## OPTION FOR BORACAY

Sec. Roy A. Cimatu

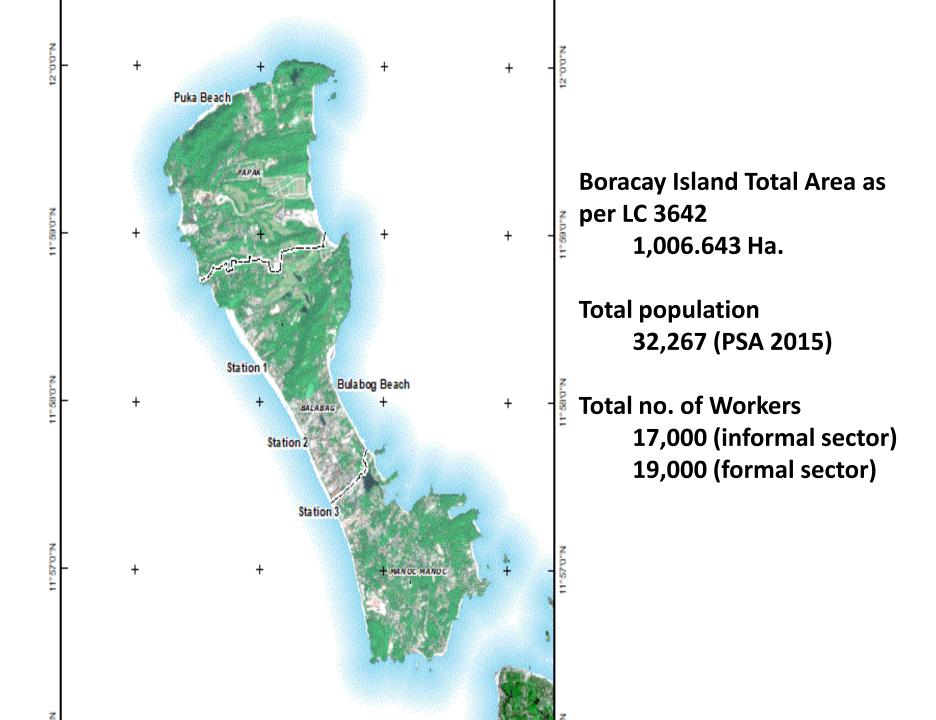
Department of Environment and Natural Resources

Boracay Island (2008 and 2018)

Boracay Island (2008 and 2018)

## OUTLINE

- A. Backgrounder
- B. Problems in the Area
- C. Action Plan
- D. Proposed Option



#### **Comparison of Boracay Island Orthophoto 2008 and 2018**





A. Drainage and Sewerage Management

# Drainage and Sewerage Management





- A. Drainage and Sewerage Management
- B. Solid Waste Management

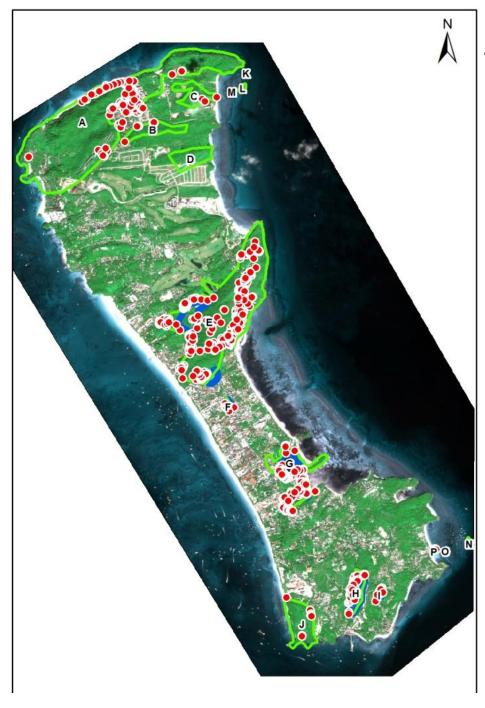
## Solid Waste Management







- A. Drainage and Sewerage Management
- B. Solid Waste Management
- C. Forest Lands and Easement Recovery and A&D Lands Management



