

# CITY OF SIPALAY

## LOCAL CONSERVATION AREAS





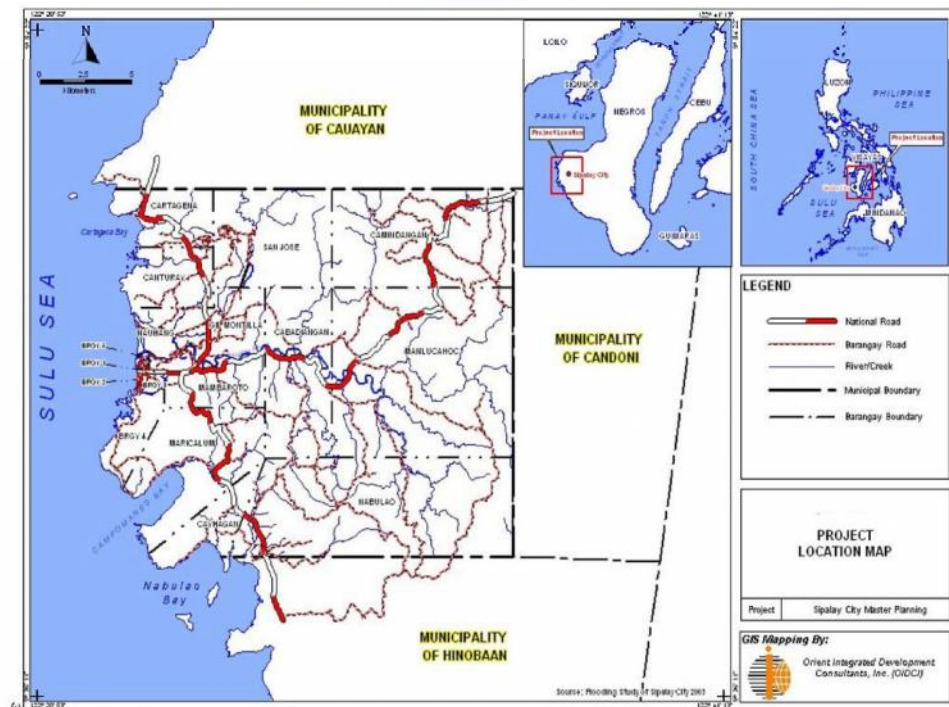


**Benefits of Landscape and Seascape  
Conservation Approaches:  
Terrestrial Local Conservation Areas  
(LCAs) and Marine Protected Areas  
(MPAs)**

**Sipalay City Learning Experience**

# Quick Facts

- ✓ 4<sup>th</sup> Class component city of the Province of Negros Occidental
- ✓ 178 kms. from Bacolod City
- ✓ 442.7 sq. kms. total land area
- ✓ 38 kms. stretch of coastline
- ✓ 46,454 has. Municipal water
- ✓ 69,096 population – 2013 census
- ✓ 17 barangays (9 coastal and 8 hinterlands)
- ✓ 2,016 has. declared forest protected areas (3 barangays)
- ✓ 148 has. marine protected areas(3 barangays)
- ✓ 278 has of mangrove forests
- ✓ 50 has. proposed mangrove protected areas



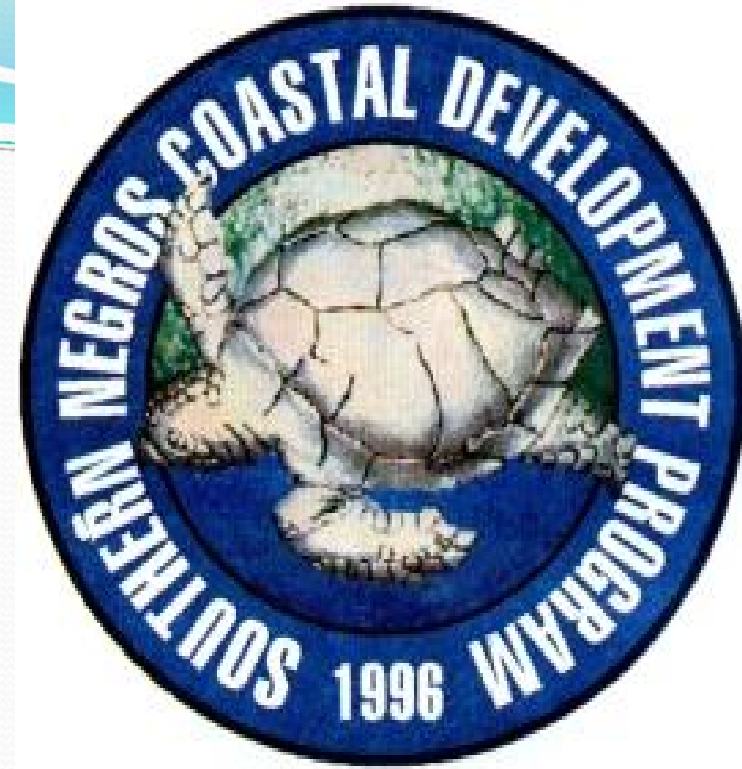


### *VISION*

Institutionalized integrated coastal resource management with abundant marine and terrestrial resources through sustainable use of resources, stakeholders empowerment, multi-sectoral collaboration and equal opportunities.

