among farming and horticultural groups.
Chuuk Conservation Society	Chuuk NGO, which serves as environment advocate for local communities and partners with local government agencies on biodiversity issues; CIST member. Likely implementation support in field.
Kosrae Conservation & Safety Organization	Kosrae NGO, which serves as environment advocate for local communities and partners with local government agencies on biodiversity issues; KIST member. Likely implementation support in field.
State Invasive Species Taskforces	Multi-organization taskforces within each state (CIST, iSTOP, KIST, YIST) to coordinate and cooperate on IAS issues within their respective states. Closely linked to project via Biosecurity Councils to be established in each State.
Micronesia Regional Invasive Species (RISC)	Its mission is to prevent the introduction of invasive species to islands across the region and control and reduce existing populations or, when feasible, eradicate these species through coordination of efforts throughout Micronesia. Key regional partner for coordinated actions on IAS.
Secretariat of the Pacific Community (SPC)	Pacific Regional inter-government organization serving as the principal scientific and technical organisation and supporting development since 1947. FSM is a member country. Potential source of technical assistance as well as promoting and facilitating Pacific-wide cooperation on controlling IAS.
Secretariat of the Pacific Regional Environmental Programme (SPREP)	Pacific Regional inter-government organization charged by the governments and administrations of the Pacific region with the protection and sustainable development of the region's environment. FSM is a member country. Similar role to SPC.

US Department of Agriculture (Natural Resources Conservation Service and Forest Service)	Through USDA Cooperative Agreement, these two US Federal Agencies provide technical assistance through grants and field support on forestry and soil conservation. Key role in supporting and demonstrating technical approaches to IAS control.
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3. ***Gender Equality and Women's Empowerment***

*Are issues on **gender equality** and **women's empowerment** taken into account? (yes /no .*

39. UNDP systematically integrates gender equality and a social inclusion perspective into programme/project planning and implementation. Project preparation will ensure that those trained through the project and target communities for outreach include participation of both sexes. Institutional development will be designed to ensure that gender is mainstreamed across the system, with mandatory representation of both sexes in decision-making and coordination mechanisms, and equal opportunities for training under Component 2 and engaging in demonstration activities under Component 3. The project will apply the relevant GEF and UNDP policies to promote and enhance roles and capacities for women in biosecurity and IAS management. Gender disaggregated target and baseline data will also be collected where appropriate, as part of the project results framework and monitoring plan. Further, the project will be expected to contribute positively to women and low income households by reducing the risks posed by IAS, many of which impact negatively on health, food security and livelihoods. More specifically, FSM's Department of Resources & Development will collaborate with the Department of Health and Social Affairs, who lead on gender issues, and engage with the various CSO partners who focus on youth, women and environment in each of the respective States. Such considerations will be elaborated in a Gender Strategy and Action Plan prepared during the PPG in consultation with the relevant interest groups and appended to the Project This Strategy will inform the IAS Communications Strategy to be prepared during the project's inception phase (**Output 2.1.1**).

4. **Risks**

Risks	Rating	Preventive Measures
Ability of government to finance biosecurity monitoring and enforcement at national and state levels and, therefore, long-term sustainability of project interventions.	Moderate	Expanding and consolidating government's capacity to address biosecurity needs in relation to IAS will be underpinned by institutionalizing many of the project's training, monitoring and enforcement interventions. This will require development and implementation of a long-term sustainable financing strategy, a key project output. Such a strategy will need to be based on developing a 'user pays' policy that can be applied to all commercial and private traffic by air and sea to recover costs of inspection, screening and enforcement measures in the four member States. Another policy measure will be to place the responsibility and onus of managing IAS on the producers (farmers and fisherfolk, for example) and landowners, with technical assistance provided by a new IAS Extension Service.
Engaging with the private sector and civil society	Moderate	This will be challenging as the sustainable solution is for those who travel and/or trade in goods between islands within FSM and overseas need to cover the additional costs of screening for IAS at points of entry to FSM and its individual islands. Raising awareness and understanding among civil society about IAS and individual/organisational responsibilities for their eradication or strict control will be crucially important to ensuring that biosecurity is prioritized in the National Strategic Development Plan.
Threats and risks associated with IAS are likely to be influenced by climate change	Moderate	Climate change may raise the threat of IAS by increasing the frequency/severity of fires, floods, etc., thereby decreasing ecosystem resilience and creating more favourable conditions for the establishment and spread of IAS. Design and establishment of a monitoring programme will include climatic parameters to better inform responses to changing levels of risk.
Environmental impacts arising from IAS interventions	Moderate	IAS interventions involving biocides and pesticides introduce risks to the environment, including animal and plant life, as well as human health either directly such as through inhalation, consumption and physical contact or indirectly such as via contamination of drinking water. Protocols are already in place with Quarantine Services but these will need to be consolidated and expanded in line with the upgrading of Quarantine Services to a Biosecurity Authority to ensure that procedures are comprehensively designed and articulated in line with the suite of IAS interventions likely to be used. This will be examined in more detail during the PPG with respect to present measures and future requirements, with necessary health and safety measures to be developed identified and included in the Project Document.

