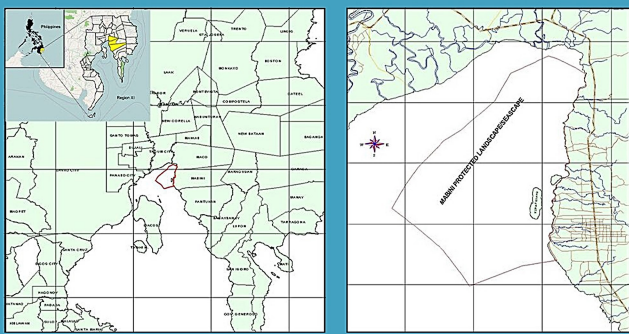




THE MABINI PROTECTED LANDSCAPE & SEASCAPE (MPLS)

MABINI DAVAO DE ORO



OVERVIEW

Located in Mabini, Davao de Oro, (MPLS was inaugurated as a PA in 2000 and elevated to the status of National Park in 2018).

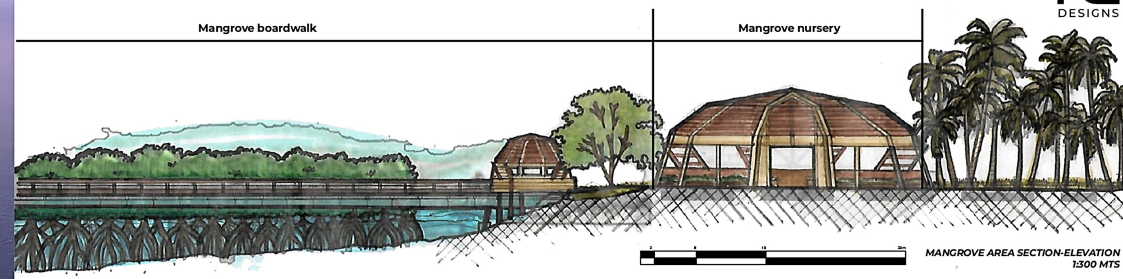
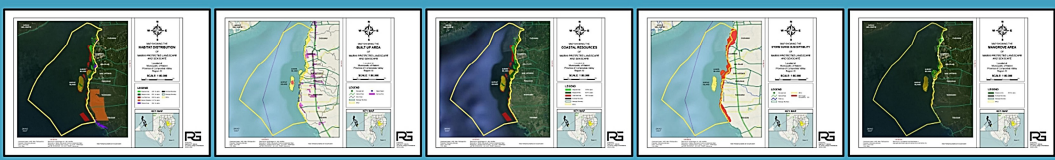
MPLS has a total area of 7k hectares and a coastline that stretches 17 kilometers through six coastal barangays of Cadunan, Cuambog, Del Pilar, San Antonio, Pindasan, and Tagnanan.

MPLS is home to thick mangrove forests, productive seagrass beds, diverse coral reef systems, and nesting grounds of endangered sea turtle species and migratory birds.

DESIGN OBJECTIVE

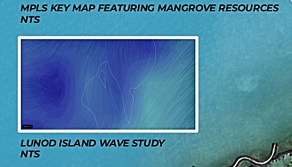
To design for sustainable tourism that maximizes the biodiversity of MPLS and provide economic opportunities to the community

MAIN STRENGTH	Rich Biodiversity (MPLS) is known as the "Jewel of Davao Gulf," with <ul style="list-style-type: none"> 336.91 hectares of diverse coral reef system, 80.54 hectares of thick mangrove forests 44.83 hectares of productive seagrass beds 17 km coastline, with white sandy beaches Rich fishing grounds nesting ground of sea turtles (pawikan) transient home of migratory birds
MAIN WEAKNESS	Lack of Livelihood Despite the rich natural resources, the annual average household income of the six coastal barangays is P75,890.79 or P6,324.23 per month. Fishing and fishery production is their main income source.
MAIN OPPORTUNITY	Tourism as Livelihood <ul style="list-style-type: none"> Local tourism: its proximity from landlocked municipalities of the provinces of Compostela Valley and Davao del Norte Diving tourism: rich marine life in PA Mangrove tourism: 11 mangrove species, 15 associate species
MAIN THREAT	Unsustainable Tourism Tourism can be a threat to the MPLS ecosystems if not properly regulated.