### *MISSION*

SNCDMC shall lead in the protection and conservation of natural resources *by mobilizing and empowering upland and coastal communities* through coastal and upland reforestation, enforcement of appropriate of fisher and other environmental laws, provision of alternative livelihood, establishment of marine protected areas and instill environmental awareness through IEC.



Sipalay City has been an organic member of the Southern Negros Coastal Development and Management Council (SNCDMC) since 1996.



## *Sipalay City Vision*

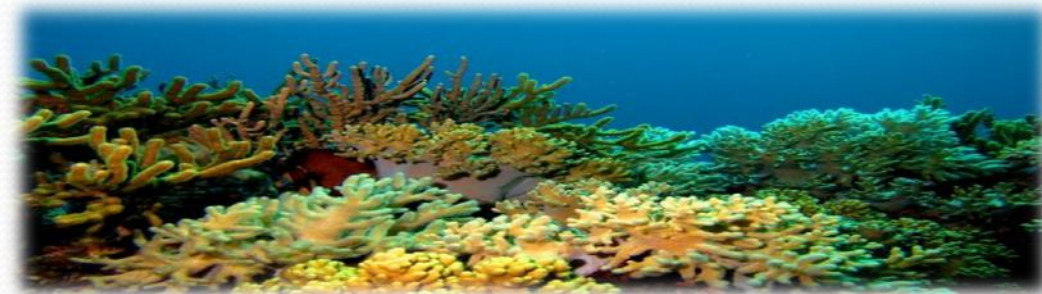
A city with protected watersheds and reforested highlands hosting wildlife preserves and extensive, protected mangrove forests, coral colonies, fish sanctuaries, and world famed coves—all lying at the heart of partnership of community-based eco-tourism and sustainable commercial ventures





# *Rationale, motivations, perceived benefits and importance*

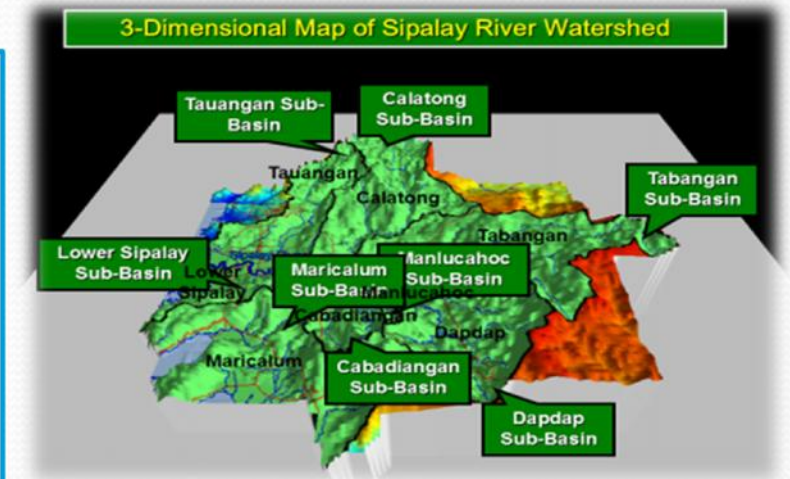
Sipalay has varied and rich natural assets that constitute its primary resource base for development. Overtime, however, the alteration and transformation of its complex landscape system from resource extractive and degrading activities have taken its toll. Multiple environmental stresses have constrained the natural regenerative capacity and productivity of terrestrial and aquatic ecosystems, which are the main resource base for socio economic development.





# *Rationale, motivations, perceived benefits and importance*

The interconnectivity of the landscape is such that activities and stresses on the upper watersheds of Sipalay clearly transcend across terrain units as exemplified by the flooding problem. Although flooding is a natural phenomenon in the alluvial plains, high surface run-off from vegetation clearing coupled by induced soil erosion of disturbed steep areas as well as piles mine wastes lead to sedimentation of rivers limiting their natural capacity to absorb flood waters, hence aggravating flooding in low-lying areas where most of the built-up and agricultural activities are concentrated. Sediment load of rivers are transported creating physical changes in the coastal zone and smothering marine habitats. At the same time, sediment load contains heavy metals from the natural occurrence of minerals in the City further included by beneficiation processes of mined ores.





# *Rationale, motivations, perceived benefits and importance*

Inland and coastal waters are highly susceptible to exposure and contamination from these substances, which are toxic to human and aquatic life. Such condition limits beneficial use of numerous water resources important for social, agriculture/fishery and tourism development. Urban expansion in the alluvial plains, on the other hand, has to contend with flooding hazards, vulnerability to settlement and liquefaction including tsunamis and storm surges at its seaward edge. To overcome these hazards would entail immense effort and costly investment for the City.





# *Rationale, motivations, perceived benefits and importance*

## Opportunities for Development:

1. The coastal/marine ecosystem and its adjacent highlands are studded with breathtaking landforms and rich marine flora and fauna. Tourism, while its nascent stage, is slowly emerging as a major industry with a whole length of beautiful coastline and stunning highland views as natural assets that can be developed with relative ease.
2. Forest and watershed regeneration is still possible and should take primacy because of its major role in maintaining the ecological balance of the entire city. The availability of planting materials provides the opportunity for expanding these remaining patches of natural forests in conjunction with agro-forestry and tourism.



