



Federated States of Micronesia

**Strategic Planning Matrix
Environment**

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ENVIRONMENT STRATEGIC PLANNING MATRIX

Mission Statement:

Recognizing the critical importance of the FSM's natural environment to the health and prosperity of this and future generations of Micronesians, the Environment Sector shall support the protection of the Nation's environment and achieve sustainable development of its natural resources. These efforts include the development, adoption and enforcement of policies, laws, and regulations in pursuit of the above-stated goals; the reduction and prevention of environmental degradation and all forms of pollution; adaptation to climate change; the protection of biological diversity, including assurance of adequate legal and international treaty safeguards relating to the protection of botanical and other agro-ecological property (including traditional knowledge and practices) belonging to the Federated States of Micronesia; the establishment and management of conservation areas; environmental infrastructure planning, design construction, and operation; interaction and cooperation with private sectors; and promotion of increased involvement of citizens and traditional leaders of the Federated States of Micronesia in the process of conserving their country's natural resources.

Strategic Goal 1 Mainstream environmental considerations, including climate change, into national policy and planning as well as in all economic development activities		
Outcomes [measurement indicators]	Activities	Outputs
1(i) National environment functions centralized in an office/division to better coordinate and assist the states in all aspects of the protection and sustainable management of the nation's ecosystems and natural environment by 2004	1.1. Consolidate national environmental programs under a central office/division with responsibilities including coordination of environment and natural resource conservation activities and assistance to states in addressing their environmental implementation needs (Pohnpei does not support – current situation is adequate)	1.1.1. All national environmental programs combined into an office/division by end 2004 (PRES, NCON)
1(ii) National Sustainable Develop Strategy completed by 2005		1.1.2. Decentralize/transfer appropriate services/functions from the National to the State level (PRES, NCON)
1(iii) State BSAP/sustainable development		

<p>plans developed and implementation begun in all States by 2005</p> <p>1(iv) Land-use and zoning master plans developed and implemented for all four state population centers by 2006</p> <p>1(v) 100% of National and State financial assistance to municipalities for infrastructure and economic development promotes environmentally sustainable development practices by 2006</p> <p>1(vi) Environmental Impact Assessments (EIA) carried out for 100% of all government and non-government development activities to minimize adverse impacts of development on the nation's environment from 2005 onward</p> <p>1(vii) 100% of environmental violations successfully prosecuted by 2010</p> <p>1(viii) Climate change adaptation strategies that address unacceptable risks to the natural environment and built assets, including those arising from natural hazards such as weather and climate extremes, variability and change developed and implemented (climate-proofing) in all states by 2010</p>	<p>1.2. Strengthen the President's Council on Environmental Management and Sustainable Development (SD Council) through stronger state and NGO representation</p>	<p>1.2.1. Conduct quarterly meetings of the SD Council (NDEA)</p> <p>1.2.2. State representatives appointed by Governors and participating in all quarterly SD Council meetings (NDEA)</p> <p>1.2.3. Core staff (at least one professional and one administrative) assigned full-time to SD Council activities and state support (NDEA)</p> <p>1.2.4. Sustainable indicators program developed and piloted by the FSM Environment Office/Division and the SD Council for the national level by 2005 (NDEA, NGO)</p> <p>1.2.5. Sustainable indicators program piloted in one state by 2006 (NDEA, SGOV, SR&D, NGO)</p>
	<p>1.3. Develop combined State BSAP/ Sustainable Development Plans</p>	<p>1.3.1 Establish Natural Resource Stewardship Councils in at least one state, with community representatives designated by traditional leaders and communities. (NDEA, SGOV, SR&D, NGO)</p> <p>1.3.2 Establish and sustain biodiversity clearinghouse nodes in all States by 2005 (NDEA, SGOV, SR&D, NGO)</p> <p>1.3.3 Support to communities for environmentally sustainable projects/ programs and assistance to individuals with projects that utilize land and marine areas for highest value use provided in all States (NDEA, SGOV, SR&D, NGO)</p>

	<p>1.4. Improve land-use and sustainable development planning in urban centers</p>	<p>1.4.1. Land-use planning and zoning plans developed in all four urban centers (Lelu-Tofol, Kolonia, Weno, and Colonia) by 2007 (SGOV, SLEG, SR&D, MG)</p> <p>1.4.2. GIS (Geographic Information System) centers established and competently staffed in all four states with nodes in key government offices (Lands, Planning, EPA, Forestry, and Marine) (and College of Micronesia state campus?) by 2006 (SR&D, SEPA, SAFD, COM)</p> <p>1.4.3. Information compiled in a GIS system categorizes land and near shore waters according to their highest value (SR&D, SEPA, SAFD, COM)</p> <p>1.4.4. All key natural resource information (digital elevation model (DEM), soils, vegetation, rivers, wildlife populations, etc.) updated and digitized for each state by 2010 (SR&D, SEPA, SAFD, COM)</p>
	<p>1.5. Promote and support sustainable land use and development planning in rural areas and outer islands.</p>	<p>1.5.1. Pilot long-term vision and sustainable development plans developed for at least ?? communities/ municipalities in each state by 2006 (SGOV, SR&D, MG, NGO)</p> <p>1.5.2. Outreach and incentive scheme to encourage communities/municipalities to adopt environmentally friendly development alternatives developed and launched in at least one State by 2008 (SGOV, SLEG, SR&D, MG)</p> <p>1.5.3. Establish and implement regular (quarterly) consultation process between state government and traditional leader councils in Yap, Pohnpei, and Chuuk (SGOV, SLEG)</p> <p>1.5.4. Identify and promote at least 2 traditional sustainable resource management practices in each state (SR&D, SMRD, SAFD)</p>