BANTAY-BAKAUAN:

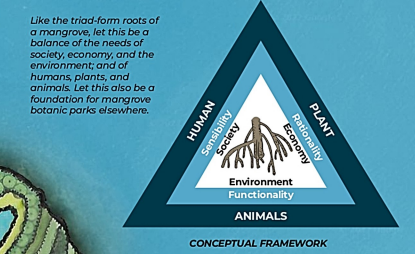
A PROPOSED MANGROVE BOTANICAL PARK FOR MPLS



Definition	Mangrove forests are a type of forest growing along tidal mudflats and along coastal areas with shallow water that is usually brackish.
Strengths	<ul style="list-style-type: none"> Mangroves are important ecosystems that provide support for marine life, protect the coast, etc. In MPLS: Thriving mangrove forests around Lunod Island.
Weakness	<ul style="list-style-type: none"> Lack of awareness (Dolomite beach, conversion to fishponds) In MPLS: Not utilized as part of tourism program.
Threats	<ul style="list-style-type: none"> Climate change, sea level rise In MPLS: Conversion to fishponds, reclamation for development
Opportunities	<ul style="list-style-type: none"> Botanical garden for conservation, preservation of existing species and other Philippine mangroves & associated species

- ### CONCEPTS
- MARINE ECOTOURISM MANAGEMENT**
THEORETICAL CONCEPT
 Marine ecotourism caters economic opportunity, reducing environmental impact, and promoting local communities interests.^[1]
 - PRODUCTIVE BOTANICAL GARDENS**
THEORETICAL CONCEPT
 Botanical gardens are designed with biological deliberations, functionality, and community cognition.^[2]
 - NEO VERNACULAR**
THEMATIC CONCEPT
 Materials to be used should be locally-available and blend in with the rest of the community.
 - BAKAUAN (RHIZOPHORA)**
FORM CONCEPT
 [Bakau for Mangrove roots] The design manifests root systems in its curvilinear forms and paths. Their oral inter-connected and reflect hierarchy for the botanical function.

[1] Adapted from Gledhill, L.L. (2008). A sustainable management framework for marine ecotourism products.
 [2] Adapted from Blazak M., Rybska E., Tsvetkova O., Constantino C.P. Botanical Gardens for Productive Interplay between Emotions and Cognition.



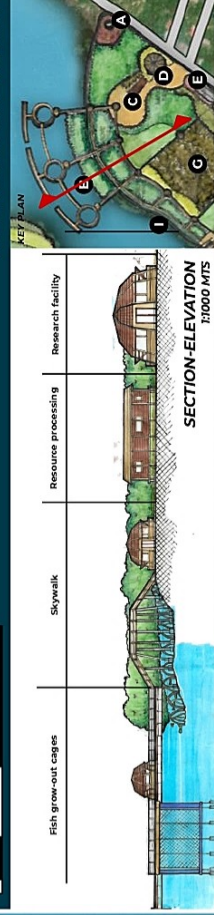
Like the triad-form roots of a mangrove, let this be a balance of the needs of society, economy, and the environment, and of humans, plants, and animals. Let this also be a foundation for mangrove botanic parks elsewhere.

- ### THREE-PART TOURISM PLAN
- PHASE 1**
MARINE ECOTOURISM CENTER IN BRGY. TAGNANAN
 Feeding, SCUBA diving, aqua adventure, kayaking, beach
 - PHASE 2**
MANGROVE ECOTOURISM IN LUNOD ISLAND
 Boating route, mangrove species nursery, boardwalk
 - PHASE 3**
INLAND & COMMUNITY INTERVENTIONS
 Solid waste management, alternative livelihoods, POs

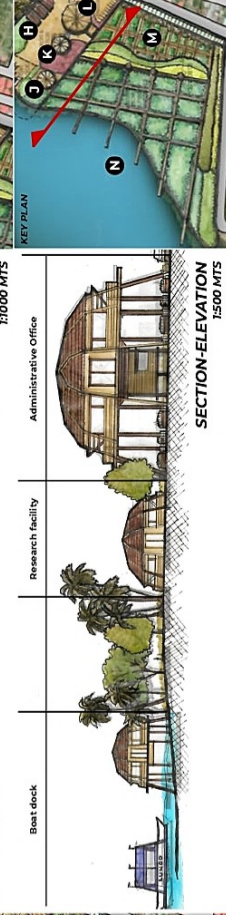
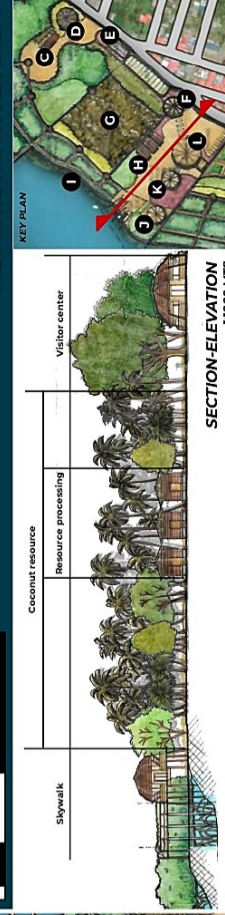