## *Rationale, motivations, perceived benefits and importance*

**Sipalay City adopted a long-term resource sustainability principles, elements, and guiding strategies as follows:**

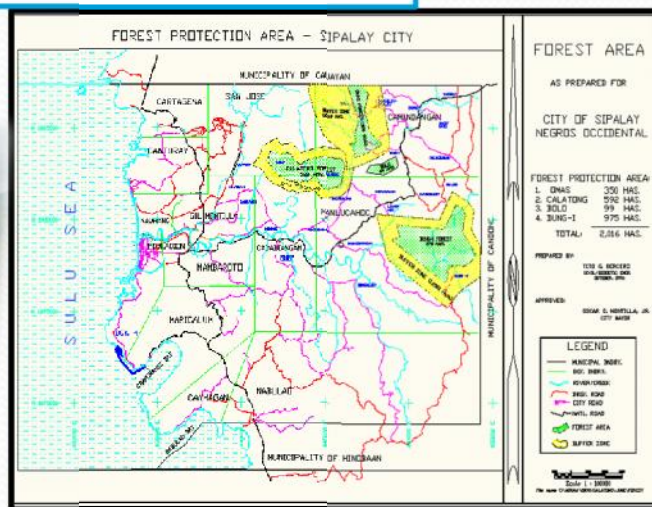
1. **Land and sea connectivity**-recognizing that they mutually influence each other in terms of natural process such as productivity, production and transport of nutrients and pollutants, climatic patterns and movement of terrestrial and aquatic species;
2. **Protection and restoration of degraded habitats** in order to bring back the natural productivity of land and aquatic ecosystems to perform their ecological function and enhance their production potential for economic development;
3. **Network of small protected zones** along key strategic terrestrial and aquatic areas that will allow self-recruitment and movement of species/propagules from one protected habitat to another and from protected area to sustainable use zones;
4. **Integrated land and sea resource management** to harmonize and rationalize land uses within the context of protection, sustainable use and socio-economic development.



# Forest Protected Areas

Sipalay City Tropical Forest Protection Areas and Wildlife Sanctuary (2,016 hectares)

Sitio Omas, Brgy. Camindangan  
Sitio Dung-I, Brgy Manlucahoc  
Sitio Calatong, Brgy. Cabadiangan





# *Declaration of Policy*

The City of Sipalay, pursuant to Section 6 of RA 9027 (Sipalay City Charter) providing for the jurisdiction over the areas of Omas Valley, Dung-I Valley and Calatong forest, declare remnant forest patches as a critical wildlife habitat that needs protection to preserve its flora and fauna and in consideration of its importance as watershed.

C.O. 2006-008 An Ordinance declaring forest patches in Sitio Omas, Barangay Camindangan, Sitio Dung-I, Brgy Manlucahoc, and Calatong Forest, Brgy. Cabadiangan, as Sipalay City Tropical Forest Protection Areas and Wildlife Sanctuary of the City of Sipalay, Province of Negros Occidental.

# *Composition of Management Board*

City Mayor as Chairperson

City Environment and Natural Resources Officer

City Planning & Development Coordinator

Sangguniang Chairman on Legal Matters

City Agriculturist

The DENR-CENRO

A representative from the State Academe in Sipalay City

A representative from PEMO

A representative from the existing PO in the Area

Punong Barangay of Camindangan, Manlucahoc, and Cabadiangan

A representative from the organized women's group

Representative, LGU-Cauayan (on-call basis, as need arises)



## *Duties and Functions of MB*

- Conduct quarterly monitoring of sectoral areas of concern, regular stakeholders meeting and information drives in order to amplify the purpose and objectives of this ordinance to the people.
- Formulate plans and programs for the protection and conservation of wildlife in the area and to conduct inventory of wildlife species and forest trees and institute scientific studies of the same including the possible re introduction of endemic species found in the area.
- Institute reforestation activities by propagating tree species that are in the reservation for the use in the conservation effort and as material for CBFMA reforestation program.
- Coordinate with national government agencies, funding institutions and other sectors for partnership arrangement in the implementation of this ordinance.
- Cause the strict implementation of related national laws on wildlife and of PD 705 or the revised forestry code of the Philippines.
- Conduct quarterly monitoring of sectoral areas of concern, regular stakeholders meeting and information drives in order to amplify the purpose and objectives of this ordinance.