5. Coordination

40. The proposed project will complement and add significant value to the ongoing GEF financed, UNDP supported project: *Implementing an integrated ‘Ridge to Reef’ approach to enhance ecosystem services, to conserve globally important biodiversity and to sustain local livelihoods in the FSM related initiatives*. A key outcome will be integrated landscape management plans for each State, providing the opportunity for this proposed project to mainstream IAS safeguards multi-sectorally within each landscape plan. The project is being executed by the Office of Environment & Emergency Management (OEEM), with the Department of Resources and Development as a key Implementing Partner responsible for Component 2 on protected areas. Thus, it will be relatively straightforward to determine an appropriate coordination mechanism between the two projects during the PPG phase.

41. The ‘Ridge to Reef’ project does not include any over-riding interventions to eliminate or reduce IAS threats to terrestrial or marine biodiversity, either in protected areas or their surround land/seascapes, with the exception of rehabilitating some areas planted with alien species, notably *Acacia confusa*. Capacity building includes some training in the identification and eradication of IAS and pesticides certification. Thus, the proposed IAS project will provide the opportunity to mainstream IAS safeguards and management interventions across these land/seascapes and their constituent network of target sites, comprising 27 (7,598 ha) existing and 13 (17,388 ha) new protected areas²⁹. There will also be other synergies of benefit to the proposed project by way of mechanisms and partnerships established by the ‘Ridge to Reef’ project, such as an established framework of Implementing Partners to deliver project interventions at national level and in each of the 4 member States, the Multi-sector Planning Forum for integrated management planning, a revived Natural Resources Advisory Committee in each State, and CSO/community partnerships. The IAS project will also benefit from and further enhance the GIS established for profiling the distribution and status of biodiversity within each State and the ecological monitoring programme established for selective indicator species.

42. Partnership and coordination exists at the State level through the respective Invasive Species Taskforce and each presiding officer(s), along with the national Department of Development & Resources Plant and Animal Quarantine Specialist, is a member of the Micronesia Regional Invasive Species Council (<http://www.micronesiarisc.org/>). This Council will be involved in reviewing the Regional Biosecurity Plan for Micronesia and Hawaii with its US counterpart (National Invasive Species Council) and collaborating with Pacific-wide partners, namely the Pacific Invasives Partnership (<http://www.sprep.org/Pacific-Invasives-Partnership/invasive-partnerships>) and Pacific Invasives Learning Network. Elsewhere in the Pacific, the project will engage with other emerging GEF-financed IAS projects to foster South-South cooperation through the identification of opportunities for collaboration, exchange and scaling up of lessons learned. Opportunities include the UNDP-supported project in Fiji, recently approved in April 2017: *Building Capacities to Address Invasive Alien Species to Enhance the Chances of Long-term Survival of Terrestrial Endemic and Threatened Species on Taveuni Island and Surrounding Islets*; a Palau safeguards project just concluding its PPG; and a regional UNEP project for four countries. Opportunities to collaborate will be explored during the PPG.

