# invasive Species Taskforce Of Pohnpei Strategic Action Plan

## 2018 - 2022

#### POHNPEI STATE, FEDERATED STATES OF MICRONESIA

### Invasive Species Taskforce of Pohnpei Members

College of Micronesia FSM, Cooperative Research and Extension (COM-FSM/CRE)

Conservation Society of Pohnpei (CSP)

FSM Resources and Development (FSM-RD)

Micronesia Conservation Trust (MCT)

Pohnpei Farmer's Association (PFA)

Pohnpei State Public Safety (EOC)

Pohnpei State Attorney General Office (AGO)

Pohnpei State Department of Public Safety - Fish and Wildlife (PS-FW)

Pohnpei State Department of Resources and Development – Division of Agriculture (PR&D-DOA)

Pohnpei State Department of Resources and Development – Natural Resource Division (PR&D-NR)

Pohnpei State Environmental Protection Agency (EPA)

Pohnpei State Office of Fisheries and Aquaculture (OFA)

Pohnpei Soil and Water Conservation District (PSWCD)

Pohnpei Women's Council (PWC)

The Nature Conservancy (TNC)

The Pacific Community (SPC)

United States Department of Agriculture, Natural Resources Conservation Service (NRCS)

#### Invasive Species Taskforce of Pohnpei Partners

Micronesia Regional Invasive Species Council (RISC

Pacific Invasive Initiative (PII)

Pacific Invasives Species Network (PILN)

Secretariat of the Pacific Regional Environment Programme (SPREP)

United States Department of Agriculture Animal and Plant Health Inspection Service (APHIS)

United States Department of Agriculture Forest Service (USFS)

University of Guam (UoG)

University of Hawaii (UH)

#### Vision

Pohnpei will sustain biodiverse terrestrial and aquatic ecosystems for the environmental, social, cultural and economic well-being of future generations.

#### Mission

Invasive Species Taskforce of Pohnpei (iSTOP) strives to enhance and preserve the natural biodiversity of Pohnpei State through collaborative efforts at all levels of our society while cooperating with neighboring states and countries to identify, prevent, and eradicate or manage/control invasive species.

### Current Species of Concern for Pohnpei

Status /		
Management Goal	Common name	Scientific name
Eradication		
	False Sakau	Piper auritum
	Chain of Love	Antigonon leptopus
	Honolulu Rose	Clerodendrum chinense
	Bengal Trumpet Vine	Thunbergia grandiflora
	Ivy Gourd	Coccinia grandis
	Myna Bird	Acridotheres tristis
	Octopus Tree	Schefflera actinophylla
Managed population		
	Mile-a-Minute	Mikania micrantha
	Koster's Curse	Clidemia hirta
	African Tulip Tree	Spathodea campanulata
	Myna	Acridotheres tristis
	Tree Sparrow	Passer montanus
	Black-spotted Eel	Mastacembelus dayi
	Eel Catfish	Plotosus lineatus
	Milkfish	Chanos chanos
	Tilapia	Oreochromis mossambicus
	Crown of Thorns Starfish	Acanthaster planci
	Whitefly	Family <i>Aleyrodidae</i>
	Papaya Mealybug	Paracoccus marginatus
Threat of special concern		
	Coconut Rhinoceros Beetle	Oryctes rhinoceros
	Brown Tree Snake	Boiga irregularis
	Little Fire Ant	Wasmannia auropunctata
	Black Sock Fungus	Phelinus noxious
	Fruit Flies	Bactrocera spp.

## Adoption of Strategic Action Plan

We, the undersigned, hereby acknowledge the responsibilities inherent in invasive species response and control planning within our respective jurisdiction. Through the acceptance of this Strategic Action Plan, we will work together to ensure that control/eradication of selected species will be successful. We are charged with additional responsibilities of keeping this plan current and ensuring those persons involved are made aware of their respective roles in this plan. This plan is also directly in line with the national commitments to the United Nations Sustainable Development Goals.