# Timeline of Activities

- ✓ February-May 2005 Wildlife survey conducted by the Center for Tropical Conservation Studies of Siliman University yielded 20 species of mammals (7 non-Volant; 13 Volant), and 110 species of birds (14 are considered as globally threatened); 250-300 trees/has.
- ✓ 2005 Revalidation of technical description of proposed Forest protected areas
- ✓ 2006 Declaration of forest patches as Tropical Forest Protection Zone and Wildlife Sanctuary
- ✓ 2006 Training and deputation of Bantay Bukid Brigade
- ✓ Constitution of Protected Area Management Board
- ✓ Provision of Alternative livelihood to upland farmers





# *Enforcement*

- ✓ Training and deputation of forest of Bantay Bukid Brigade
- ✓ Provision of Enforcer equipments
- ✓ Regular Foot Patrol and Site Monitoring
- ✓ Establishment of Barangay Intelligence Networks
- ✓ Inspection and Apprehension
- ✓ Filing of Cases





# Environmental Advocacy

- Consultative Meeting
- Pulong-pulong (PD.705, City Environment Code)
- Film-showing (schools)
- Installation of Signages
- Distribution of reading Materials
- Environment Week Celebration
- Tree Planting
- Share a gift for better environment





# Financial Capacity

The City allocation for reforestation projects at Barangays Camindangan, Cabadiangan, and Manlucahoc to be implemented by City ENRO

Environmental Mgt. Program	Fiscal Year	Budget
8.5M	2015 (proposed)	1.5M
8.5M	2014	1.5M
4.9	2013	900K
4.9M	2012	900K

Source, CPDO AIP

## Proposed Support for Forest Protected Area (2 years project)

- GIZ-PAME Proposed Counterpart 1.3M
- Sipalay 3M
- Province and CENRO-Sipalay 800K

# Coastal Resource Mgt: MPAs Establishment and Networks





# Brief Coastal Profile

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<i>Total Number of Coastal Barangays</i>	8
<i>Total Coastal Population</i>	35, 500 (NSO 2010)
<i>Total Number of Major Rivers</i>	9
<i>Total Coastal length</i>	38.6 Kms
<i>Municipal Water Area</i>	46, 520 has.
<i>Major Bodies of Water</i>	Sulu Sea
<i>Estimated total reef cover</i>	1,000 has. more or less (Coral Cay 2001)
<i>Sea grass beds</i>	100 has. more or less (DED 2005)
<i>MPA Total Covered Areas</i>	148 has.
<i>Total Mangrove Cover</i>	278 has. More or less
<i>Important pelagic fishery products</i>	Tuna and flying fishes

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## *CRM-related Focus Program Initiatives*

- *Coastal Regulation Management (2008)*  
(Fishing Boat and Gear Licensing Management)
- *Coastal Law Enforcement (2003)*  
(Bantay Dagat /Bantay Katunggan )
- *Coastal Habitat Protection (2003)*  
(Marine Protected Area Establishment and Mangrove Refo and Conservation/Rehabilitation Support Program, Rescue of Marine Mammals /Marine Turles, Protection of endangered species)
- *Coastal Resource Assessment (2001)*  
(Mangrove Inventory, MPA survey and assessment , Capture Fishery Production
- *Costal Enterprise Development (2003)*  
(Livelihood Support Assistance for fisherfolks affected by the implementation of RA 8550, MPA Ordinances and Mangrove Conservation and PO's Capacity Building ).



## *Related Legislative Measures Enacted, Adopted and Implemented*

Organization and formation of FARMC's in 1999 lead to the enactment of various ordinances and legislative action pertaining to Resource Management.

- ✓ Delineation Ordinance (C.O 2003-006)
- ✓ Campomanes Ballo MPA Ordinance Establishment (C.O 2004-006 )
- ✓ Campomanes Bay Water Use Regulation Ordinance (C.O 2002-12)
- ✓ Basic Fishery Ordinance ( 2005-004)
- ✓ EO 305 Fishing Vessel Registration Ordinance (C.O 2008-008)
- ✓ Municipal Users Fee Ordinance (C.O 2012- 004 )
- ✓ City Environment Code of 2013

# *Legal Bases for MPA Establishments*

**Section 16 of RA 8550** stipulates that the *“The municipal/ city government shall have jurisdiction over municipal waters...”*

*“Enforce all fishery laws, rules and regulations...”* **(Section 80, RA 8550)**

**Section 81, RA 855** *“that at least fifteen percent (15%) where applicable of the total coastal areas in each municipality shall be identified...”*

**Section 96, RA 8550** *“It shall be unlawful to fish in fishery areas declared by the department as fishery reserves, refuge and sanctuaries”*

**Local Government Code of 1991** granting power to the LCE to issue executive order for the faithful and appropriate enforcement and execution of laws and ordinances;

And the Sangguniang Panlungsod to protect the environment and impose appropriate penalties for acts which endanger the environment, such as dynamite fishing and other forms of destructive fishing...



# *Sipalay City MPA (C.O. 2004-006)*

MPA Type	Combination
MPA Management	Locally-managed
Ecosystems being Protected	Coral Reefs, seagrasses
Location	Barangays IV and Maricalum, Sipalay City, Negros Occidental
Size of MPA	Marine Reserve 36 has.; Marine Sanctuary 30 has.
Date established	August 12, 2004
Ordinance Number	City Ordinance No. 2004-006
MPA Meat Level	3 (Sustained as of 2013)



# Timeline of Activities

- ✓ Aug.1997-March 1999, CCC Baseline Survey
- ✓ 2003 UW assessment by PRRCFI
- ✓ August 2004 Establishment of the first MPA in Sipalay City
  - Demarcation of buoys
  - Training and reactivation of BD
  - First MB meeting
- ✓ 2005. Signing of MOA with DED
  - Willingness to pay survey for user fees
  - Installation of German consultant
  - Acquisition of communication equipment, construction of Bantay Dagat HQ