#### **ON GOING ACTIVITIES IN BORACAY**

- □ Conducted survey of structures within Forestlands
  - Surveyed a total of 948 establishments/ structures

#### Legend

- Structures within Forestland
- Forestland
- Wetland

Forest Lands and Easement Recovery and A&D Lands Management





- A. Drainage and Sewerage Management
- B. Solid Waste Management
- C. Forest Lands and Easement Recovery and A&D Lands Management
- D. Road and Transport

## Road and Transport





- A. Drainage and Sewerage Management
- B. Solid Waste Management
- C. Forest Lands and Easement Recovery and A&D Lands Management
- D. Road and Transport
- E. Biodiversity Conservation, Wetlands Rehabilitation and Geohazard Management

Biodiversity
Conservation,
Wetlands
Rehabilitation and
Geohazard
Management







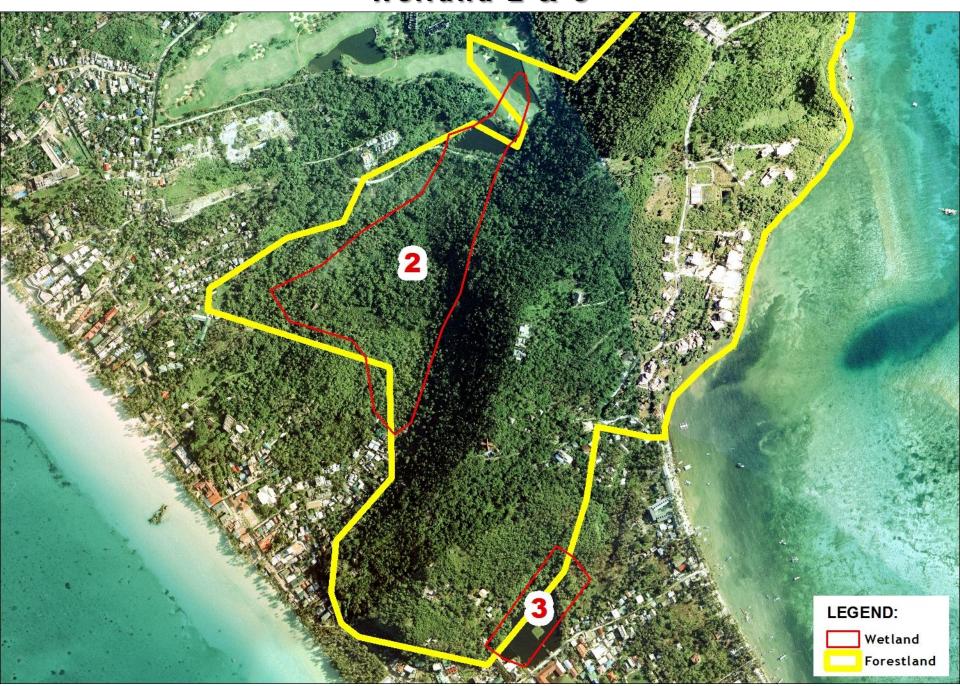








Wetland 2 & 3

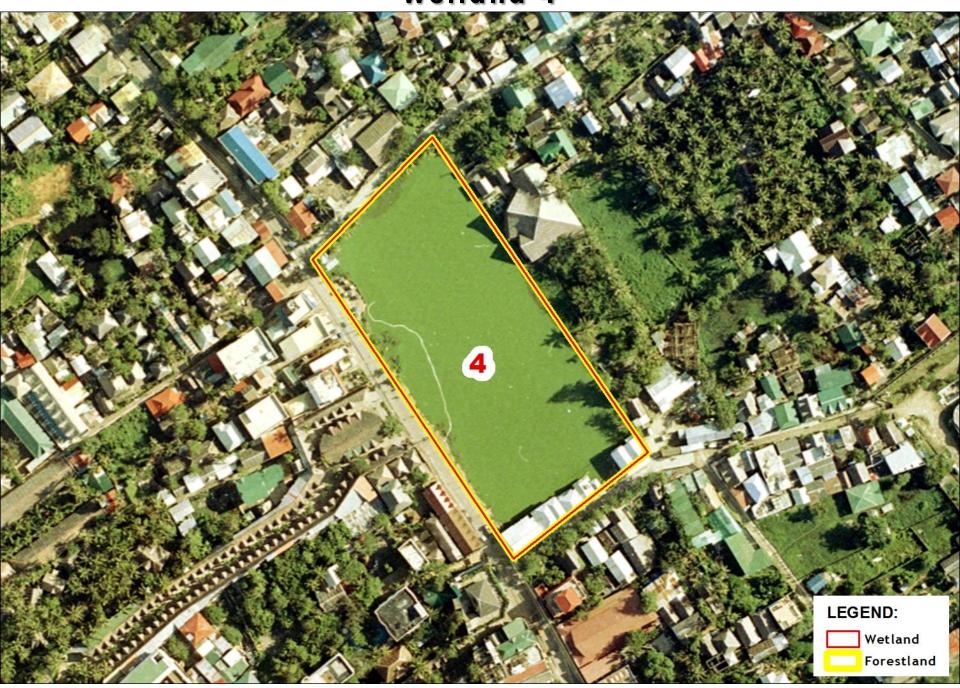


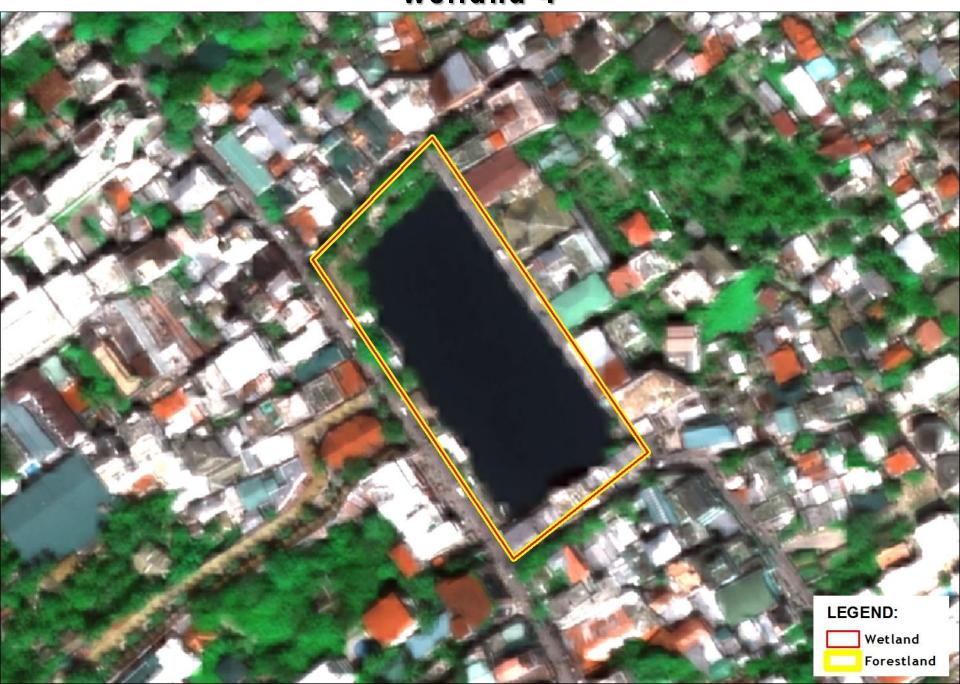
Wetland 2 & 3





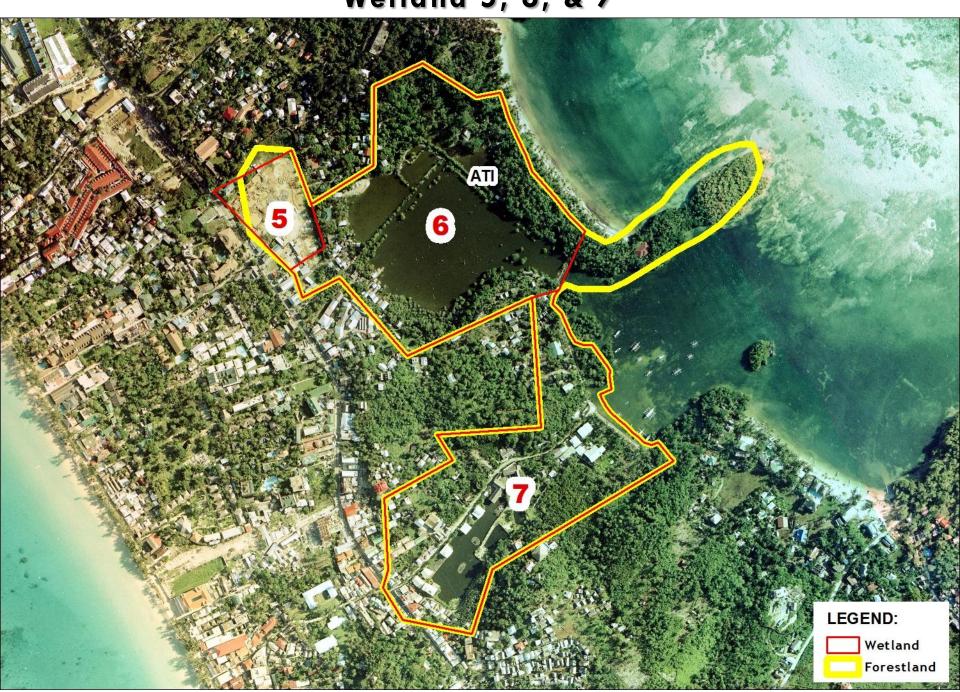








Wetland 5, 6, & 7



Wetland 5, 6, & 7

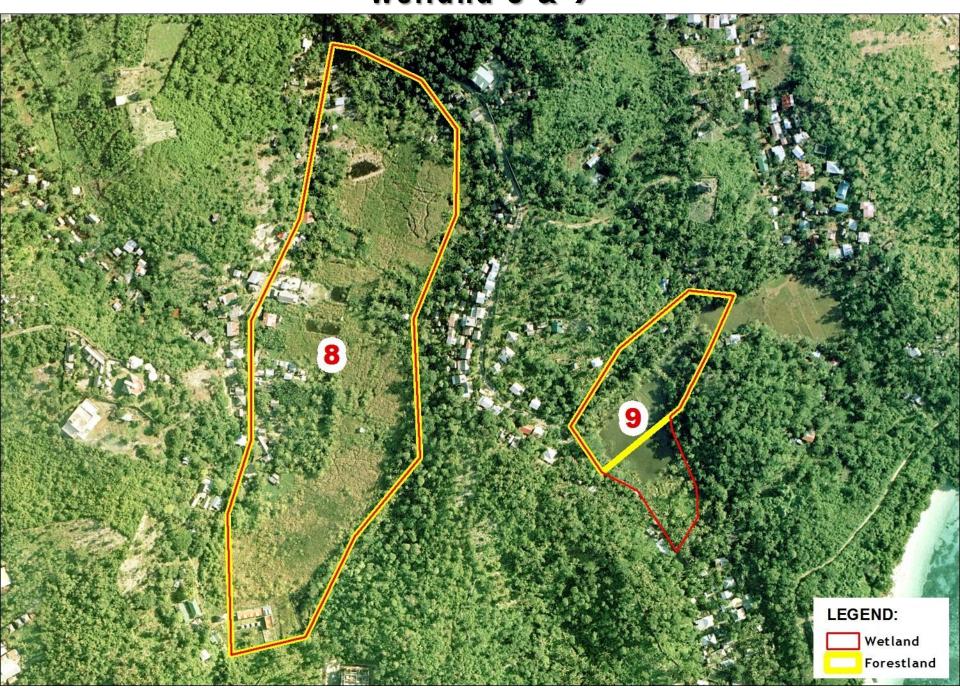




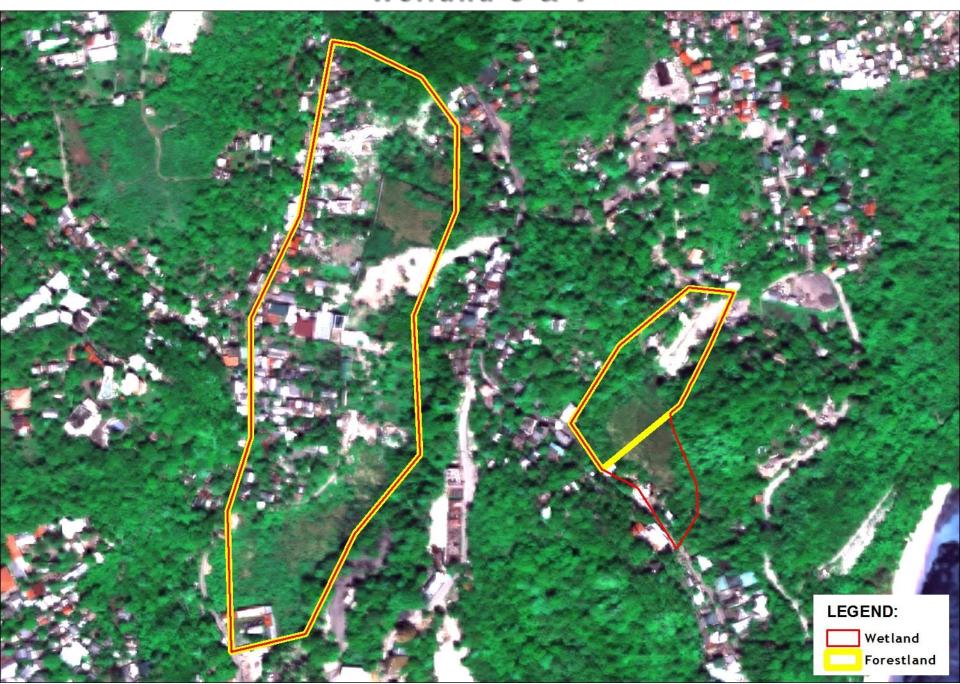




#### Wetland 8 & 9



Wetland 8 & 9



#### **BORACAY ACTION PLAN**

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six month rehabilitation  Water Quality Testing to ascertain effectiveness									
Opening of Drainage				Testing to ascertain							
Declogging											
Siphoning / Desilting / Treatment											
Cutting of illegal lines											