- ### LEGEND
- A. Welcome sign
 - B. Tricycle terminal
 - Mangrove Area**
 - C. Fish grow-out cages
 - D. Resource processing
 - E. Research facility
 - Administrative Area**
 - F. Visitor center
 - G. Coconut resource
 - H. Resource processing
 - I. Mangrove Skywalk
 - J. Boat dock
 - K. Research facility
 - L. Administration Office
 - Mangrove Area**
 - M. Nursery
 - N. Boardwalk

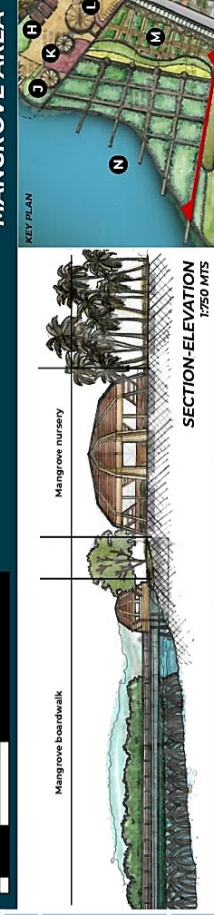
SITE DEVELOPMENT PLAN 1:3000 MTS



ADMINISTRATIVE AREA



MANGROVE AREA



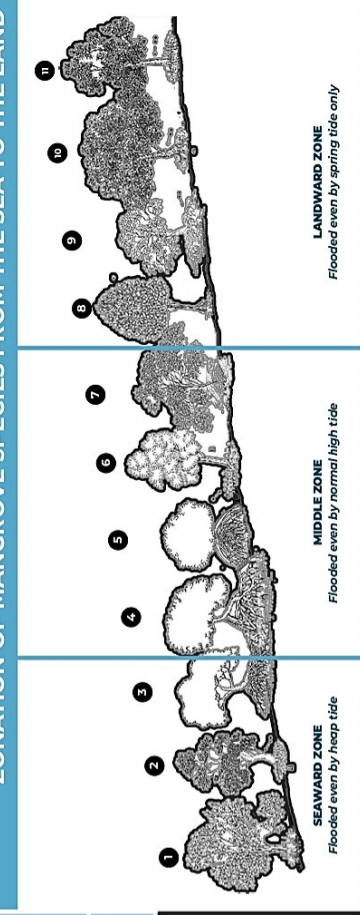
True Mangrove species

Number	Species Name	Root System
1	<i>Sonneratia alba</i>	Pneumatophores
2	<i>Avicennia rumphiana</i>	Buttress roots
3	<i>Avicennia marina</i>	Stilt roots
4	<i>Avicennia officinalis</i>	Buttress roots
5	<i>Bruguiera gymnorhiza</i>	
6	<i>Ceriops tagal</i>	
7	<i>Rhizophora stylosa</i>	
8	<i>Rhizophora mucronata</i>	
9	<i>Rhizophora apiculata</i>	
10	<i>Excoecaria Agallocha</i>	
11	<i>Aegiceras Floridum</i>	

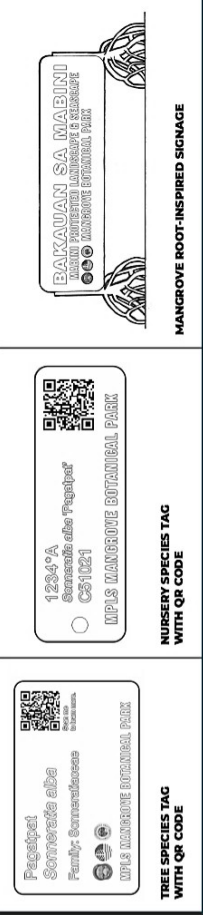
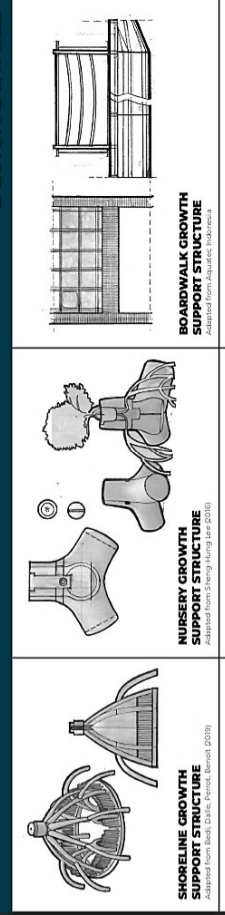
PERSPECTIVE VIEWS



ZONATION OF MANGROVE SPECIES FROM THE SEA TO THE LAND



DESIGN DETAILS



AERIAL PERSPECTIVE