6. Consistency with National Priorities

Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

43. The proposed project is consistent with a wide range of national and state strategies and plans that prioritize biosecurity in terms of establishing border control, quarantine, eradication and/or management programs to effectively protect FSM’s biodiversity, livelihoods, sustainable development and resilience to climate change from the impacts of invasive species, as outlined in the NISSAP (2016-2021). Such sentiments are mirrored in numerous strategies, action plans and emergency response plans prepared in the last decade or so by the respective State Invasive Species Taskforces (refer to paragraph 18); and biosecurity is one among 11 themes in FSM’s 2002 National Biodiversity Strategic Action Plan (NBSAP). However, many of these lack implementation as noted in FSM’s 5th National Report to the Convention on Biological Diversity (2014). An important task during the PPG, therefore, will be to review the 2007 Biosecurity Act, NISSAP and the latest NBSAP currently being finalised to ensure that project activities are aligned with current IAS priorities.

²⁹ 40% of the total coverage of 24,986 ha is terrestrial and 60% is marine.

44. IAS features in FSM's 2004-2023 Strategic Development Plan under the Agriculture Sector's Strategic Goal 4 - Promote environmentally sound and sustainable production; and under the Environment Sector's Strategic Goal 7 - Establish effective biosecurity (border control, quarantine and eradication) programs to effectively protect FSM's biodiversity from impacts of alien invasive species, for which the target is to eradicate 50% of alien species by 2020. The Plan notes that biosecurity issues have been updated in FSM's NISSAP; and that the Micronesia Biosecurity Plan is up for review in 2018 with FSM's US Federal counterparts (US National Invasive Species Council). The latter provides the project with a further collaborative opportunity.

7. Knowledge Management

45. Knowledge management is a key cross-cutting element of this project that is incorporated into Component 2, underpinning the awareness raising and capacity building outcomes. The Communications Strategy (Output 2.1.1) will identify key knowledge outputs and how knowledge, information and data will be distributed and made accessible to key stakeholders, for which a principle vehicle will be the project's Biodiversity Information System.

46. The two main thrusts to knowledge management are: (i) the Biosecurity Information System to support the identification, screening and monitoring of IAS at international and inter-state entry points by air and sea to FSM and its member States, with guidance on biosecurity legislation, regulations and policy; and (ii) an IAS GIS that will support monitoring of the status and spatial distribution of IAS established in the FSM, with guidance on identification and elimination or control measures. The former will be established by the project and the latter will be developed in cooperation with the 'Ridge to Reef' project to enhance or link up with its biodiversity GIS for land/seascapes (referred to above in Section 6).

47. Significant knowledge about IAS and their management already exists among Pacific island nations and the considerable experience in enforcement and management measures gained in such countries as Australia and New Zealand will also be used to inform project activities and, as appropriate, incorporated into best practice guidance. Following the Mid-Term Review it is proposed that the Communications Strategy be updated, having taken stock of MTR findings and lessons learned in order to establish consensus on a set of knowledge products (guidelines, best practices, lessons learnt) to generate and disseminate before the end of the project. It will be appropriate to collaborate with other projects and initiatives in generating these knowledge products.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT³⁰ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr Andrew Yatilman	Director and GEF OFP	Office of Environment & Emergency Management	08/29/2017

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies³¹ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu Executive Coordinator		09/01/2017	Michael Green Regional Technical	+44- 7810062030	michael.green@undp.org