	<p>1.6. Strengthen State Environment Protection agencies to better assess development projects, and enforce and prosecute offenders</p>	<p>1.6.1. All four State EPA Boards fully trained in environmental protection and sustainable development (NHHS, SEPA)</p> <p>1.6.2. One lawyer/prosecutor recruited and hired to support each State EPA by 2006 (SGOV, SLEG, SEPA)</p> <p>1.6.3. Double the EPA staff in each State designated as full-time enforcement officers by 2005(SEPA)</p> <p>1.6.4. EPA enforcement officers in all States trained in legal procedures, evidence handling, case development, etc. by 2006 (SAG, SEPA)</p> <p>1.6.5. EIA legislation improved and strengthened in all States by 2006 (SGOV, SLEG, SEPA)</p> <p>1.6.6. National standards for Environmental Impact Assessments & clearinghouse & standards for EIA expertise developed by 2006</p> <p>1.6.7. Roster of certified technical assistance for EIAs and other environmental planning by 2006</p> <p>1.6.8. Consortium of local and outside expertise to conduct EIAs by 2006</p> <p>1.6.9. Successful prosecutions for pollution, illegal earthmoving/landfill, and other infringements of environmental laws and regulations increased by ?? % by 2006 (SEPA, SAG)</p> <p>1.6.10. Laboratory facilities improved in all four states to handle basic environmental contamination testing of water and soil (NHHS, SEPA) by 2006</p>
	<p>1.7. Revamp existing State development review processes (including foreign investment) in all states to take into account environmental considerations and community input at all stages of project review</p>	<p>1.7.1. Development review processes with strong environmental criteria and involving community input adopted in two states by 2006 (SGOV, SLEG, SEPA, NGO)</p>

	1.8. Draft necessary implementing legislation for international conventions to which the FSM is already a party	1.8.1.National legislation developed and passed to support FSM commitments under all major international environment conventions – Climate Change, Biodiversity, Desertification, Transport of Hazardous Wastes, etc. by 2008 (NDEA, NHHS, SGOV, SLEG, SR&D)
	1.9.Develop and implement integrated coastal environmental and resource management plans to enhance resilience of coastal and other ecosystems to extreme hazards exacerbated by climate variability and sea level rise.	1.9.1.Coastal management plans developed for four state centers by 2008 (SGOV, SRMD, MG, NGO)
	1.10 Integrate considerations of climate change and sea-level rise in strategic and operational (e.g. land use) planning for future development, including that related to structures, infrastructure, and critical assets supporting social and other services	1.10.1 Existing facilities and infrastructure "climate-proofing" assessments and improvement plans developed for all States by 2010 (SGOV, SR&D, MG) 1.10.2 100 % of new government facilities and infrastructure designed and constructed to be "climate-proof" from 2005 onwards (PRES, NCON, SGOV, SLEG, MG)

2 Improve and Enhance the Human Environment (Improve waste management (reduce, recycle, reuse) and pollution control)

Outcomes [measurement indicators]	Activities	Outputs
<p>Ratification of Stockholm POPs Convention by the National Congress by 2004</p> <p>Importation of POPs into the FSM reduced by 70 % by 2010</p> <p>Solid wastes reduced by at least 10 % in all states, through reduced imports, recycling, and other methods by 2010</p> <p>Safe solid waste disposal sites designated, established and managed in 100% of State centers and 50% of rural municipalities by 2010</p> <p>At least 50% of households in urban areas served by effective public sewage treatment plants by 2010</p> <p>100% of urban households and 50% of rural households with access to sanitary latrines by 2010</p> <p>Coastal marine water quality (measured by ppm fecal coliform) around urban centers improved by 100% by 2008</p> <p>100% of FSM communities will have ample access to safe drinking water supplies by 2020</p> <p>Increase preparedness for pollution emergencies (oil spills, chemical leakages, etc.) in all States by</p>	<p>2.1 Limit and control importation and transport of polluting and hazardous substances into and within the FSM</p>	<p>2.1.1 Stockholm POPs Convention ratified by FSM Congress by 2004</p> <p>2.1.2 National laws and regulations controlling trans-boundary pollution and transport of hazardous substances adopted by 2005 (PRES, NCON, NHHS)</p> <p>2.1.3 All imports of ozone-depleting substances (such as CFCs and including other substances not yet determined) prohibited from 2005 onwards (PRES, NCON, NHHS)</p> <p>2.1.4 National and State legislation to ban the import of POPs (persistent organic pollutants including polychlorinated biphenyls (PCBs)) and other hazardous chemicals adopted and enforced by 2006 ((PRES, NCON, NHHS, SGOV, SLEG, SEPA)</p> <p>2.1.5 At least one state bans import of Styrofoam products and/or plastic bags by 2006 (SGOV, SLEG, SEPA)</p> <p>2.1.6 At least one local handicraft/industry within FSM designing and developing shopping bags (which could also be sold for tourists as souvenirs from FSM) by 2006 (SEPA, SR&D)</p>

<p>50% by 2010</p> <p>Reduce damage to natural resources and human infrastructure and health from local pollution emergencies (in terms of dollar loss) by ?? % by 2010</p>	<p>2.2 Establish and enforce national minimum standards for pollution and hazardous wastes, including POPS</p>	<p>2.2.1 National Implementation Plan for POPs completed by 2005 (NHHS, SEPA)</p> <p>2.2.2 Central temporary storage site for hazardous wastes designated and all hazardous wastes stored until they can be properly disposed of in all States (SEPA)</p> <p>2.2.3 All existing POPs in the FSM identified and safely disposed of (through AusAID assistance program) by 2006 (NHHS, SEPA)</p> <p>2.2.4 Minimum pollution standards for imported vehicles adopted and enforced by 2006 (NHHS, SEPA)</p> <p>2.2.5 Import of all motor vehicles manufactured before 1996 prohibited (due to global ban on CFCs) (PRES, NCON, NDEA, SGOV, SLEG)</p>
	<p>2.3 Assess contaminated (e.g., oil, heavy metals, PCBs) lands in all States and undertake clean up operations</p>	<p>2.3.1 Inventory and assessment of contaminated lands in all States completed by 2005 (NHHS, SEPA)</p> <p>2.3.2 Clean up plans developed and implementation begun by 2006 (NHHS, SEPA, MG)</p>

