



HYPACK and the Gulf of Honduras Project

By Carlos Tejasdas

This project involves the countries of Belize, Guatemala and Honduras, is administered by the [InterAmerican Development Bank \(IADB\)](#), and is funded by the [Global Environment Facility \(GEF\)](#). Other participating organizations include the MesoAmerican and Caribbean Sea Hydrographic Commission and the Central American Maritime Transport Commission (COCATRAM), and the Central American Commission for Environment and Development (CCAD).

The Gulf of Honduras is a unique tri-national body of water that includes portions of the exclusive economic zones of Belize, Guatemala, and Honduras, and is home to the Mesoamerican Barrier Reef System (MBRS)—the second largest barrier reef system in the world. Maritime transport plays a critical role in the region's overall economy, but the unregulated expansion of this sector places highly valued environmental resources in the Gulf, like the MBRS, at risk. In 2003, the five major ports in the Gulf accommodated nearly 4,000 ships and handled more than 12 million metric tons of cargo, and the volume of maritime traffic and goods shipped is only expected to increase. With an increase in port traffic and cargo loads comes an increase in the possibility of accidents and threats to human safety, property, and the environment—events that carry the potential to negatively affect the region's economy (http://www.iho-machc.org/urcp/acerca_nosotros/welcome_en.html).



PROJECT GULF OF HONDURAS

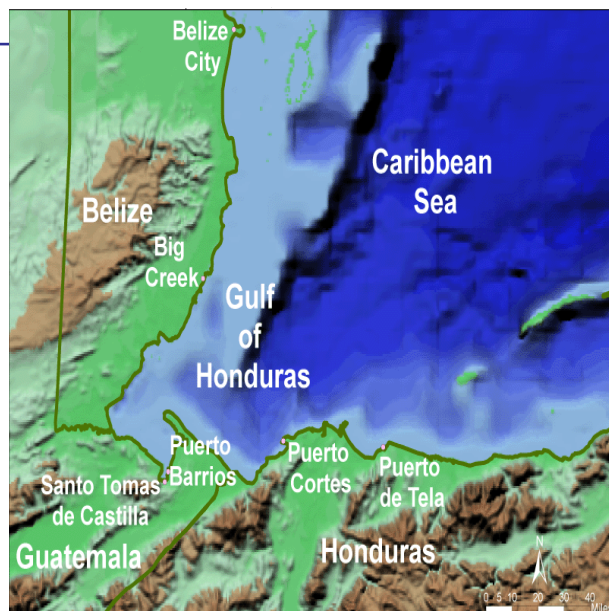


Within the area of the project there are 6 major ports: Belize City and Big Creek, from Belize; Santo Tomas de Castilla y Puerto Barrios from Guatemala and Puerto Cortes and Puerto de Tela from Honduras.

FIGURE 1. *Gulf of Honduras Project Area*

The project's regional objective is to reverse the degradation of the coastal and marine ecosystems within the Gulf of Honduras. This will be done by enhancing the prevention and control of maritime transport-related pollution in major ports and navigation lanes in the Gulf, improving navigational safety to avoid groundings and spills in the Gulf, and reducing land-based sources of pollution draining into the Gulf. The project aims to achieve these goals by focusing on demonstrations of innovative technologies in the region.

The project has 4 components. Activities under the third one--Enhancing Navigational Safety in Shipping Lanes--focus on



prevention of accidental groundings and discharges from maritime transport operations in the Gulf of Honduras, and on development of infrastructure and the capacity to address such spills if they occur. Specifically, **these activities are designed to improve hydrographic and oceanographic cooperation in the region**. Therefore, defining national and regional policy and legislative interventions, to demonstrate new technologies that can aid in the prevention of accidents, and to develop contingency plans to address accidents.

Plans for the project began in 2000 and were finally approved in 2007. Work began in 2008 and is ongoing today.

Understandably, the development of national hydrographic capabilities among the three participating nations, have been a key issue for the project.

Each country has been equipped with a single beam system including side scan sonar, so they can complete hydrographic surveys that fulfill requirements for IHO Order 1A. All three countries selected HYPACK® Max as their hydrographic software for project planning, data collection and processing, and for producing final smooth sheets.

During the week of May 9 to 14th in Puerto Barrios we conducted a special training session focused on processing the data collected up to now by the three nations and producing all the hydrographic documents required for the charting institution which will produce new or updated nautical charts of this important region. Documentation included analysis of cross check statistics, TPU (Total Propagated Uncertainty) reports, lines run, etc.

HYPACK, Inc. feels proud to be part of this project and to help these three countries to enhance the security to navigate to 6 important ports. It also makes us very proud to be selected, not only by the three countries, but for the several organizations involved in the management and technical support to this project, as the primary tool to help them gather and process all their hydrographic data.