³⁰ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

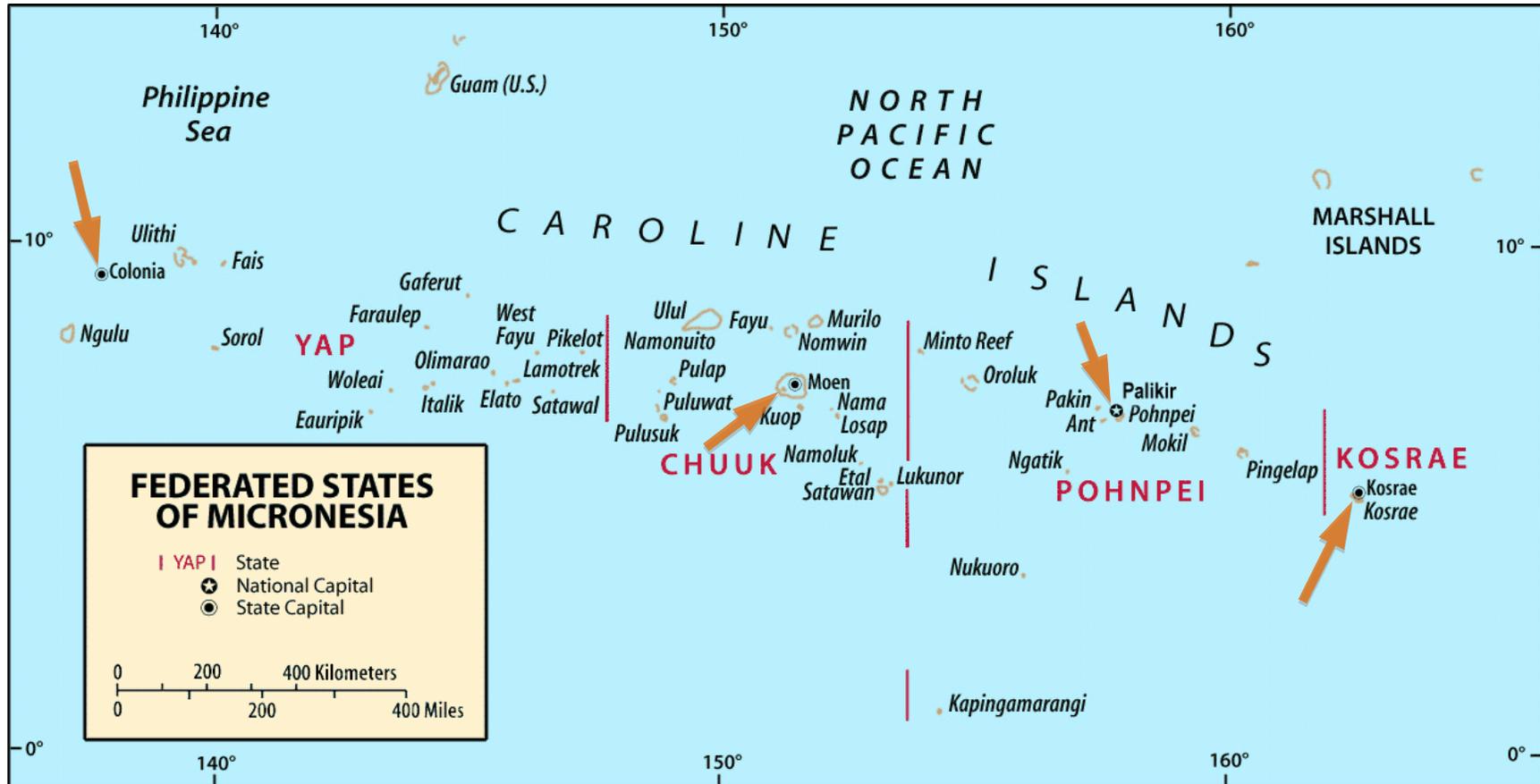
³¹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCCF, SCCF and CBIT