	<p>2.4 Promote the development and effective use of waste reduction initiatives, solid waste collection systems, and recycling programs for aluminum, glass, and paper in all state centers</p>	<p>2.4.1. Develop Integrated Waste Management Plan focusing on source reduction, reuse, recycling, composting, land filling, incineration, and disposal of hazardous wastes all States by 2010 (SEPA, MG)</p> <p>2.4.2. Waste management and reduction campaigns conducted in all States by 2006 (SEPA, MG, NGO)</p> <p>2.4.3. Hazardous waste (waste oil, batteries, etc.) collection services established in one State by 2006</p> <p>2.4.4. Solid waste collection services serving 75 % of the population in all State urban centers by 2006 (SEPA, MG)</p> <p>2.4.1 50% of solid waste collection services privately-managed by 2008 (SEPA)</p> <p>2.4.2 Aluminum recycling centers established and operating in at least two states by 2006 (SEPA, MG)</p> <p>2.4.3 Glass recycling centers established and operating in at least two states by 2006 (SEPA, MG)</p> <p>2.4.4 100% of government office aluminum, glass, and paper wastes are recycled by 2008 (PRES, NCON, NHHS, SGOV, SLEG, SEPA, MG)</p> <p>2.4.5 80 % of imported aluminum cans recycled nationwide by 2006 (NHHS, SEPA)</p>
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	<p>2.5 Designate, establish and/or upgrade, and manage easily accessible safe waste disposal sites on all populated islands, and encourage their effective use</p>	<p>2.5.1 All four state urban centers will improve or establish and properly manage a designated waste disposal site (separating hazardous wastes, plastic or other impervious liner, composting, covering with soil, etc) by 2010 (SLEG, SEPA, MG)</p> <p>2.5.2 ?? % of the nation's outlying municipalities will improve or establish and properly manage a designated waste disposal site (separating hazardous wastes, plastic or other impervious liner, composting, covering with soil, etc) by 2020 (SLEG, SEPA, MG)</p> <p>2.5.3 Private companies will manage 50% of waste disposal sites (SGOV, SLEG, SEPA, MG)</p>
	<p>2.6 Remove and/or recycle abandoned cars and other bulky solid wastes (computers, air conditioners, stereos, microwaves, washing machines, and other items with electronic components that require special disposal) on all islands</p>	<p>2.6.1 At least two States launch a fund financed by a tax on vehicle importers to finance the cost of removing abandoned vehicles by 2006 (SGOV, SLEG, SEPA)</p> <p>2.6.2 All abandoned vehicles will be removed from public areas and safely disposed of (including use as artificial reefs) in all States by 2008 (SEPA, MG)</p> <p>2.6.3 Tax incentive created to encourage local or foreign entrepreneur to crush vehicles and export them to Asia for the scrap metal market (NCON, NDEA, SGOV, SLEG, SEPA)</p>
	<p>2.7 Improve sewage treatment facilities in main population centers and resite sewage discharge locations outside the barrier reefs to limit negative impacts on the marine environment in all state centers</p>	<p>2.7.1 Increase the number of homes with connection to sewage system in urban centers to ?? % by 2006 (SPUC)</p> <p>2.7.2 Reduce to ?? % the amount of untreated sewage discharge into lagoons in all States by 2008 (SPUC, SEPA)</p>
	<p>2.8 Develop and implement urban storm water management plans in urban centers</p>	<p>2.8.1 Storm water devices in urban centers (eg litter traps, sediment traps, oil/water separators) installed and/or improved in all State centers by 2008</p>

	<p>2.9 Provide and encourage the use of sanitary sewage disposal in all rural areas (septic tanks, water seal toilets, composting toilets, etc.)</p>	<p>2.9.1 ?? % of households in all States will have access to some form of sanitary latrines (temporary or permanent) by 2010 (NHHS, SEPA)</p>
	<p>2.10 Improve management of surface catchments and aquifers to meet projected water supply demands, including educational programs for landowners and other key stakeholders</p>	<p>2.10.1 Limited-access Watershed Forest Reserves established above ?? % of village water systems catchments on high islands by 2010 (SGOV, SLEG, SEPA, SAFD, MG)</p> <p>2.10.2 Increase to ?? % the number of households connected to a safe water supply system in all States by 2006 (SEPA, MG)</p> <p>2.10.3 Decrease by ?? % levels of contamination of groundwater aquifers and surface waters by 2010 (SEPA, MG)</p> <p>2.10.4 Watershed management fund from public water system revenues established in at least one state by 2006 (SGOV, SAFD, SPUC, NGO)</p> <p>2.10.5 In partnership with USGS and WERI, reestablish and monitor a system of stream gauges in all four States by 2006 (NDEA, SR&D, SEPA, SPUC)</p>
	<p>2.11 Continue to improve and extend centralized water systems in urban centers, and improve community water systems in rural areas to assure access to safe drinking water supplies.</p>	<p>2.11.1 Public water systems extended to ?? additional households in each main island by 2006 (SPUC)</p> <p>2.11.2 Water subsidies eliminated in all States by 2010 (SGOV, SLEG, SPUC)</p> <p>2.11.3 ?? % of FSM rural households have access to safe drinking water (including roof catchment, sand filtering, and other low-cost, low tech methods) by 2010 (SEPA)</p> <p>2.11.4 Low tech solar desalination plants are established on at least 4 populated outer islands in each FSM State by 2008 (SLEG, SEPA)</p>



