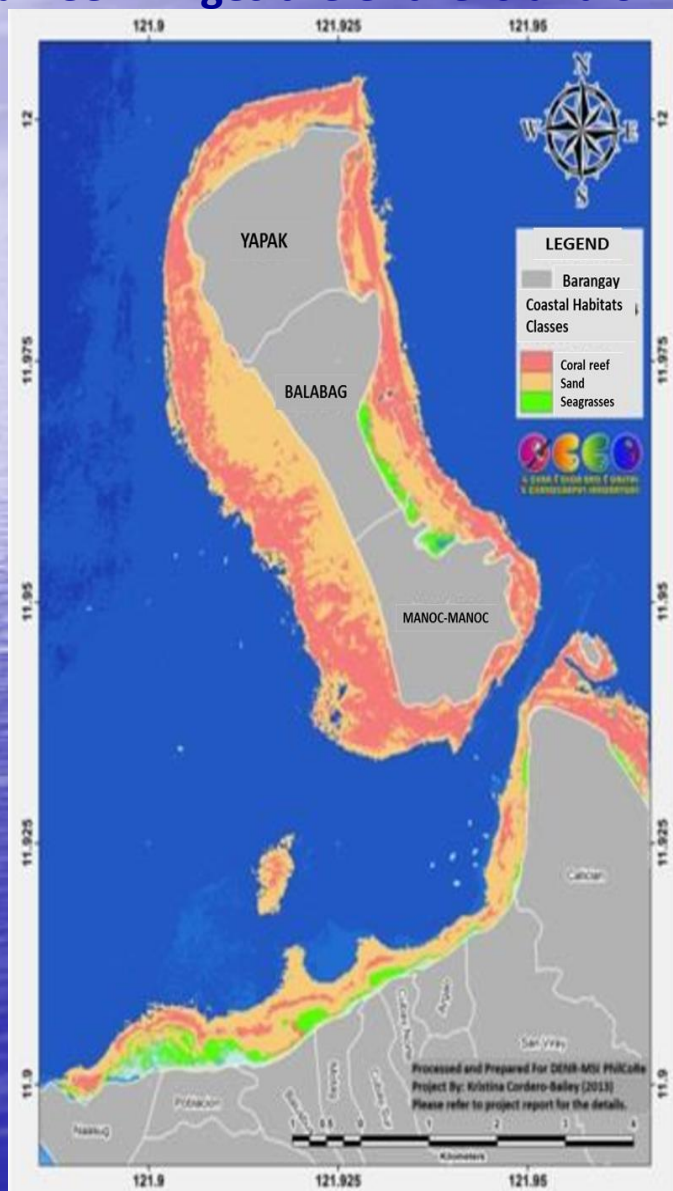


Current Conditions of Reefs in Boracay: DENR (BMB) Action Plans

Vincent V Hilomen
Biodiversity Management Bureau
Department of Environment and Natural Resources

Coastal and Marine

Coral reef fringes the entire island of Boracay



Sites	Coral Reef Area (ha)	Seagrass Area (ha)	Mangrove Area
Yapak, Boracay Island	161.89	0.83	156.42
Balabag, Boracay Island	258.30	10.73	150.93
Manoc-manoc, Boracay Island	153.88	8.15	208.98

With 9 Marine Parks (Locally Managed MPA: MO 272) and 15 designated scuba diving sites

- Angol Point Reef
- Tambisaan and Crocodile Reef
- Tulubhan Reef
- Ilig-Iligan Reef
- Balinghai Reef
- Lapus-Lapus Reef
- Sa-Id Point Reef
- Punta-Bunga Reef (recently declared in 2009)
- Bunyugan Reef (recently declared in 2009)