UNDP-GEF			Advisor, EBD, UNDP		
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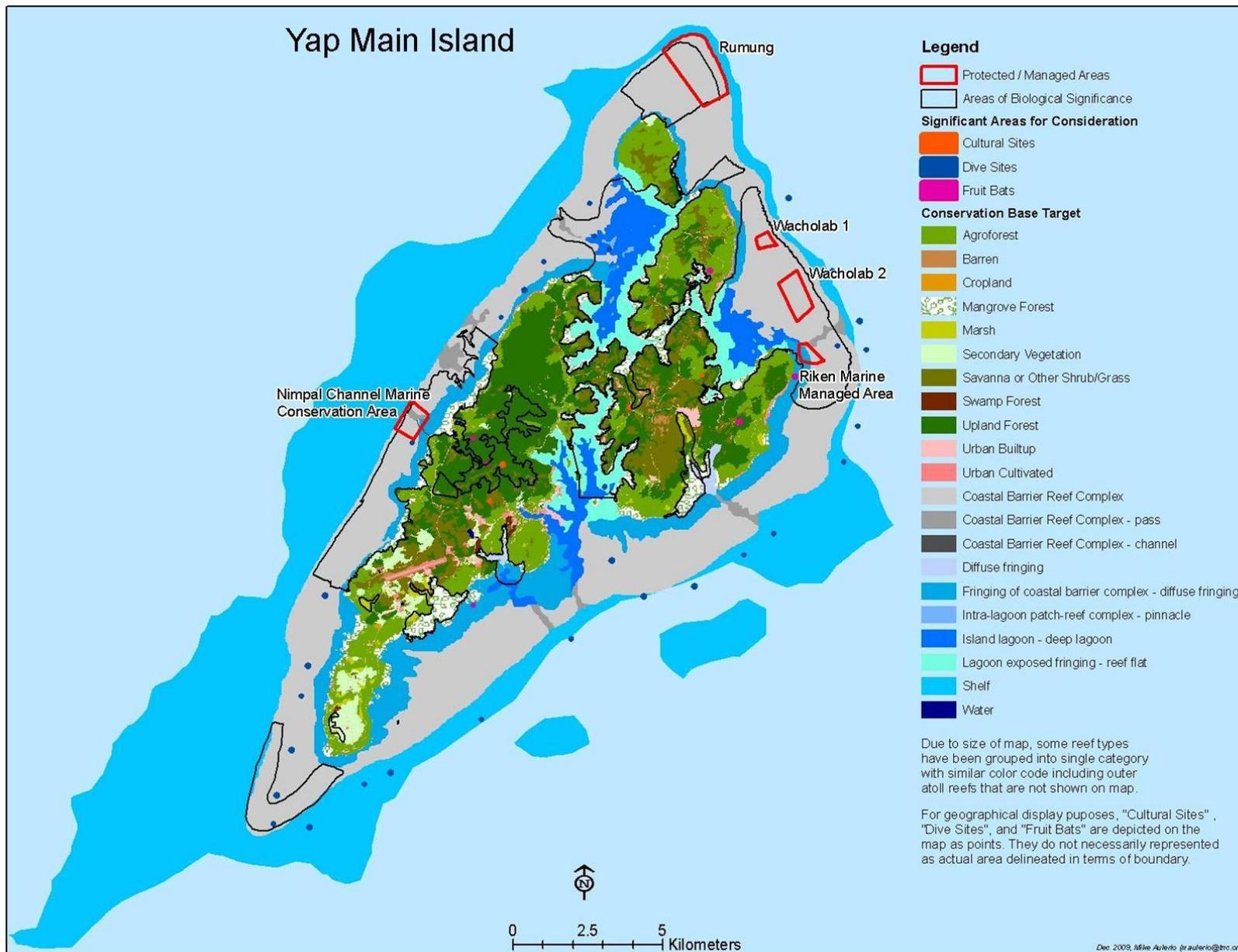
Annex 1: Maps

Note: These maps are taken from Annex 1 of the Ridge to Reef project document, having previously been adapted from *A blue print for conserving the biodiversity of the Federated States of Micronesia*, 2002.