# Timeline of Activities

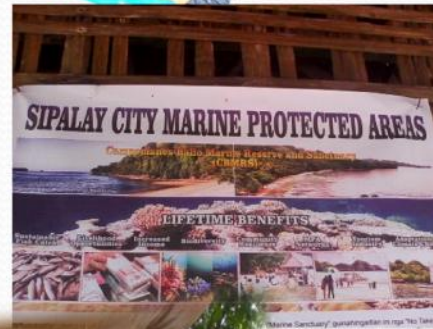


- ✓ 2007 Signing of MOA with GTZ (German Technical Cooperation)
- ✓ 2008 Conduct of MPA Management Planning Workshop
- ✓ 2012 Declaration of three additional MPAs
  - MOA with USAID-BFAR ECOFISH Project
- ✓ 2013 Participatory MPA Management Planning



# *Intensive IEC (MPA social marketing)*

- Consultative meetings and public hearings
- KAP survey
- MPA day (film-showing, fisherfolk games, orientation-seminar)
- Production and distribution of MPA IEC materials (installation of signages, mpa t-shirts, thematic calendar, policy banner etc.)
- SCUBASORERO and coastal clean-up drive
- Environment week activities (palawod, mangrove planting)





# Initiative Outcome (Regulation/Law Enforcement )

*Starting in 2003, after the City Mayor declared an “all out war “ against illegal fishing resulted in*

- Enactment and adoption of Basic Fishery Ordinance as basis of Enforcement of Fishery Laws in 2005 pushed for the conviction of various illegal fishers reflecting a high rate of conviction up to 90% of cases filed in court were resolved.
- Higher rate conviction of illegal fishing cases filed in court greatly contributed to the provision of monthly salaries for fishery law enforcement unit (Bantay Dagat) starting in 2006 up to the present with 8 Patrol Boats.
- Enactment and adoption of Fishing Vessels Registration Ordinance in 2008 guide LGU in the identification of priorities among coastal stakeholders for the inclusion and exclusion entry and implement a no fishing permit , no entry policy and fishing exclusively for Sipalay residents only.



Year	No. of Violation	No. of Case filed	Violation	Remarks
2003	9	9	Sec. 86/90 of RA 8550	7 cases(Fiscal), 1 convicted, 1 penalty
2004	10	10	Sec. 86/90 of RA 8550	4 convicted,3 fiscal office, 3 penalty
2005	7	7	Sec. 86/90 of RA 8550	4 convicted, 3 fiscals office, confiscated fishing gear and catch
2006	6	6	Sec. 46 ,City Ordinance 2005-004	2 fiscal office, 3 fined & convicted, 1 dismissed
2007	-	-	-	-
2008	9	9	Sec. 46 ,City Ordinance 2005-004	9 convicted
2009	13	5	Sec. 46 ,City Ordinance 2005-004	8 warning/reprimand/ 4 case file 1 convicted
2010	5	3	Sec. 46 ,City Ordinance 2005-004	-3 convicted and fined
2011	4	4	Sec. 46 ,City Ordinance 2005-004	2 convicted and fined
2012	4	4	Sec. 46 ,City Ordinance 2005-004	Convicted 27 Individuals
2013	1	1	Sec. 46 ,City Ordinance 2005-004	Cases filed in proper court

# Initiative Outcome (Livelihood)

Displaced Fisherfolk  
Support Program :  
Php. 4 Million (light  
aggregating, cash for  
work incentive, gear  
swap, fish aggregating  
devices, post harvest  
facilities)





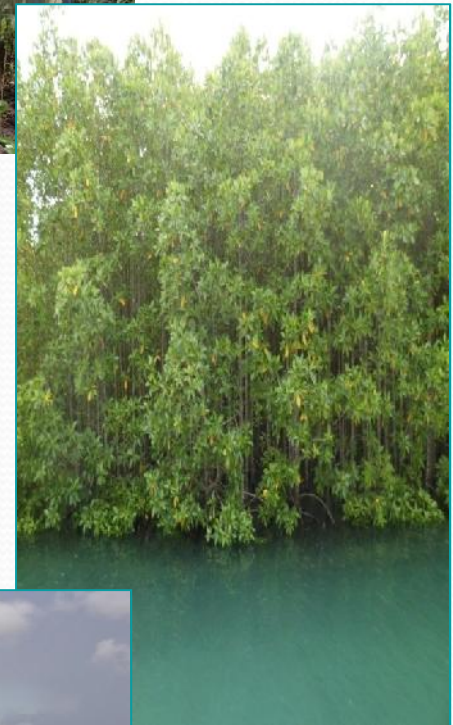
# *MPAs as Seaturtles-nesting sites*





# *Mangrove forests conservation efforts*

- ✓ Survey assessments
- ✓ Nursery Establishments
- ✓ Advocacy
- ✓ Reforestation
- ✓ Training and deputation of BKV
- ✓ Proposed sites for Protection