Coastal and Marine

..... LEGEND

Marine Turtles



Marine turtle hatchlings
March 2018



Hawksbill turtle



Green turtle



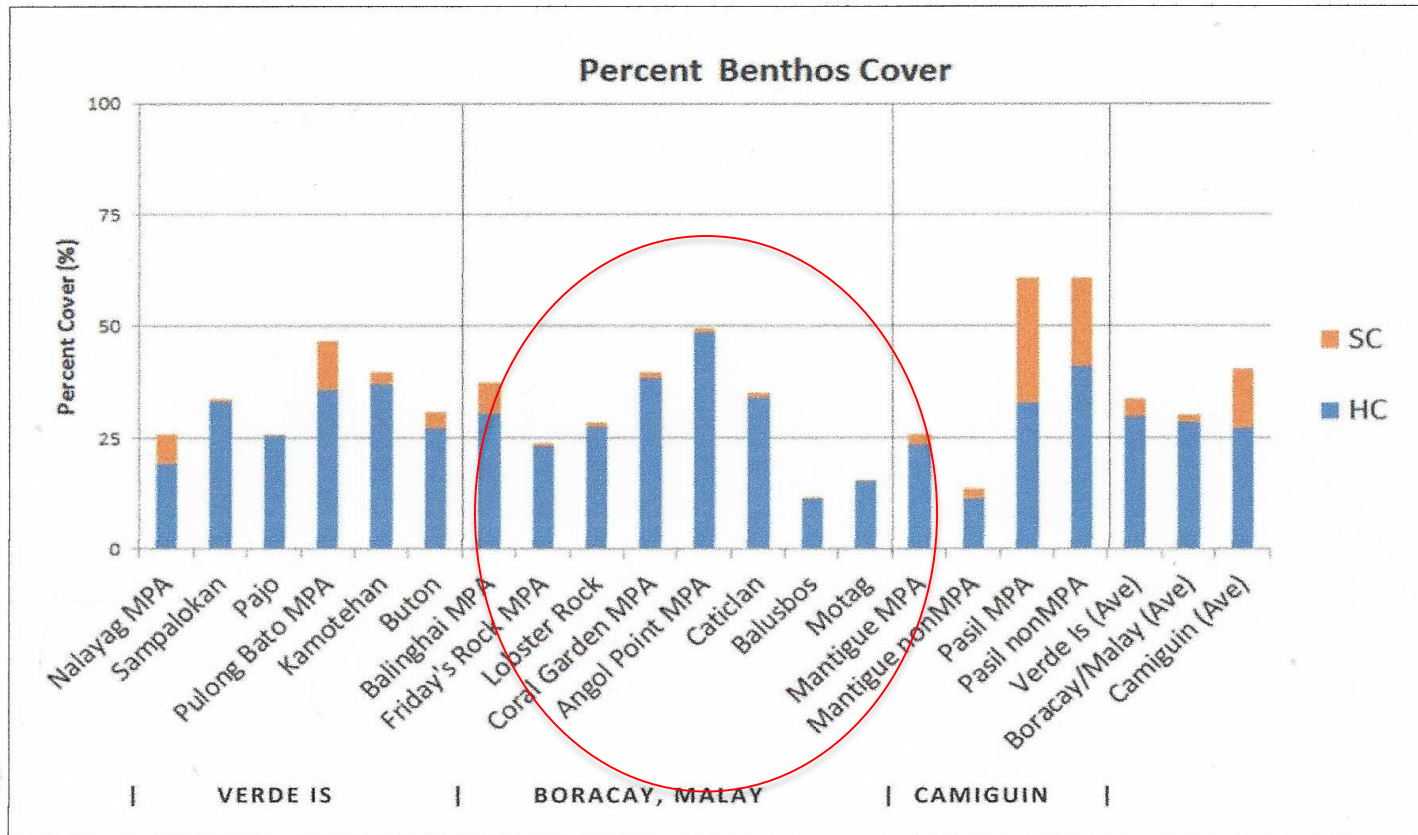
