



# INTERNATIONAL WATERS RESULTS NOTES

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## Integrated Assessment and Management of the Gulf of Mexico Large Marine Ecosystem

GEFID#: 1346, UNIDO: GFMEX09001, Project Status: [Active]



1. Transboundary issues analyzed and priorities defined (Revised TDA available and agreed upon by both countries).
2. LME-wide ecosystem-based management approaches encouraged and strengthened through the successful implementation of the Pilot Projects (Pilot Projects all implemented and delivered on schedule).
3. Effective project coordination (Project team is effectively coordinating the project and meeting the objectives).

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## PROJECT OBJECTIVE

The long-term development/environmental objective of the project is: Sustainable development of the Gulf of Mexico LME enhanced through ecosystem-based management approaches.

The Project objective is: To set the foundations for the Gulf of Mexico LME-wide ecosystem-based management approaches to rehabilitate marine and coastal ecosystems, recover depleted living marine resources, and reduce pollution and nutrient overloading.

## RESULTS: PROCESS

- Updating of the TDA has been completed in close collaboration with the Project's experts and consultants.
- Promotion and follow-up of transboundary issues (such as addressing the MC 252 DWH oil spill) through active participation in the Inter-ministerial Commission for Oceans and Coasts (CIMARES).
- Preparation of a Memorandum of Understanding between Mexico's National Commission for Natural Protected Areas and the US National Oceanic and Atmospheric Administration, for the establishment of a network of Marine Protected Areas.
- Harmful Algal Blooms integrated system in Mexico under development, oceanographic buoy for early detection of HABs to be installed in 2011, coastal states engaged in the process and towards regional HABIOS integration with the US and Mexico.

INDICATOR#1 (Revised TDA available and agreed upon by both countries) [TDA published and disseminated provides basis for informed management decisions at a regional level].

INDICATOR#2 (Effective project coordination) [Project implemented in an effective manner in accordance with agreed work plans and budgets]

The Project's process is being conducted as stated in the results framework and basic complementary actions are already in progress for SAP implementation.

## RESULTS: STRESS REDUCTION

- Establishment of a standard Quality Assurance/Quality Control (QA/QC) monitoring protocol for measuring the ecosystem health.
- Watershed networking established with federal, state and academia partners in main watersheds draining to the Gulf of Mexico in order to reduce contaminants and pollutants.
- Reduced fishing pressure through the promotion of alternative livelihoods such as ecotourism (marine mammals and bird watching) and other diversified sustainable activities in marine and coastal areas.
- An ecosystem-based fisheries model is under construction to propose best fishing management measures.
- Living marine resources and highly migratory species of transboundary nature under assessment
- Established hydrological restoration methods and indicators with 100 ha of mangrove being restored in Terminos Lagoon in close collaboration with local, federal and state stakeholders, local capacity building and community empowerment enhanced.
- Land use change in the pilot project area Terminos Lagoon assessed and information and tools provided to update the Marine Protected Area management plan
- Erosion and accretion conditions of coastal areas in the Laguna de Terminos assessed.
- Environmental services, such as carbon sink and sequestration project under preparation to enable entering the carbon market assets towards local communities in Laguna de Terminos
- A Regional Environmental Educators Alliance for the Gulf of Mexico (MEX-US) has been created for addressing transboundary issues
- Regional Education Plan for the Mexican portion of the Gulf developed and agreed with authorities

- Cultural, archaeological and historical connectivity throughout the Gulf assessed. New paradigm to reunite GoM LME bordering countries towards cultural bonds proposed.

INDICATOR#1 (Pilot Projects all implemented and delivered on schedule) [All three demonstration projects fully and satisfactorily implemented and all objectives completed]

INDICATOR#2 (Joint monitoring, assessment and evaluation of the coastal environment of the Gulf of Mexico Large Marine Ecosystem capacity developed.) [Regional coastal assessment monitoring programme demonstration project successfully completed]

Transferable lessons and best practices are already serving to replicate successes elsewhere both nationally and regionally. Likewise, capacity building has been conducted at the local level through training courses, seminars and wide public participation throughout the GoM LME region.

## **RESULTS: WATER RESOURCE AND ENVIRONMENTAL STATUS**

- Baseline sampling has been established for taking measurements to assess the Terminos Lagoon coastal condition through five indexes: water quality, sediment quality, benthic community, coastal habitat, and fish contaminant. The indexes are rated good, fair or poor using colors that can be represented in a map.
- A proposal for a Medium Size Project has been submitted for approval to the GEF with the objective of protecting the environmental integrity of the coastal and marine ecosystems of the GoM LME, limiting contaminants and oil pollution, particularly after the MC 252 DWH oil spill.
- Support has been provided and a collaboration framework has been established for the development of a study to measure Harmful Algal Blooms bio-optical parameters and properties in Mexican territorial waters of the Gulf of Mexico through the establishment of a buoy.

INDICATOR#1 (Joint monitoring, assessment and evaluation of the coastal environment of the Gulf of Mexico Large Marine Ecosystem capacity developed.) [Regional coastal assessment monitoring programme demonstration project successfully completed]

Progress has been achieved in joint monitoring of ecosystem health through capacity building actions and the establishment of agreements with Mexican and foreign institutions.

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