	<p>2.12 Increase preparedness and skills/capacity of relevant government and private sector agencies to rapidly respond to pollution emergencies (e.g., oil spills, ship groundings, natural disasters, etc)</p>	<p>2.12.1 At least two states will establish and train an inter-agency pollution emergency rapid response team by 2006 (NHHS, SEPA)</p> <p>2.12.2 Develop and implement legislation for the prevention, control and removal of oil spills in all States by 2008 (NHHS, SEPA)</p> <p>2.12.3 Oil spill contingency plans developed and implemented in all States by 2006 (NHHS, SEPA)</p> <p>2.12.4 National response plan to large oil spill events developed by 2006 (NHHS, SEPA)</p> <p>2.12.5 Develop methods of waste/spilled oil collection and disposal in all States by 2008 (NHHS, SEPA)</p>
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3 Reduce energy use and convert to renewable energy sources / Minimize emission of greenhouse gases		
Outcomes [measurement indicators]	Activities	Outputs
<p>3.2. Decrease the import and use of imported petroleum fuels by 50% by 2020</p> <p>3.3. ?? % of electricity in urban centers and ?? % in rural areas will be generated using renewable energy sources by 2020</p> <p>3.4. 100% of new public and 50% of private buildings in the FSM will meet US standards for energy-efficiency by 2006</p> <p>3.5. Private motor vehicle ownership/number of vehicles will</p>	<p>3.1 Decrease the use of imported petroleum fuels through improved energy efficiency, energy conservation, elimination of energy subsidies, and public education.</p>	<p>3.1.1 100% of all housing development funded by the US or FSM and State Governments shall meet minimum US standards for energy efficiency from 2006 onwards (NDEA, SHA, USDARD)</p> <p>3.1.2 All electricity subsidies in the FSM eliminated by 2010 (SGOV, SLEG, SPUC)</p> <p>3.1.3 All states fully enforce new pollution standards through existing vehicle inspection and maintenance programs from 2006 onwards (SEPA, SPSP)</p> <p>3.1.4 100% public and private motor vehicles in the FSM will meet minimum efficiency and pollution standards by 2006 (NDEA, NHHS, SPSP, SEPA)</p> <p>3.1.5 100% of energy generation in the FSM will meet USEPA and other relevant standards by 2008 (SDEA, SPUC)</p>

<p>decrease by ?? % by 2010</p> <p>3.6. The FSM will have a net gain of area covered by forests between now and 2020</p> <p>3.7. The FSM will have a net gain of area and health status of coral reefs between now and 2020</p> <p>3.8. The FSM will remain a net importer of greenhouse gases through 2020</p>	<p>3.2. Provide public transportation in State population centers and discourage private vehicle use, including through educational programs</p>	<p>3.2.1 At least one state will establish a public transportation system on the main island which will be regularly used by at least 30% of the island's population by 2010 (SGOV, SLEG)</p> <p>3.2.2 Vehicle ownership per capita will decrease by ??% by 2010 (NCON, NDEA, SGOV, SLEG)</p> <p>3.2.3 Cycling paths will be established in one urban center by 2008 (SLEG, MG)</p>
	<p>3.3. Increase the use of solar power, wind, and/or solar/wind hybrids for alternative power generation schemes, especially in rural and remote communities, through incentives and public education</p>	<p>3.3.1 Solar and/or wind power systems will be established and operating on at least two outer islands in each state by 2008 (EU-funded energy project) (NDEA, SGOV, SPUC)</p>
	<p>3.4. Provide incentives for the use of alternative and renewable energy sources and energy efficiency mechanisms in government and private sector buildings and development projects</p>	<p>3.4.1 100% of new public buildings will be energy efficient from 2005 onwards (PRES, NCON, SGOV, SLEG, MG)</p> <p>3.4.2 New public buildings will integrate at least one alternative energy source (solar, wind, hydro-electric) to generate at least ?? % of energy needs (PRES, NCON, SGOV, SLEG, MG)</p> <p>3.4.3 ?? % of existing public buildings will be refurbished with energy efficiency mechanisms by 2010 (PRES, NCON, SGOV, SLEG, MG)</p>

	<p>3.5. Undertake planning, regulatory, educational and other initiatives that will ensure the preservation of remaining native forests and agroforests and ensure reforestation for watershed protection and as a carbon sink</p>	<p>3.5.1 National government, in concurrence with all States, adopts policy of no net loss of forests and mangroves by 2006 (PRES, NDEA, NCON, SGOV, SAFD)</p> <p>3.5.2 Limited-access Watershed Forest Reserves established above ?? % of village water system catchments on high islands by 2010 (SGOV, SLEG, SEPA, SAFD, MG, NGO)</p> <p>3.5.3 Reforestation will be undertaken successfully in at least 50% of the nation's degraded watershed areas by 2020 (SGOV, SLEG, SAFD, MG, USDAFS)</p> <p>3.5.4 Ban or gradual ban of use of mangroves for fuel wood in all States adopted and enforced by 2006 (SGOV, SLEG, SAFD, MG, USDAFS)</p>
	<p>3.6. Undertake educational and other initiatives that will prevent the degradation and destruction of coral reefs</p>	<p>3.6.1 National government, in concurrence with all States, adopts policy of no net loss of coral reefs by 2006 (PRES, NCON, NDEA, SGOV, USDOJ)</p>
	<p>3.7. Upgrade local capacity to carry out operation and maintenance of all renewable energy hardware</p>	<p>3.7.1 Local utilities and private sector staff in all States able to operate and maintain renewable energy hardware by 2008 (SDEA, SPUC)</p>

4 Enhance the benefits of sustainable use of the FSM's genetic resources and ensure benefits derived are fairly shared amongst stakeholders		
Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) Access to genetic resources in the FSM enhanced to support economic development and improved quality of life</p> <p>1(ii) Fully document traditional knowledge and practices pertaining to the FSM's genetic resources by 2020</p> <p>1(iii) All research on the FSM's traditional knowledge and genetic resources is permitted and monitored to ensure that benefits are equitably shared by 2006</p>	<p>4.1 Draft and adopt mechanisms and legal framework regulating access to traditional knowledge, other forms of intellectual property, and genetic resources in the FSM so that the value of these resources is preserved for FSM citizens</p>	<p>4.1.1 National legislation adopted protecting the FSM's biodiversity and intellectual property and ensuring equitable sharing of benefits from any utilization, including enforcement protocol and penalties, by 2006 (NCON, NAG, NDEA, SGOV, SLEG)</p> <p>4.1.2 National bio-prospecting coordinating expert panel established by 2005 (NAG, NDEA, COM, SGOV, SAG, SR&D, MG, NGO)</p> <p>4.1.3 Process for the collection of biological specimens needed for scientific studies which complies with international regulations on the transport of biological specimens established by 2005 (NCON, NAG, NDEA, COM, SGOV, SLEG)</p> <p>4.1.4 Model genetic access agreement negotiated and completed between the National and at least one State government and one private sector firm by 2008 (NAG, NDEA, SGOV, SAG, SR&D, MG, NGO)</p>