Olive ridley



Photo credit: DENR Region 13

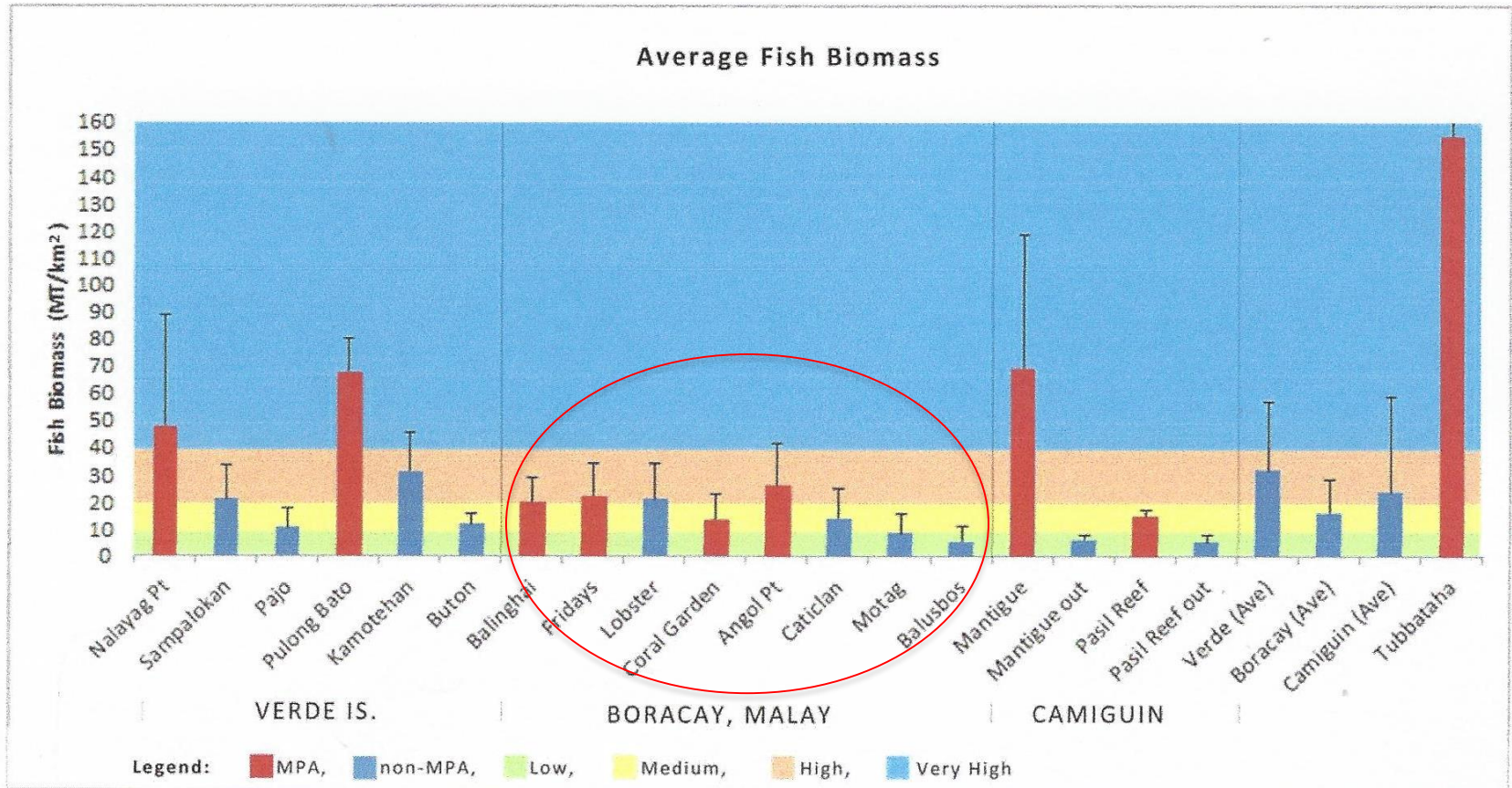
Leather back turtle

CORAL COVER

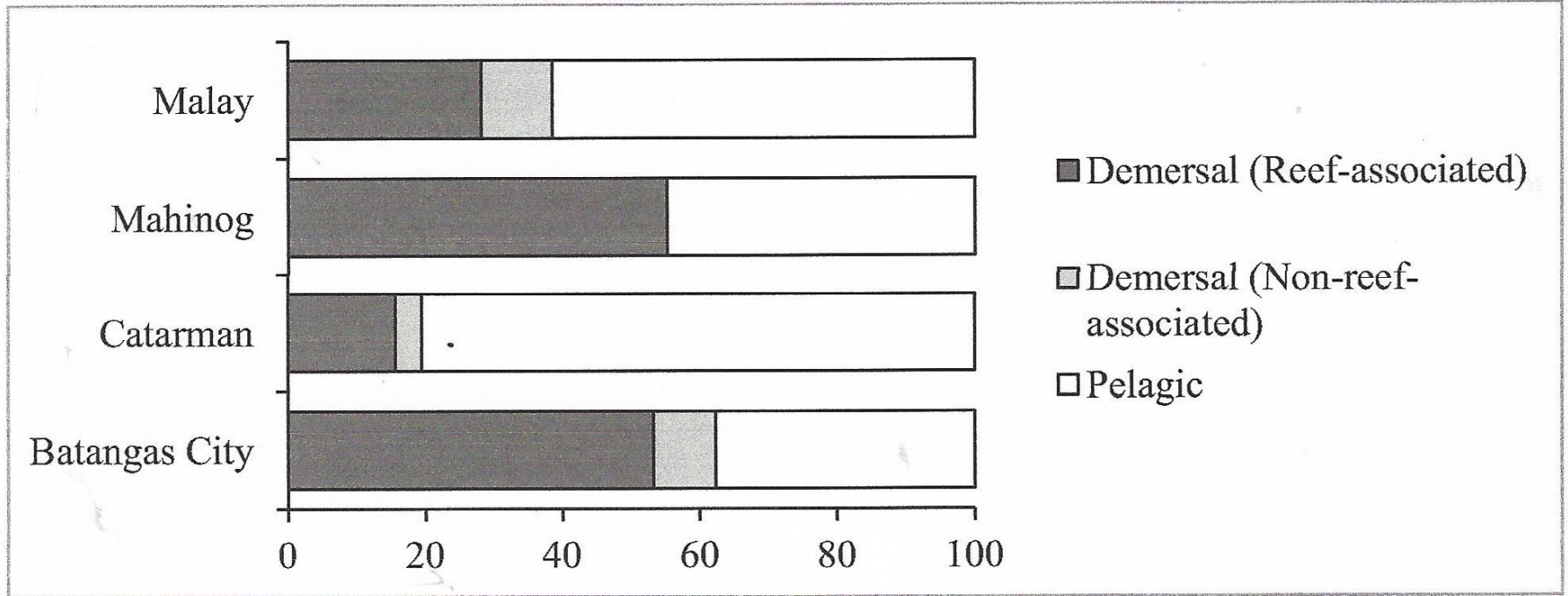


Reef condition based on live coral cover: 0-21.9% Poor; 22-32.9% Fair; 33-43.9% Good; >44% Excellent. POOR=2 of 8 sites, FAIR= 4 of 8 sites; GOOD = 1 of 8 and Excellent 1 of 8