5/17/18	Marchalle	
Date	Governor Pohnpei State	
5/11/18	AT Duy	
Date	Director, Pohnpei State Department of Resources and Development	
6/17/18	sin 19 St	
Date	Chair, Invasive Species Taskforce of Pohnpei	7

## Goals, Objectives, Activities and Outcomes

#### **Goal 1: Conserve Biodiversity and Protect Livelihoods from the Threat of Invasive Species**

Objective	Activities	Time Frame	Outcomes	Lead	Progress / Activities / Outcomes To Date
1. By mid-2022, at least 5 of the 7 targeted	a. Assess distribution of all 7 species and update GIS map.	Ongoing	Current GIS map updated at least quarterly.	CSP	
species are eradicated:  1. False Sakau  2. Chair of Lave	b. Respond to newly reported sites.	Ongoing	Eradication efforts following Control Plan initiated.	CSP	
Chain of Love     Honolulu Rose			2. Initial control applied.	CSP	
4. Bengal Trumpet Vine 5. Ivy Gourd	c. Follow-up visits to known sites and reapply control where necessary.	Ongoing	1. Update database on results after each site visits.	CSP	
6. Myna Bird	d. Quarterly monitoring and reporting on results of invasive control activities.	Quarterly @ iSTOP meetings	1. At least 5 target species eradicated.	CSP	
7. Octopus tree			Results of eradication activities reported quarterly.	CSP	
2. Management for 9 targeted species:	a. Determine management plan for each species identified involving	Ongoing	Management plan for each species identified and completed.	OFA, PR&D DOA / NR	
<ol> <li>Mile-a-Minute</li> <li>Koster's Curse</li> </ol>	communities.		Provide information to landowners/ managers on how to manage.	OFA, PR&D DOA / NR	
African Tulip Tree     Tree Sparrow	b. Implement management plans with communities.	Ongoing	Management plans implemented.	CSP, OFA	
<ul><li>5. Black-spotted eel</li><li>6. Eel Catfish</li><li>7. Milkfish</li><li>8. Tilapia</li><li>9. Crown of Thorns</li></ul>	c. Quarterly monitoring and reporting on results of invasive management activities.	Quarterly @ iSTOP meetings	Results of management activities reported quarterly.	CSP, OFA	
Starfish  10. Whitefly  11. Papaya mealybug					

(table continues next page)

Objective	Activities	Time Frame	Outcomes	Lead	Progress / Activities / Outcomes To Date
3. Bio-Control of Mile-a- Minute and Koster's	a. Monitor progress of bio-control efforts in Pacific region.	2018	Success stories available.	PR&D DOA / NR	
Curse	b. Introduction and distribution of bio- control agent	2019	Quarantine requirements met.	PR&D DOA / NR	
			Appropriate application to selected sites.	PR&D DOA / NR	
	c. Monitoring and evaluation of bio- control effectiveness.	2019 - 2022	Results documented and reported.	PR&D DOA / NR	
4. Prevent introduction of new invasive	a. Be vigilant with inspection protocols at ports of entry.	Ongoing	Early detection and identification of possible invasives at port of entry.	PR&D DOA / NR	
species (e.g. CRB, BTS, LFA, RIFA)	b. Pest surveillance and monitoring around Pohnpei.	2018	Early detection and identification of possible invasives.	PR&D DOA / NR	
	c. Training of quarantine officers.	Ongoing	Well trained quarantine officers to respond to possible invasives.	PR&D DOA / NR	
			2. Attend at least one training per year.	PR&D DOA / NR	
	d. Public awareness of invasive species impacts	2018	1. See detail in Objective 6.	iSTOP, FSM RD	
	e. When suspected introduction of new invasive species, initiate ERP process	Ongoing	ERP implemented as needed.	PR&D DOA / NR	
5. Provide response in the event of a newly	a. Develop a Generic Emergency Response Plan.	2018	Generic ERP available for use.	iSTOP	
found species	b. Finalize the CRB and BTS ERP documents and obtain State authorization.	2018	CRB and BTS ERPs endorsed by Department of R&D.	iSTOP	
	c. Include specific information of new invasive species into the Generic ERP.	As needed	Specifics of ERP for new species endorsed by relevant State agency.	iSTOP	
	d. Implement the ERP as needed.	As needed	Efficient and effective response to possible invasive introductions.	ISTOP	

(table continues next page)

Objective	Activities	Time Frame	Outcomes	Lead	Progress / Activities / Outcomes To Date
6. By 2022, 90% of Pohnpei communities will have an increased	a. Training of Community Conservation Officers (CCO)'s on invasive species identification and basic weed control.	Ongoing	1. 15 CCO's are trained annually.	CSP	
awareness of invasive species and control methods	b. Provide annual training on safe use and handling of herbicides and pesticides.	Ongoing	1. Trainings conducted annually.	EPA	
	c. Continue production and distribution	2018	Invasive awareness video produced.	iSTOP	
	of awareness materials for schools,		2. New poster and new flyers produced.	iSTOP	
	libraries, communities, and travelers.		3. Updated invasive species booklet.	iSTOP	
			4. Develop iSTOP web site.	iSTOP	
	d. Public awareness announcements are released through various media outlets.	Annually	1. Two news articles to KPress per year.	iSTOP	
			At least one radio announcement per year.	iSTOP	
	e. Present awareness CD and materials.	Ongoing	1. Use video at the schools.	CSP	
			2. Video used at the airport.	CSP	
	f. Conduct community surveys on awareness level of invasive species	2018	1. Results of survey are made available for use.	CSP	
	g. Community meetings will be held yearly in each municipality.	Ongoing	At least 5 community meetings conducted.	CRE, CSP	
			Increased public understanding of the impact of invasive species and their identification.	CRE, CSP	
	h. iSTOP members participate in regional trainings, conferences and meetings.	Annually	At least one iSTOP member attends a regional or national meeting or training per year.	iSTOP Chairman	
	i. Display invasive species exhibit at public events, e.g. World Food Day.	As Needed	Displays for at least two events annually.	iSTOP Members	
	j. Guest lectures at COM-FSM, Pohnpei campuses on invasive species.	Annually	1. At least one lecture per year.	iSTOP	