	<p>4.2 Encourage and assist individuals, families and communities to secure their traditional knowledge and enhance it where appropriate</p>	<p>4.2.1 All State Foresters, and State Marine Resources and Agriculture Chiefs trained in ethnobotany and genetic access and benefit sharing by 2006 (NDEA, COM, SAFS)</p> <p>4.2.2 Capacity of local staff in archaeology, museum/ curator, and other indigenous knowledge-based disciplines improved in all States by 2008 (NDEA, COM, SAFS, SHPO)</p> <p>4.2.3 Traditional knowledge databases established and maintained in all states using World Intellectual Property Organization's (WIPO) recommended protocol by 2006 (NDEA, SAFD, SHPO)</p> <p>4.2.4 Classes/training in ethnobotany and related subjects offered at College of Micronesia campuses in 2 States by 2006 (NDEA, COM, SAFD)</p>
	<p>4.3 Document, improve, and enforce the current national research permitting process to assure that intellectual property rights and genetic resources are protected</p>	<p>4.3.1 100% of research on the FSM's traditional knowledge and genetic resources is approved and monitored by the FSM National Government and respects the nation's policies in this regard by 2008 (NDEA, SR&D, SHPO)</p> <p>4.3.2 Develop and implement a scientific code of conduct for all biodiversity and bioprospecting research in the FSM (NDEA, SR&D, SHPO, SEPA, NGO)</p> <p>4.3.3 Research permit process that includes provisions for hiring local associates in order to assure the local capacity is developed and supported in conjunction with research on genetic resources and traditional knowledge (NBSAP) for permitting adopted by 2008 (NDEA, SR&D, SHPO, SEPA, NGO)</p>

5 Manage and Protect the Nation's Natural Environment/Protect, conserve, and sustainably manage a full and functional representation of the FSM's marine, freshwater, and terrestrial ecosystems

Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) A nation-wide system of community-led marine, freshwater, and terrestrial conservation areas where special measures are enforced to conserve biological diversity is developed and implemented by 2010</p> <p>1(ii) Conservation areas contribute at least ?? % of the total national economy through successful compatible enterprises including ecotourism, non-timber forest products, and mariculture.</p> <p>1(iii) At least 20% of the nation's coral reefs are protected as "no-take" reserves by 2020</p> <p>1(iv) Deforestation/Agricultural conversion rates are decreased to 0% by 2010</p> <p>1(v) No plant or animal species endemic to the FSM will go extinct, and endangered and threatened species status will improve between now and 2020</p> <p>1(vi) Comprehensive nation-wide biodiversity health and threat abatement monitoring program established and implemented by 2008</p>	<p>5.1 Assist states, municipalities and communities to identify high priority "areas of biological significance", and support the development and implementation of conservation management plans for these areas</p>	<p>5.1.1 National guidelines for the selection, establishment, and management of protected areas are developed and approved by three out of four states by 2007 (NDEA, SR&D, SAFD, SMRD, NGO)</p> <p>5.1.2 Genetic resources, natural communities & ecosystems inventoried and support provided for state biodiversity nodes by 2006 (NDEA, SR&D, SAFD, SMRD, NGO)</p> <p>5.1.3 50% of government and NGO conservation area managers are trained in, adopt, and apply conservation area planning methods for their specific sites by 2008 (NDEA, SR&D, SAFD, SMRD, NGO, MCT)</p> <p>5.1.4 50% of the FSM municipalities legally designate at least one marine or terrestrial site (using the ABS sites identified in ecoregional plan developed under the NBSAP) as a conservation area by 2010 (NDEA, SR&D, SAFD, SMRD, MG, NGO, MCT)</p> <p>5.1.5 Limited-access Watershed Forest Reserves established above ?? % of village water system catchments on high islands by 2010 (SGOV, SLEG, SEPA, SAFD, MG, NGO)</p> <p>5.1.6 Deforestation/Agricultural land conversion rates will decrease by at least 50% on all high islands in the FSM by 2006 (NDEA, SR&D, SAFD, NGO)</p>