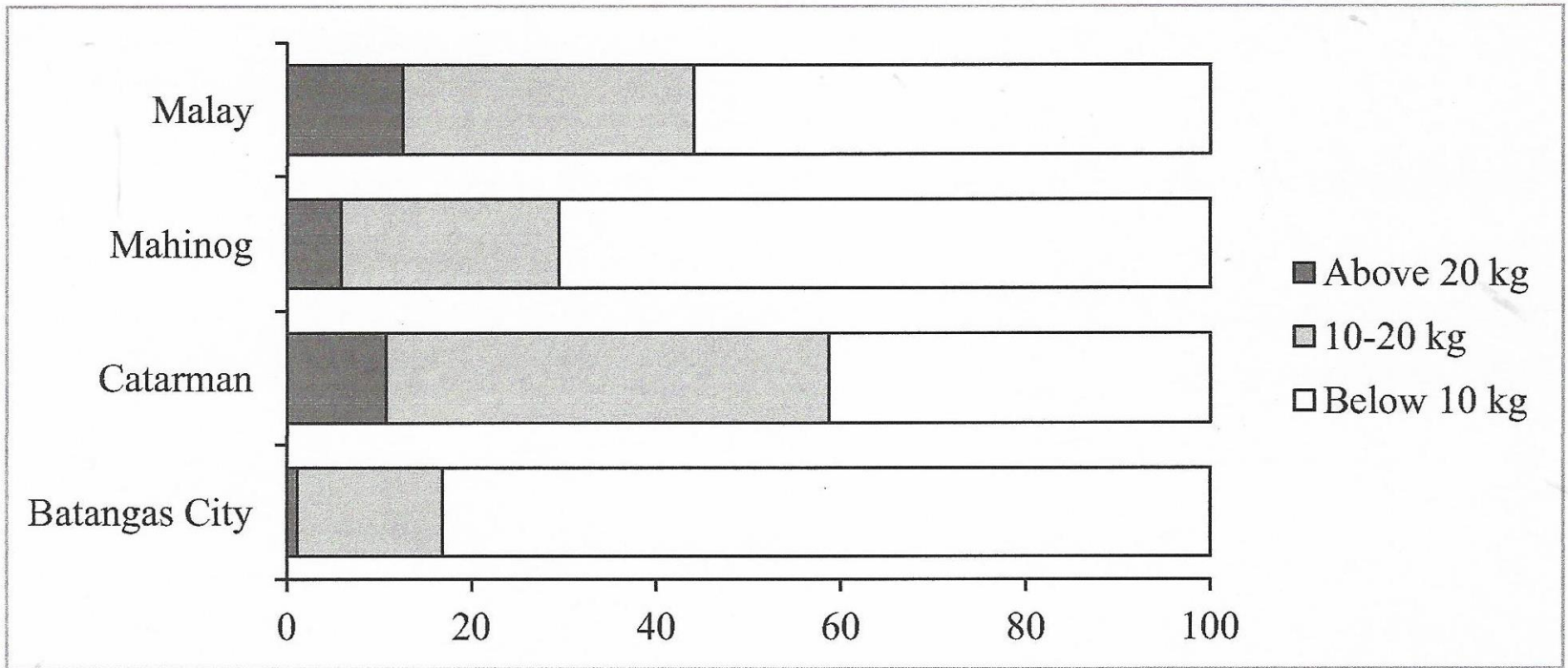
REEF FISH



Fish Biomass: Low = 2 of 8 sites; Med = 3 of 8; High = 3 of 8; Very High = None



Catch composition: Boracay area, >60% pelagic spp.; ~10% non-reef associated and ~30% reef associated



Catch rates in Boracay: nearly 60% of fishers report daily catch rates of below 10 kg per day; ~30% between 10 – 20 kg per day and ~ 10% above 20 kg per day