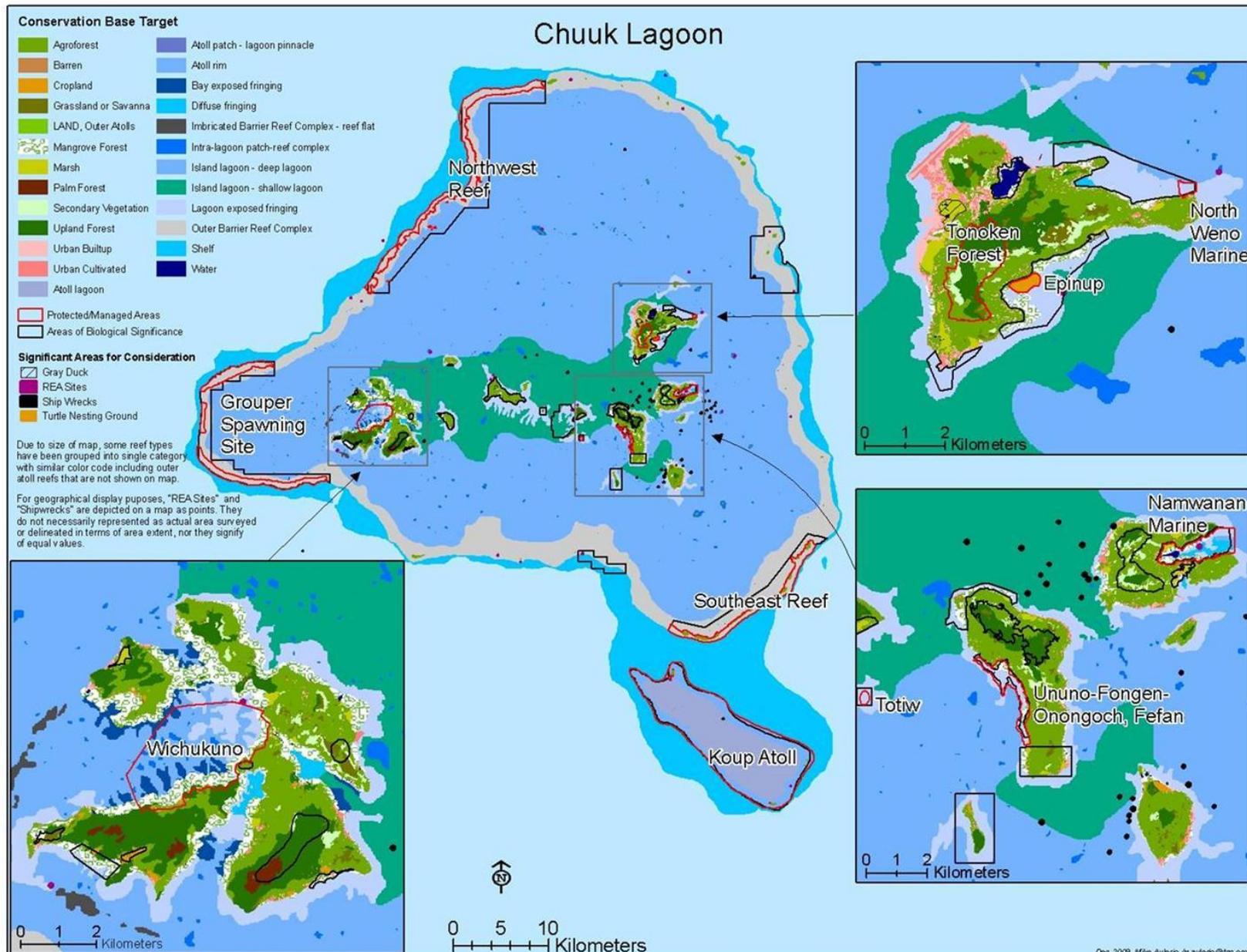
Map 1: Location of the four States and their respective High Islands within the Federated States of Micronesia



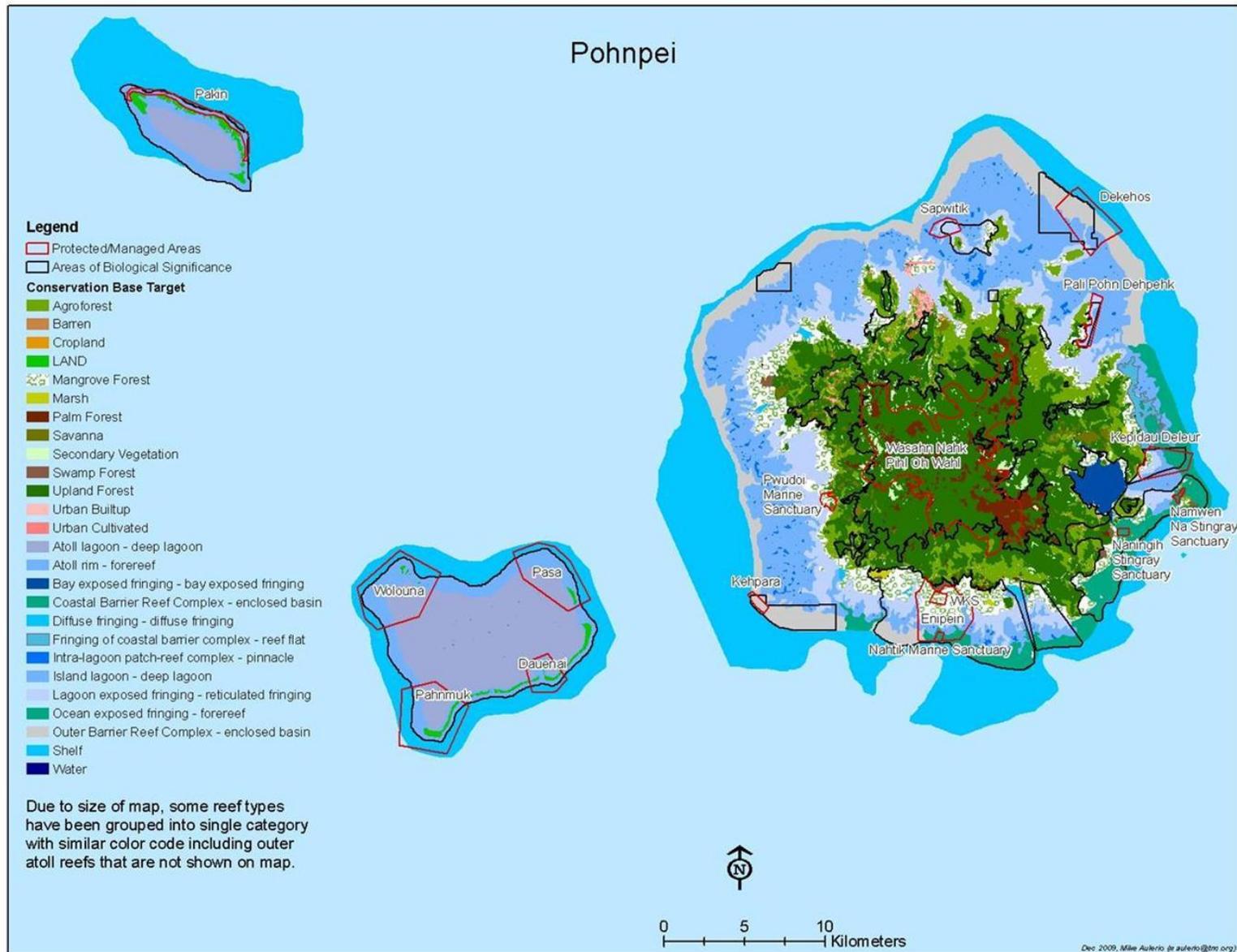
Map 2: Land-cover and protected areas of Yap Island and lagoon