# *MPA Managers*

M

P

A

The City Mayor as overall chairperson

ABC President

Chairpersons of the EXECOM in their respective areas

SP Chairman on Agriculture

SP Chairman on Environment

SP Chairman on Tourism

City Agriculture Officer

City Planning and Development Officer

City Environment & Natural Resources Officer

CFARMC Chairman

CENRO

PNP Chief

City Tourism Officer

City Tourism Council Chairman

DepED representative

SK Federation President

Women sector

Religious sector

Business sector

B

O

A

R

D

## *Duties and Functions of SCMWMB*

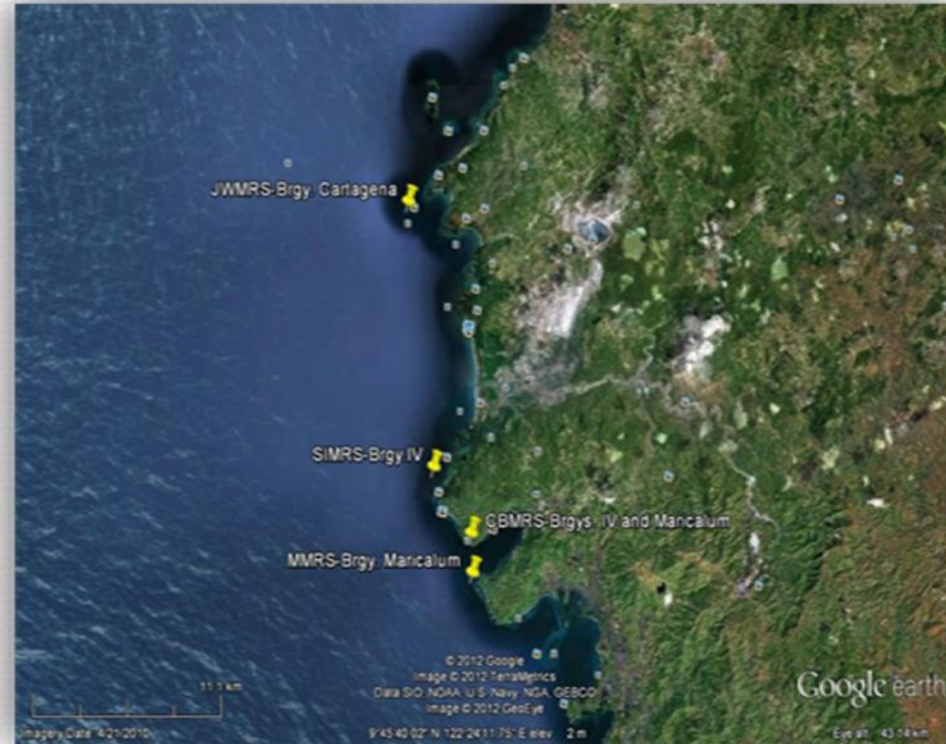
- Formulate programs and policies for the consideration of the City Government;
- Develop plans, programs, projects and strategies on environment and natural resources
- Establish and maintain a validated registry of municipal fishing vessels, gears and fishers within the MPAs;
- Coordinate with the government agencies and non-government organizations which promote sustainable management of the environment and natural resources;
- Vigorously enforce all environmental and fishery laws, promulgate and enforce rules and regulations relative to marine protected areas; and
- Exercise such other powers; perform such other duties and functions as maybe prescribed by law and ordinances.



# *Executive Committees (EXECOMs)*

*pursuant to C.O. 2012-004 as amended*

1. CMBRSEC, Brgys. IV and Maricalum
2. JWRSEC, Brgy. IV
3. MMRSEC, Brgy. Maricalum
4. SIMRSEC, Brgy. IV



*General Function: Oversee and administer the respective activities in their specific areas of concern as well as conduct periodic inspection and patrol and recommend filing of cases against apprehended violators*

# CRM Budget Support Allocation

- Budget allocated primarily to *Support and Maintenance of existing MPA's, strengthening of Bantay Dagat and Bantay Katunggan Enforcement Units , FARMC development, Conservation and Rehabilitation of Biodiversity Areas (Mangrove Refo), Enterprise Devt. and Livelihood for displaced fisherfolks, contribution to the Coastal Alliance of in Southern Negros for CRM Management .*

## AIP-Coastal Resource Mgt. Program

FY	Budget
2014	2M
2013	2M
2012	1M

## External Funding Source:

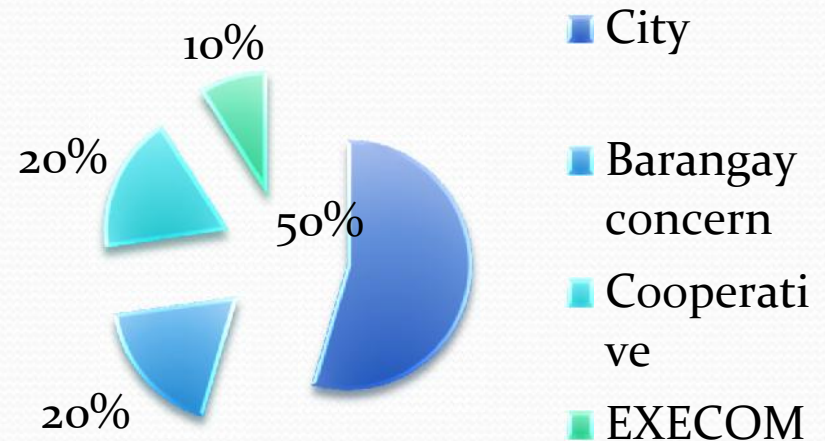
1. German Development Cooperation (GIZ, Ded, ACCCoast)
2. RARE Conservation
3. Provincial Government (PEMO, OPA)
4. USAID-BFAR ECOFISH Project