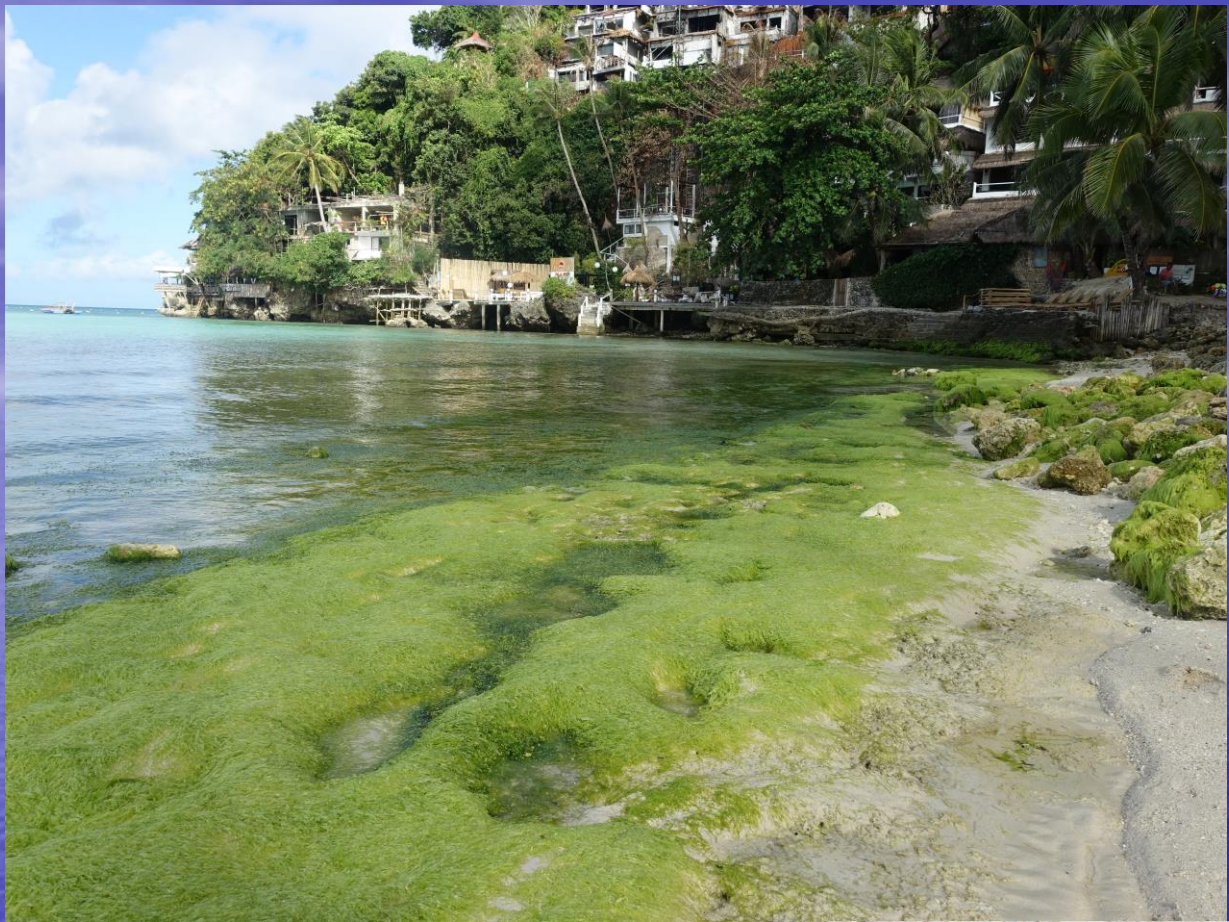
Threats and Pressures

- Pollution [over capacity –tourism activities]
 - Solid wastes
 - Waste water
 - Only ~70% of 842 establishments (bigger ones) have their own STP or are connected to Boracay Water STP
 - Current STPs not enough
 - Those without STP connect illegally to storm drain

#LoveBoracay?



<https://www.facebook.com/dboracay/photos/pcb.938352373005397/938350086338959/?type=3&thicker>







Before



After



Threats and Pressures

- Habitat conversion
 - Wetlands have been reclaimed, titled and establishments erected
 - Blocked natural drain of watersheds
 - Ability of wetlands to control floods impaired (worst flooding in Boracay December 2017)
 - Habitat loss for biodiversity (birds, invertebrates, fish, plants)

Threats and Pressures

- Habitat conversion
 - Forestlands have been reclaimed, titled and establishments erected
 - Habitat loss for biodiversity (bats, birds, invertebrates, plants)
 - Caves disturbed
 - Displaced important biodiversity (snakes, bats, crabs)