Map 3: Land-cover and protected areas of Chuuk Lagoon Atoll



Map 4: Land-cover and protected areas of Pohnpei Island and lagoon



Map 5: Land-cover and protected areas of Kosrae Island and lagoon



Annex 2: National and State Priority IAS³²

IAS Scientific name (Common name)	Yap	Chuuk	Pohnpei	Kosrae	Comments
1. <i>Wasmannia auropunctata</i> (Little Fire Ant)	✓				Present in Guam, Melanesia – New Caledonia, Sol. Islands, Vanuatu; Polynesia – Wallis & Futuna, Tahiti, HI, possibly Tuvalu; Present in Northern and Southern America, West Indies, Mexico, Southern United States, Galapagos, West Africa, England, Canada, Los Angeles, Israel Present in Yap (reported to be present and confirmed to be present as of Aug. 2017).
2. <i>Solenopsis invicta</i> (Red Imported Fire Ant)					Present in some parts of the United States. Recently reported to be present in Japan
3. <i>Boiga irregularis</i> (Brown Treesnake)					Present in Guam, Solomon Islands and some parts of Australia
4. <i>Neotermes rainbow</i> (Coconut Termite)				✓	Also present in other islands of the Pacific
5. <i>Oryctes rhinoceros</i> (Coconut Rhinoceros Beetle)					Present in Guam, Palau, Solomon Islands, Papua New Guinea, Fiji, Samoa
6. <i>Bactrocera cucurbitae</i> (Melon fly)					Present in Guam, CNMI
7. <i>Eleutherodactylus coqui</i> (Coqui Frog)					
8. <i>Clerodendrum chinens</i> (Honolulu rose)		✓	✓		
9. Hull biofouling and ballast water transported organisms					Needs inspection and detection measures
10. Common Myna (Family Sturnidae)			✓		Present in Hawaii, Fiji, Samoa One bird is reported and confirmed to be present in Pohnpei - still at large.
11. <i>Oreochromis mossambicus</i> (Mozambique Tilapia)	✓		✓		
12. <i>Imperata cylindrical</i> (Cogon grass)	✓				
13. <i>Phyllenus noxius</i> (‘Black Sock’ fungal disease)	✓		✓	✓	
14. <i>Passer montanus</i> (Tree sparrow)	✓		✓		Also present in Guam
15. <i>Hypothenemus hampei</i> (Coffee Berry Borer)			✓		Also present in Hawaii and other Pacific Island locations

³² Provided courtesy of Quarantine Services Unit, Department of Resources & Development, FSM