**Areas of Responsibility** Isla Kite Pre-Phase 1 Drainage Banana Outfall **EXISTING TIEZA** Saging DRAINAGE Phase 1 Max's Bolabag Drainage DRAINAGE Outfall Pre-Phase 1 Network Henann **TIEZA** Garden Drainage PS Mandala Spa **DRAINAGE NETWORK** TIEZA Drainage Phase 1 Pre-Phase 1

#### **DRAINAGE OUTFALL 2**



<sup>\*</sup>STANDARD FECAL COLIFORM LEVEL IS 400 MPN/100ML

#### DRAINAGE OUTFALL IA



<sup>\*</sup>STANDARD FECAL COLIFORM LEVEL IS 400 MPN/100ML

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	on					
Treatment and disposal of stale water in holding tank											
Complete flow diversion from Balabag Sewerage Treatment Plant (STP) to Manoc-Manoc STP (completed)											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	k mont	h rehab	ilitati	on					
Building of temporary interceptor in pre- phase 1 drainage outfall											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	on					
Rehabilitation of Balabag STP											
Replacement of aging PTA/BWSS Sewer Network at Balabag along Main Road.											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	ion					
Provision of support in acquisition of Insitu compact STP for big hotels, resort, and other commercial											
establishments. Implementation of Php 1.1B Drainage Project											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati						
Continue plugging of illegal connection to the drainage and issuance of NOV/Closure order											
Acquisition of three (3) Desludging trucks											

# Solid Waste Management

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	on					
Explore waste to energy project to address residual and biowaste											
Procurement of additional garbage trucks											