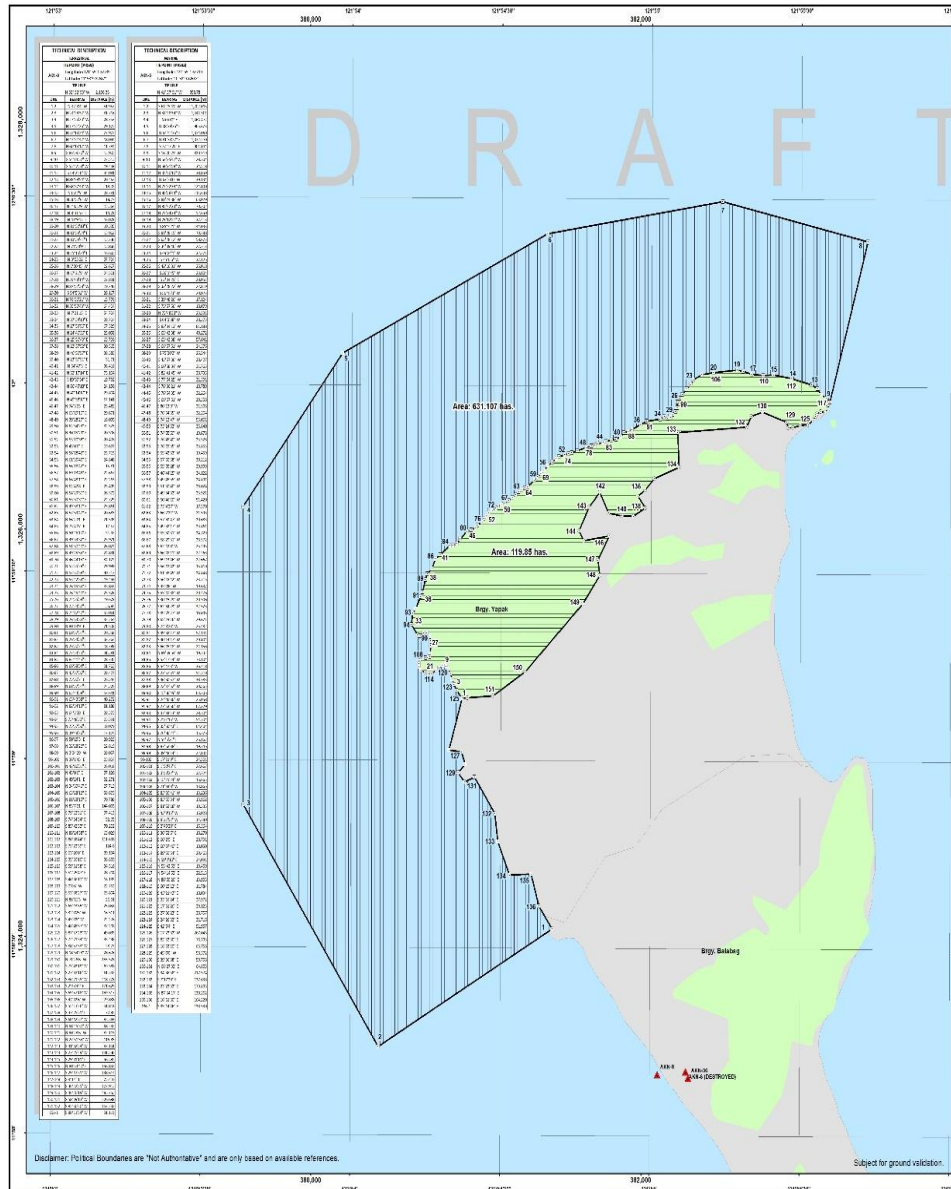
Other Threats and Pressures

- Tourism activities that help degrade habitats (aside from over capacity)
 - Anchor damage
 - Recreational fishing
 - Collecting mementos (shells, sand)
- Weak governance (both local and national)
 - Solid and liquid waste management
 - Issuance of permits
 - Law enforcement
 - Monitoring and evaluation

What we intend to do (for which we need help from science community)

- Determine carrying capacity (programmatic)
 - Develop new limits for indicators (e.g. E. coli, BOD, TSS, etc.)
 - Number of tourists on the island
 - Establishments
- CEPA –communication, education and public awareness campaigns to change behavioral attitudes including greed
- Increase competence for governance
- Promote code of conduct for tourism
- Develop new and better rehabilitation methodologies consistent with correct conservation

PROPOSED BORACAY ISLAND CRITICAL HABITAT



Map No. R06-CH-01

**PROPOSED
BORACAY ISLAND
CRITICAL HABITAT**

SCALE 1:10,000

0 0.25 0.5 1
Kilometers

SPHEROID: Clarke 1866
PROJECTION: Universal Transverse Mercator (UTM), Zone 51N
HORIZONTAL DATUM: Philippine Reference System of 1992 (PRS 1992)
VERTICAL DATUM: Mean Sea Level

LEGEND

- PRSO Control Monument
- Marine Critical Habitat Corner
- Terrestrial Critical Habitat Corner
- Marine Critical Habitat
- Terrestrial Critical Habitat
- Foreland (LC-3842)
- Barangay Boundary (Not Authoritative)
- Municipal Boundary (Not Authoritative)

LOCATION MAP

Republic of the Philippines
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
BIODIVERSITY MANAGEMENT BUREAU

THIS IS TO CERTIFY THAT THIS IS THE TRUE AND CORRECT MAP OF BORACAY ISLAND CRITICAL HABITAT SET ASIDE PURSUANT TO SECTION 26 OF R.A. 9147 OTHERWISE KNOWN AS THE WILDLIFE RESOURCE CONSERVATION AND PROTECTION ACT.

PREPARED BY:

CHECKED & VERIFIED BY:

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Biodiversity Management Bureau

THERESA MUNDITA S. LIM
DIRECTOR
Biodiversity Management Bureau

ROY A. CIMATI
SECRETARY
Department of Environment
and Natural Resources

Total Area (in ha):
750.96
 Land: 119.85
 Marine 631.107

Location:
 Brgys.Yapak
 and Balabag
 Malay, Aklan

With critical habitat, we hope to achieve

- Protecting nesting sites for marine turtles, roosting sites of fruit bats, cave habitats
- Impose on the island no collection of sand, shells and other materials
- Educate tourists and locals
- Initiate improving governance
- Improve cooperation with locals for conservation activities
- Rehabilitate conditions of habitats