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Coastal Assessment Tool and Planning Software (COASTPLAN)

Towards marine spatial planning and fisheries management

What is COASTPLAN?

COASTPLAN is a software for marine spatial planning and fisheries management. It integrates socioeconomic and biophysical inputs into interconnected computer platforms. It synthesizes basic fisheries information at the municipal and regional level by providing estimates and scenario testing on fisheries carrying capacities and MPA size.

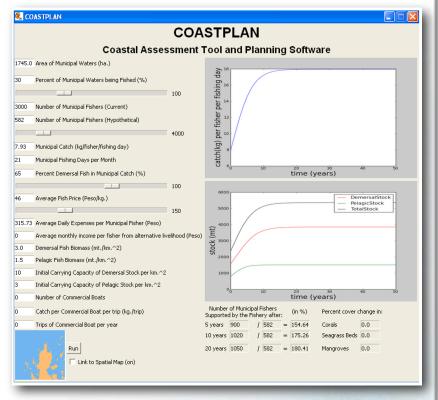
COASTPLAN can also demonstrate the effects of protection efforts visually. It shows the effectiveness of reserves to the conservation of marine habitats and the effects of stresses on the marine community. It includes spatial mapping of various coastal habitat resources and anthropogenic stresses. This information helps stakeholders decide on the best sites to be protected.

Who can use it?

Academic institutions with functional relationships with National CTI Coordinating Committees (NCC) can use the software. Likewise, the local government units (LGUs), local and international non-government organizations, and people's organizations (POs) can readily use this tool. It is free, user-friendly, not too technical, and requires only basic fisheries information to work.

What outcomes can users expect?

COASTPLAN was designed to encourage users to protect ecologically important habitats. The



software can help stakeholders forge agreements on resource use, set up protected areas, and select potential areas for rehabilitation (e.g. mangroves).

How can organizations avail of COASTPLAN?

COASTPLAN and the demonstration guide* are available upon request from the UP Marine Science Institute (MSI). Contact Dr. Porfirio M. Aliño, Decision Support Specialist, at pmalino2002@yahoo.com. *Reference: R.B. Cabral, E.D. David Jr., R.C. Geronimo, M.T. Lim, P.M. Aliño. 2010. Coastal Assessment Tool and Planning Software (COASTPLAN) Tool Demonstration Guide. In: Marine Environment & Resources Foundation, Inc. Ecosystem-Based Management Toolkit for Philippine Coastal Resource Management. Marine Environment & Resources Foundation, Inc., Marine Science Institute, UP Diliman, Quezon City, Philippines. 21p.



3D RELIEF MAPPING An ecosystem-based tool for coastal resource management

What is 3D Relief Mapping?

Relief Mapping is a mapping activity where two dimensional (2D) contour maps are transformed into three dimensional (3D) maps covering the entire ridge to reef area through the stacking of boards. The process of developing the map, usually involving students or community groups with some basic knowledge of resource attributes, allows a candid discussion on the issues confronting resources and especially how activities in the uplands affect the coastal environment. This tool is very useful specially in remote areas that have no access to electricity and/or may not be well-oriented with computers.

Who can use Relief Map?

LGUs, local and international NGOs, and POs can use the tool to facilitate discussions with the community about marine and terrestrial spatial planning and proposed management actions. Local students may also get involved in the creation of the 3D maps. It is an enriching activity that will promote learning and appreciation of resources towards better stewardship. The local community can also participate after proper orientation on how to read contour maps.

What outcomes can users expect from Relief Map?

After a resource mapping activity, the output is an overlay map of identified resources and anthropogenic stresses (human impact). The combination of this information and other available data into a single 3D map creates a clear picture of the current local fishery status. The map adds value towards marine and terrestrial continuum spatial planning. Relief mapping also highlights potential overlaps in resource use. It can also help communities identify areas that need urgent protection.

RETA 7307 supports ongoing CTI efforts via knowledge management in the preparation of a State of the Coral Triangle Report, sustainable financing, and environmental economics and payment of environmental services for the CTI. http://www.primexinc.org/cti_km





How can organizations avail of the Relief Map manual?

A guide booklet for Relief Map* is available upon request from the UP Marine Science Institute (MSI). Contact Dr. Porfirio M. Aliño, Decision Support Specialist, at <u>pmalino2002@yahoo.com</u>.

* Reference: R.N. Muallil and R.C. Geronomo. 2010. The 3D RELIEF (Resources, Environment, Livelihoods, Ecosystems and Fisheries) Map: An Ecosystem-based Management Tool for Philippine Coastal Resources Management.. In: Marine Environment & Resources Foundation, Inc. Ecosystem-Based Management Toolkit for Philippine Coastal Resource Management. Marine Environment & Resources Foundation, Inc., Marine Science Institute, UP Diliman, Quezon City, Philippines. 25 p.

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