# Conservation User Fees

Calendar Year	Users Fee Collected
2007	30,000.00
2008	50,000.00
2009	40,000.00
2011	43,000.00
2012	114,000.00
2013	322,000.00
2014	294,000.00
Total	855,000.00

## Percentile Sharing

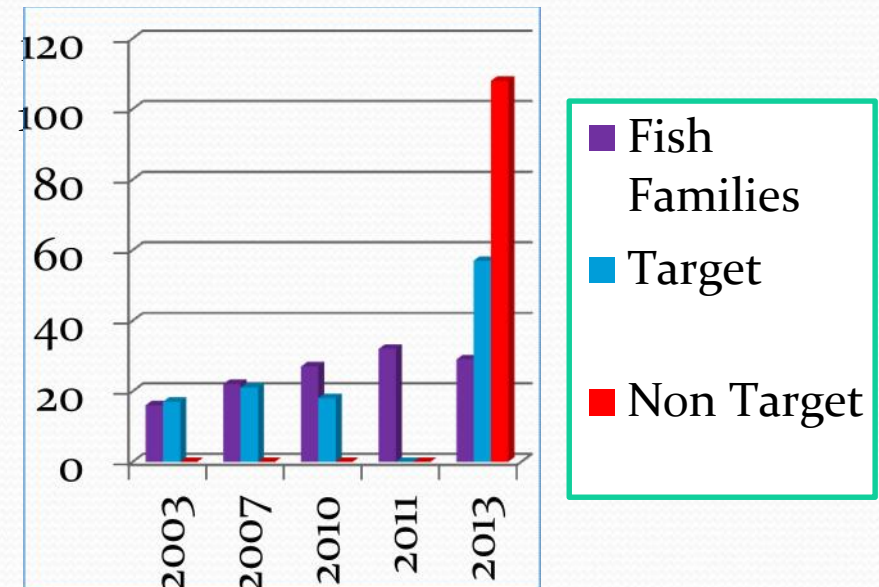


Your User Fee will help Improve Sipalay and protect its marine resources

# Benefits gained from LCA

## Enhanced Biodiversity

Year	Fish Families	Target	Non-Target
2003 <sup>1</sup>	16	17	0
2007 <sup>2</sup>	22	21	0
2010 <sup>3</sup>	27	18	0
2011 <sup>4</sup>	32	0	0
2013 <sup>5</sup>	29	57	108



Sources: <sup>1</sup> Lumbab, et.al. Underwater Survey Report and Management Plan for the Recommended Protected Area in Sipalay City. June 2003.

<sup>2</sup> Rebadomia, Jonas 2007. Underwater Survey and Progress Report of Sipalay Marine Protected Area

<sup>3</sup> Rebadomia, et.al 2010. Underwater Survey and Progress Report of Sipalay Marine Protected Area

<sup>4</sup> Nillos-Kleiven, et.al. 2011. Field Report Underwater assessment of proposed and existing MPAs in southern Negros Occidental

<sup>5</sup> Elemia, et.al 2013. Biodiversity Assessment of Marine Protected Areas in the Provinces of Negros Occidental, Antique and Southern Leyte



Year	Fish Species Diversity		Fish Density		Biomass	
	Inside	Outside	Inside	Outside	Inside	Outside
2013 <sup>5</sup>	38.3±3.3 spp/300m <sup>2</sup>	29.7±2.9 spp/300m <sup>2</sup>	588.8±218.6 indiv/300m <sup>2</sup>	1022.3±414.5 indiv/300m <sup>2</sup>	19.3±7.2 kg/300m <sup>2</sup>	15.0±3.1 kg/300m <sup>2</sup>
2011 <sup>4</sup>	-	-	200-400 indiv/300m <sup>2</sup>	-	10.85 kg/500 m <sup>2</sup>	-
2010 <sup>3</sup>	-	-	15,614 indiv/3,000m <sup>2</sup>	-	-	-
2007 <sup>2</sup>	-	-	19,917 indiv/3,000m <sup>2</sup>	-	-	-
2003 <sup>1</sup>	-	-	6,248 indiv/30,000m <sup>2</sup>	-	-	-

Sources: <sup>1</sup> Lumbab, et.al. Underwater Survey Report and Management Plan for the Recommended Protected Area in Sipalay City. June 2003.  
<sup>2</sup> Rebadomia, Jonas 2007. Underwater Survey and Progress Report of Sipalay Marine Protected Area  
<sup>3</sup> Rebadomia, et.al 2010. Underwater Survey and Progress Report of Sipalay Marine Protected Area  
<sup>4</sup> Nillos-Kleiven, et.al. 2011. Field Report/Underwater assessment of proposed and existing MPAs in southern Negros Occidental  
<sup>5</sup> Elemia, et.al 2013. Biodiversity Assessment of Marine Protected Areas in the Provinces of Negros Occidental, Antique and Southern Leyte