	<p>5.2 Establish and enforce biologically connected marine protected area networks in all four states with the goal of protecting at least 20% of the FSM's reefs in no-take reserves</p>	<p>5.2.1 Rapid marine resource assessments carried out in 100% of the high island reefs and 25% of the outer island reefs by 2010 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.2.2 Biological reef connectivity studies undertaken and completed in at least two states by 2010 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.2.3 Reef resilience to climate change-caused coral bleaching will be integrated into the MPA network design process in at least one state 2010 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.2.4 At least two Municipal governments in each state will successfully manage and enforce a conservation area in their locale, in partnership with traditional leaders and State government by 2008 (NDEA, SAG, SMRD, COM, MG, NGO, MCT)</p> <p>5.2.5 Successful prosecutions for infringement of laws designating and managing of conservation areas will be increased by ?? % by 2006 (NDEA, SAG, SMRD, COM, MG, NGO)</p>
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	<p>5.3 Develop and implement programs/policies that recognize, promote, and support community ownership and stewardship of natural resources and support for natural areas in all states, including environmentally compatible economic development enterprises.</p>	<p>5.3.1 With National government assistance, State BSAPS completed for all four states and implementation begun (NDEA, SR&D, SMRD, MG, SAFD, NGO)</p> <p>5.3.2 Sustainable timber harvest determined FSM forests types and unsustainable logging and logging which deprives the culture of the natural resources it needs for its materials culture (traditional houses, canoes, etc.) controlled in all States by 2008 (NDEA, SR&D, SMRD, MG, SAFD, NGO)</p> <p>5.3.3 Policies encouraging & supporting in-situ conservation of traditional agrobiodiversity in support of landuse sustainability and nutritional health adopted in all States by 2008 (NDEA, SAG, SMRD, MG, NGO)</p> <p>5.3.4 Analyses of nutrient content of traditional crops compiled and disseminated in all States by 2006 (NDEA, NHHS, SAG, NGO)</p> <p>5.3.5 A law recognizing and supporting community-led conservation area designation and management is adopted by at least one State by 2006 (NDEA, SAG, SMRD, MG, NGO)</p> <p>5.3.6 ?? % conservation area management plans will integrate at least one traditional resource management practice (NDEA, SMRD, COM, MG, NGO)</p> <p>5.3.7 At least one successful ecotourism enterprise is established for ?? % of all conservation areas in the FSM by 2010 (NDEA, SMRD, COM, MG, NGO, MCT)</p> <p>5.3.8 Appropriate mariculture enterprises (sponges, giant clams, pearls, etc.) are successfully established at ?? % of the marine protected areas (MPAs) by 2010 (NDEA, SR&D, SMRD, COM, MG, NGO, MCT)</p>
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	<p>5.4 Limit the use of destructive fishing technology, e.g., monofilament gill net, underwater flashlights, SCUBA, fish poisons, etc.</p>	<p>5.4.1 All States prohibit the export of monofilament gill nets with gaps less than three inches in width by 2006 (NDEA, SAG, SMRD, MG, NGO)</p> <p>5.4.2 All States prohibit fishing with SCUBA by 2006 (NDEA, SAG, SMRD, MG, NGO)</p> <p>5.4.3 At least two states prohibit night fishing with flashlights by 2008 (NDEA, SAG, SMRD, MG, NGO)</p> <p>5.4.4 Harvest and transport of threatened and endangered species by non-traditional means prohibited in all States by 2010 (NDEA, SAG, SMRD, MG, NGO)</p>
	<p>5.5 Identify key ecological indicators to monitor trends and conditions of marine and terrestrial biota, and regularly assess their status, and set up community-based resource monitoring systems and, through education and training, assist communities to use this information for decision-making.</p>	<p>5.5.1 Standard fish and coral monitoring protocols established by the National and State governments and monitoring teams trained in all States by 2006 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.5.2 State fisheries agencies, in partnership with NGOs and Municipal governments implement standard state-wide fish and coral monitoring program by 2007 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.5.3 With support from the national government, each state update vegetation maps by 2008 using aerial or satellite photography and repeat no less than once every five years afterwards (NDEA, SMRD, COM, MG, NGO)</p> <p>5.5.4 With support of the National government, each State will undertake new forest bird and fruit bat surveys by 2008, and repeat no less than once every five years afterwards (NDEA, SAFD, COM, NGO)</p> <p>5.5.5 Establish and manage a community-based monitoring network in at least one State by 2006 (NDEA, SMRD, COM, MG, NGO)</p>

	<p>5.6 Identify endangered or threatened species in the FSM, promote research on their biology, and establish species recovery plans</p>	<p>5.6.1 FSM Endangered species law is updated and adopted by 2007 (PRES, NCON, NAG, NDEA, SGOV, SR&D)</p> <p>5.6.2 Keystone species, natural communities and ecosystem processes identified, linkages documented, and their condition and trends monitored in all States by 2008 (NDEA, SMRD, COM, MG, NGO)</p> <p>5.6.3 Develop and implement species recovery plans for at least one threatened or endangered species in each state by 2006 (in partnership with US Fish and Wildlife Service) (NDEA, SR&D, SMRD, SAFD, NGO, MCT)</p>
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6 Improve environmental awareness and education and increase involvement of citizenry of the FSM in conserving their country's natural resources

Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) Resource management and environmental studies are integrated into all levels of the nation's education curricula by 2010</p> <p>1(ii) Community environmental awareness improved and citizen involvement in conservation and environmental activities increased to 80% by 2010 (measured by public awareness surveys)</p> <p>1(iii) Public awareness and understanding of the consequences of climate change increased to 80% by 2010 (measured by public awareness surveys)</p> <p>1(iv) Sharing and transfer of environmental information between government, private sector, communities and NGOs improved 100% by 2008</p>	<p>6.1 Bring together educators, representatives of State and National Departments of Education and local and outside environmental experts to develop an appropriate environmental curriculum for the nation's schools</p> <p>6.2 Implement public educational programs that support good practices in environmental health, sustainable resource management, waste management and disposal, awareness and understanding of the consequences of natural hazards including those related to extreme weather events, climate variability and change and sea-level rise</p>	<p>6.1.1 A nation-wide environmental curriculum featuring the FSM's unique environment and biodiversity will be developed and implemented in schools throughout the FSM by 2010 (NDEA, NHHS, NDOE, SDOE, SR&D, SMRD, SAFD, NGO)</p> <p>6.2.1 Carry out at least one conservation public awareness campaign in each state each year (NDEA, NHHS, SR&D, SMRD, SAFD, NGO)</p> <p>6.2.2 Carry out at least one climate change public awareness campaign in each state each year (NDEA, SR&D, SMRD, SAFD, NGO)</p> <p>6.2.3 Establish and implement regular (quarterly) consultation process between state government resource managers and traditional leader councils in Yap, Pohnpei, and Chuuk State by 2006 (SGOV, SR&D, NGO)</p> <p>6.2.4 National government, in partnership with the State governments, produce annual "state of the environment" report and present to traditional leaders councils from 2008 onwards (PRES, NSDC, NDEA, SGOV, SR&D)</p>

	<p>6.3 Improve the dissemination and sharing of information on biodiversity, climate change, and other environmental information and activities between different levels of government and with the general public.</p>	<p>6.3.1 Clearinghouse mechanism (state computer nodes, web page, etc.) with easily-accessible state nodes successfully implemented, regularly updated, and used regularly by the public by 2006 (NDEA, NHHS, SR&D, COM, NGO)</p> <p>6.3.2 Environmental reference collection established and/or improved in major State and National environmental agencies (eg EPA, MRMD) by 2006 (NDEA, NHHS, SR&D, COM, NGO)</p> <p>6.3.3 College of Micronesia campus library environmental literature collections are improved and updated (measured by a doubling of library resources) by 2010 (NDEA, NHHS, SR&D, COM, NGO)</p> <p>6.3.4 At least one information dissemination specialist in each state will be trained and supported by 2008 (in partnership with SPREP) (NDEA, NHHS, SR&D, COM, NGO)</p>
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7 Establish effective biosecurity (border control, quarantine and eradication) programs to effectively protect the FSM's biodiversity from impacts of alien invasive species

Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) Introduction of new alien invasive species into the FSM, transfer or existing alien species across state borders, and between islands within States will be totally prevented by 2010</p> <p>1(ii) Control, and if feasible, eradication programs for top ten invasive species instituted in all states by 2008</p>	<p>7.1 Develop and implement national and state laws and screening processes and improve screening at all ports for alien species introduction and genetically modified organisms (GMOs) to minimize their impact on the nation's biodiversity.</p>	<p>7.1.1 National alien species screening process in place in all FSM ports of entry by 2006 (NDEA, SGOV, SR&D, , SMRD, SAFD, USDAFS)</p> <p>7.1.2 National GMO policy adopted and enforced by 2008 (NDEA, SGOV, SR&D, SAFD)</p> <p>7.1.3 Increase quarantine staff at all ports of entry by 50% by 2008 (NDEA, SGOV, SR&D, SAFD)</p> <p>7.1.4 Deputization program for State resource management personnel to augment existing quarantine officers instituted in all States by 2006 (NDEA, SGOV, SR&D, SAFD)</p> <p>7.1.5 Legislation to require ships to empty ballast water at sea before entering FSM waters or to take other appropriate precautions to prevent the introduction of invasive and potentially harmful marine organisms instituted nationally by 2005 (PRES, NCON, NDEA, SGOV, SLEG, SR&D, SMRD)</p>
	<p>7.2 Through training and education, further develop national enforcement capacity of all laws and regulations relating to alien species introductions</p>	<p>7.2.1 Penalties on National quarantine laws increased by ?? % to further discourage violations (PRES, NCOM, NAG, NDEA)</p> <p>7.2.2 Increase prosecutions for violation of quarantine laws by 100% by 2008 (NAG, NDEA)</p>
	<p>7.3 Improve general awareness amongst the population to reduce the chance that invasive species are accidentally or deliberately spread around FSM.</p>	<p>7.3.1 Carry out a public awareness campaign to women's' groups in all States on the threat of invasive species/diseases through the deliberate introduction of ornamental plants by 2006 (NDEA, SMRD, SAFD, NGO)</p>

	<p>7.4 Increase local capacity to address biosecurity, particularly the ability at the State level to identify, control and eradicate alien invasive species.</p>	<p>7.4.1 At least 2 permanent positions focusing on invasive species control established and hired in each state by 2006 (NDEA, SMRD, SAFD)</p>
	<p>7.5 Develop and implement effective quarantine and inspection protocols and, where possible, physical barriers to alien species introduction (lighting, fencing, traps, dogs, etc.) at all ports and airports in the nation</p>	<p>7.5.1 Develop and train an interagency Brown Tree Snake Rapid Response Force on all islands with ports of entry by 2006 (in partnership with the USGS) (NDEA, SGOV, SR&D, SAFD, NGO)</p> <p>7.5.2 Institute a policy that all arriving containers, vehicles and other cargo from Guam or the CNMI must be quarantined for three days by 2006 (NAG, NDEA, SGOV)</p> <p>7.5.3 With USGS and USFWS assistance, improve one State port/airport to be Brown Tree Snake-proof by 2008 (NDEA, SGOV, SAFD)</p>
	<p>7.6 Establish invasive species task forces in each state to improve coordination between groups working on invasive species to identify and evaluate species present in the FSM and develop control/eradication plans for priority species, including rapid response plans for each state</p>	<p>7.6.1 All four states establish and fund inter-agency Invasive Species Task Forces to deal with priority invasive species by 2006 (NDEA, SGOV, SR&D, SAFD, COM, MG, NGO)</p> <p>7.6.2 Develop rapid response plans for the five most serious invasive species threats after the Brown Tree Snake by 2008 (NDEA, SGOV, SR&D, SAFD, COM, MG, NGO)</p>
	<p>7.7 Identify and evaluate invasive species present in the FSM and develop control/eradication plans for priority species</p>	<p>7.7.1 Invasive plant and animal database updated and widely disseminated to all State resource management agencies and private sector by 2007 (NDEA)</p> <p>7.7.2 Develop control eradication plans for the top ten invasive species in each State by 2008 ((NDEA, SGOV, SR&D, SAFD, COM, MG, NGO)</p>

	7.8 Control and eradicate (where feasible) priority invasive species, especially those that have been introduced but have not yet become widely established	<p>7.8.1 State Governments prioritize invasive species control and eradication in annual budgets from 2005 onwards (SGOV, SLEG, SR&D, SAFD)</p> <p>7.8.2 State Governments develop control and eradication protocols involving local communities, traditional leaders, and resource owners (SGOV, SR&D, SAFD, COM, MG, NGO)</p> <p>7.8.3 Complete review and recommendations for biological control in the FSM (what has been introduced, successes and failures, and future options) and widely disseminate by 2008 (NDEA, SR&D, SAFD, COM)</p>
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8 Create sustainable financing mechanisms for environmental and sustainable resource initiatives (FSMES, NBSAP)		
Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) Micronesia Conservation Trust (MCT) capitalized with \$20 million, and providing \$1 million/year in grants to organizations and communities throughout the FSM by 2020</p> <p>1(ii) Access to outside funding and technical assistance by the government and non-government conservation agencies increased 100% by 2010</p> <p>1(iii) Sustainable conservation funding mechanisms to support conservation activities in all states implemented and covering at least 25% of the States' environmental project costs by 2010</p>	8.1 Fund directly and assist in securing foreign assistance for the Micronesia Conservation Trust to strengthen and empower resource owners and local communities to manage their resources sustainably, as well as to improve the long-term viability of local and national environmental and sustainable programs	<p>8.1.1 The Micronesia Conservation Trust will be established and endowed with at least US\$10 million by 2010 (PRES, NCON, NDEA, SGOV, SLEG, MCT)</p> <p>8.1.2 All States will establish sub-accounts within the MCT to help support state environmental priorities by 2010 (SGOV, SLEG, MCT)</p> <p>8.1.3 GEF Small Grants Program provides \$250,000/year grant money through the MCT from FY05 onwards (PRES, NDEA, MCT)</p> <p>8.1.4 MCT will access assistance from at least one other GEF grant window (PDF A, PDF B, medium-sized, or large grants) and other multi- and bilateral donors by 2006 (PRES, NDEA, MCT)</p>