## Goal 2: iSTOP Increases Capacity and Builds National and State Leadership to Support Legislation, Funding and Support for Invasive Species

	Objective	Activities	Time Frame	Outcomes	Lead	Progress / Activities / Outcomes To Date
1.	Review Legal Authority to enforce control of invasive species	a. iSTOP maintains invasive Species Control Plan to authorize activities.		<ol> <li>Control Plan updated and approved as needed.</li> <li>Partners maintain Control Plan.</li> <li>Regulation provides "teeth" to iSTOP activities.</li> </ol>	iSTOP Members, AG	
		b. Liaise with AG office to get invasive species act / regulation			7.0	
2.	At least one major	a. Identify donors or funding sources.	2018	1. Funding source is identified.	CSP	
	grant proposal to be funded by 2019	<ul> <li>b. Draft and submit proposals for funding.</li> </ul>	2018	Proposals drafted and submitted.	CSP	
3.	By 2018 iSTOP will have a full time	a. Identify donors or funding sources for position.	2018	<ol> <li>Funding is secured for iSTOP coordinator.</li> </ol>	CSP	
	coordinator in place	b. Recruitment and hiring of full-time ISTOP coordinator.	2018	1. Coordinator is hired.	CSP	
4.	iSTOP maintains networks and communications with partners	a. iSTOP meets at least once quarterly.	Quarterly 1	Meeting minutes distributed to members and partners.     iSTOP chairman     iSTOP plans, minutes, reports are housed in a central location.		
		b. iSTOP member attends RISC and other priority meetings.	Annually			
5.	Increase leadership support for invasive	a. Conduct a yearly invasive species awareness seminar to share progress	Annually – prior to	increases leaders' ability to make	iSTOP Members	
	management	and new materials for policy makers and relevant partners.	budget developm ent	decisions regarding invasives management.		
		b. Encourage and promote invasive species management to be included into State budgets.	Ongoing	Increased funding for more resources and activities is allocated.	iSTOP Members	
		c. Review SAP annually and update as needed.	Annually - July	<ol> <li>SAP reviewed and updated as needed annually.</li> </ol>	iSTOP Chairman	
		d. Awareness of iSTOP SAP increased at all levels of State and National Governments, Traditional Leaders and interested parties.	Annually	<ol> <li>New SAP is distributed to all levels of Pohnpei State Govt. and all National and interested parties.</li> </ol>	iSTOP Members	

## Cost Summary by Objective

### iSTOP SAP Estimated 5-Year Cost 2018-2022

Goal	Objective	Estimated 5-year Cost		
Goal 1:	Conserve Biodiversity and Protect Livelihoods from the Threat of Invasive Species			
	1. By mid-2022, at least 5 of the 7 targeted species are eradicated	\$120,000		
	2. Management for 9 targeted species:	150,000		
	3. Bio-Control of Mile-a-Minute and Koster's Curse	75,000		
	4. Prevent introduction of new invasive species (e.g. CRB, BTS, LFA, RIFA)	500,000		
	5. Provide response in the event of a newly found species	50,000		
	<ol><li>By 2022, 90% of Pohnpei communities will have an increased awareness of invasive species and control methods</li></ol>	500,000		
	Subtotal	\$1,395,000		
Goal 2:	iSTOP Increases Capacity and Builds National and State Leadership to Support Legislation, Funding and Support for Invasive Species			
	Review Legal Authority to enforce control of invasive species	30,000		
	2. At least one major grant proposal to be funded by 2019	10,000		
	3. By 2018 iSTOP will have a full time coordinator in place	150,000		
	4. iSTOP maintains networks and communications with partners	50,000		
	5. Increase leadership support for invasive management	25,000		
	Subtotal	\$265,000		
Total Est	\$1,660,000			