# Solid Waste Management

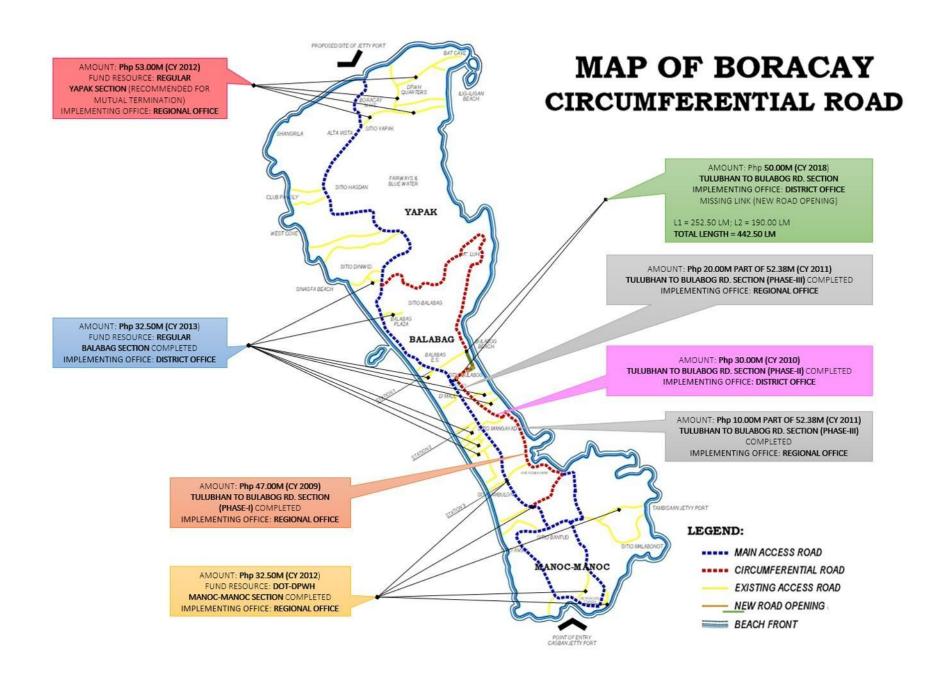
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati						
Update the 10- year solid waste management plan											
Reorient/train all stakeholders to segregate their wastes and other aspects of SWM											

# Solid Waste Management

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehak	oilitati	ion					
Fast track the construction of MRF in Manoc-manoc											
Rehabilitate existing MRFs											

#### **Roads**

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity		Six	montl	n rehak	oilitat	ion					
Construction of missing link of diversion road											



	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehal	oilitati	ion					
A. Preparation of Spatial data on Boracay Island											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehak	oilitati	ion					
B. Management											
of Public Lands											
B.1 Sending of											
Show-Cause											
Orders and											
Evaluation of											
Answers											
B.1.1 Shoreline											
Easement											
B.1.2 Road											
Easement											
B.1.3 Wetlands											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab							
B.2 Sending of notice to vacate (NTV) in Forestland											
B.3 Filing of cases in Court:											
B.3.1 Violation of PD 705											
B.3.2 Violation of Presidential Proclamation 1064											

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	on					
B.4 Sending of Notices to demolish:											
B.4.1 Shoreline											
B.4.2 Road Easement											
B.5 Identification of Resettlement Areas											

#### **Wetlands**

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Si	x mon								
Removal of Illegal Structures, piled debris, waste and sediments, invasive Alien Species within identified wetlands											
Adoption Phytoremediation and Bioremediation Technologies											

#### Geohazard

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab	ilitati	on					
Updating of Sinkhole and Cave Inventory											
Geotechnical Studies (i.e. Ground Penetrating Radar of Areas Near/Within Identified Sinkholes and Caves)											
Monitoring for Signs of Karst Subsidence											

#### **Biodiversity**

	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
Activity/ies		Six	mont	h rehab							
Establishment of Boracay Island Critical Habitats (BICH) pursuant to RA 9147 for flying foxes and marine turtles											
Enforcement of Wildlife Act e.gDeputation of Enforcement Officers WEO Operations											





# THANK YOU!