	<p>8.2 Facilitate effective access to external sources of funding (bilateral, multilateral, international) for environmental and sustainable initiatives</p>	<p>8.2.1 Through clearinghouse mechanism, regularly provide information on environmental grant opportunities to State governments and NGOs from 2005 onwards (NDEA, NHHS, SR&D)</p> <p>8.2.2 Increase external environmental funding (excluding US government) by 100% by 2010 (NDEA, SR&D, NGO)</p> <p>8.2.3 Hold fund-raising, proposal-writing, and project management workshops for government and non-government environment personnel in all States beginning in 2006 and biannually thereafter (NDEA, SR&D, NGO)</p> <p>8.2.4 Maintain and expand existing SD Council database to include project information from all States by 2005 (NDEA, NSDC, SR&D)</p> <p>8.2.5 Secure at least one GEF medium-sized grant every year and one GEF large grant every three years from 2005 onwards (NDEA, NSDC, SR&D)</p>
	<p>8.3 Provide legal and financial incentives to encourage NGO fund-raising and development</p>	<p>8.3.1 Adopt national tax-exempt status for non-profit organizations to increase private sector support and donations from individuals and businesses by 2006 (PRES, NCON, NAG, NDEA, NGO)</p> <p>8.3.2 At least one strong and effective state-wide NGO will be established in each state to engage local communities, the government and private sector in innovative and highly successful conservation partnerships by 2006 (NDEA, NGO)</p>
	<p>8.4 Develop in-country sources of funding and investment for environmental and sustainable initiatives, including resource rentals and/or royalties, user fees for tourism activities, environmental bonds for development projects, and special taxes for visitors and tourists.</p>	<p>8.4.1 At least one local conservation revenue source will be established in each state that will effectively leverage additional resources (bilateral, private foundation, and other) to assure conservation success by 2010 (SGOV, SLEG, SR&D, MG, NGO)</p>

9 Enhance and Employ In-Country Technical Capacity to Support Environmental Programs

Outcomes [measurement indicators]	Activities	Outputs
<p>1(i) Staff of State government and non-government environmental organizations will be technically competent and highly capable to deal with all environmental challenges facing the nation by 2010</p> <p>1(ii) The College of Micronesia will emerge as the regional training “center of excellence” in environmental protection and natural resource management by 2010</p> <p>1(iii) Government and non-government organizations throughout the country will be linked together in strong networks and actively sharing best practices/successes, lessons learned, and opportunities for assistance by 2010</p> <p>1(iv) At least 10 new FSM conservation/environment leaders are nurtured and developed by 2010</p>	<p>9.1 Assess technical training needs in the areas of waste management, drinking water quality, environmental monitoring, chemical safety, resource management, and emergency preparedness, and identify/develop training programs</p>	<p>9.1.1 Training needs assessment completed by 2006 (NDEA, SGOV, SR&D, NGO)</p> <p>9.1.2 Comprehensive training program developed and implemented by National government by 2007 (in partnership with US Government agencies and SPREP) (NDEA, SGOV, SR&D, NGO)</p> <p>9.1.3 Through the clearinghouse mechanism, regularly provide information on environmental training and scholarship opportunities to State governments and NGOs from 2005 onwards (NDEA, NDOE, SGOV, SR&D, NGO)</p> <p>9.1.4 National regulations requiring approval of visiting researcher’s proposals, presentation of research finding to the public, and provision of copies of all reports/products; and contribution to the development of local capacity by hiring a local guide & assistant, affiliating with a local agency, NGO or institution, and/or contributing to a scholarship fund for local students studying environmental subjects established by 2005 (NCON, NDEA, SR&D)</p>
	<p>9.2 Build local service provider networks to provide cost-effective trainers and resource people to help build local technical capacity</p>	<p>9.2.1 Environment service providers network established and actively providing in-country training and technical assistance by 2008 (NDEA, COM, NGO)</p> <p>9.2.2 Cadre of EIA specialists trained and national network/ consortium of certified expertise developed by 2006 (NDEA, SR&D, COM, NGO)</p>

	<p>9.3 Develop formal (up to B.Sc. degree level) and informal conservation, resource management and environmental protection training programs at the College of Micronesia</p>	<p>9.3.1 Two environmental training programs/year developed and delivered by College of Micronesia to government and non-government agency staff (NDEA, NHHS, COM)</p> <p>9.3.2 Two year A.S. degree program in resource management and/or environmental science/health offered at all four state campuses by 2008 (NDEA, NHHS, COM)</p> <p>9.3.3 Four year B.Sc. degree program in resource management and/or environmental science/health developed and delivered at COM-FSM Palikir campus by 2010 (NDEA, NHHS, COM)</p>
	<p>9.4 Promote nation-wide and regional learning networks of local conservation and environmental leaders to promote peer learning</p>	<p>9.4.1 The Micronesians in Island Conservation (MLIC) peer learning network will be expanded to include at least 16 conservation leaders (currently 10) from the FSM by 2008 (in partnership with The Nature Conservancy, NOAA, and other agencies) (NDEA, SR&D, SMRD, SAFD, COM, NGO)</p>
	<p>9.5 Establish and fund graduate (M.Sc. and Ph.D.) and undergraduate scholarships in environmental studies, with requirement that students return to the FSM upon completion of their studies for a fixed period (e.g., 2-5 years of service for every year of scholarship – to be determined by individual States)</p>	<p>9.5.1 Provide at least two graduate degree scholarships/year (M.Sc. or higher) in resource management/environment to deserving FSM students from 2005 onwards (PRES, NCON, NDEA, NDOE, NSDC, SGOV, SLEG, SDOE, COM)</p>
	<p>9.6 Develop nationwide (government and NGO) environmental intern program to provide training and career opportunities</p>	<p>9.6.1 Offer ten in-country resource management/environment internships/year to FSM students at the College of Micronesia or studying abroad from 2005 onwards (NDEA, NHHS, NSDC, SGOV, SLEG, SDOE, COM, NGO)</p>