# Coral cover

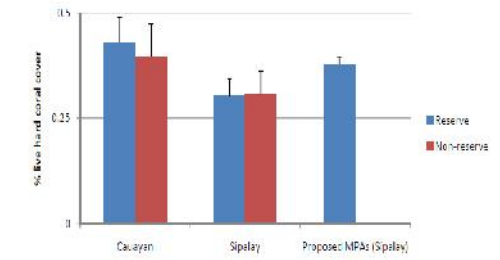


Figure 9. Average live hard coral cover in reserve, non-reserve and proposed MPA sites (pooled data across sites). Error bars are ± S.F.

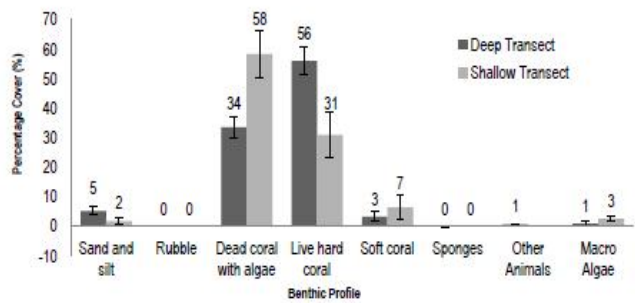
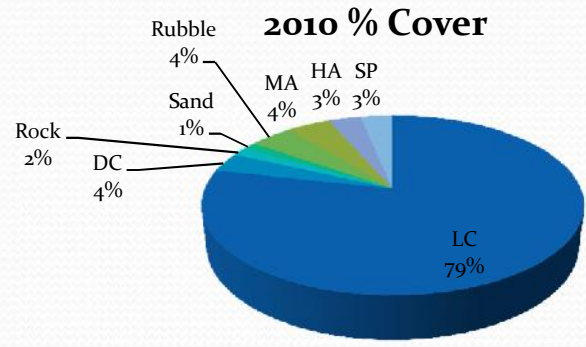


Figure 8. Benthic profile of Campomanes-Ballo Marine Reserve and Sanctuary, Brgy. Maricalum and IV, Municipality of Sipalay, Negros Occidental at Station 1 in shallow and deep transects. Coral condition in shallow (Fair), deep (Good).



# *CRM Recognition*

- 1. FARMC Gawad Saka Award  
(provincial, regional, and national  
awardee 2011- 2013)*
- 2. Best Performing ENRO 2013*
- 3. Seal of Good Environmental  
Governance*
- 4. Entry for LGU Best Practices on  
Climate Change Adaptation-Coastal  
City Category (DENR and PIA-Region  
VI)*
- 5. Hiyas ng Turismo (2008)*



# Influential Drivers

- ❑ **Provincial Government** – technical and legal support /formation and organization of Coastal Alliance in Southern Negros in support to Resource Management Initiatives.
- ❑ **Coral Cay/ PRCCFI** – identification of potential MPA and conservation sites, survey and assessment of coastal resources
- ❑ **CCEF** – Sustainable MPA Management Expertise
- ❑ **Academe (West Negros/La Salle /CAHMC )** –open an avenue for students to choose Sipalay as potential sites for CRM learning experience in the Southern Negros.
- ❑ **GIZ/ DED/EU-NRM** – technical capacitation and long term support for Resource Management Sustainability.
- ❑ **RARE /Accoast** – MPA Social Marketing/ MPA Effectiveness Policy Implementation
- ❑ **JICA/PNOC- EDC/DENR - Mangrove Refo support donees/ Mangrove Protection**
- ❑ **Haribon/NFR** – PO's mentoring development and FARMC empowerment focus on Local Governance Participation
- ❑ **Negros Island Integrated Water Resources Management Program**-Financial support in the rehabilitation of Ilog Hilabangan Water Basin & capacitation of Bantay Bukid Brigade.

# Lessons Learned

1. **Political will**-*the City Mayor declared all-out-war against all sorts of illegal fishing and habitat degradation*
2. **Support from Alliance and Provincial Government**
3. **Capacitated Forest and MPA Managers**
4. **Institutionalization of FARMC**-*recommendatory body for LGU in coastal affairs*
5. **Strong partnership** *with NGOs, NGAs and various stakeholders*
6. **Change in administration**-*formulation and adoption of long-term management plans*
7. **Self-help volunteerism**-*provision of salary for deputized enforcers*
8. **Community-based management approach**-*empowerment and participation of local POs and sectoral groups (fishers, youth, women, religious, academe, business etc.)*



# Challenges Ahead ?

- *Sustainable financing and capacity needs mechanism*
- *Proactive and consistent policy governance*
- *CC-Resilient coastal community*
- *Resource Mapping and data management*
- *Institutionalization of CRM Program*
- *Collaboration to managing partners*
- *Champions for the environment*
- *Jurisdictional issues- regulatory aspect- (upland /coastal)*