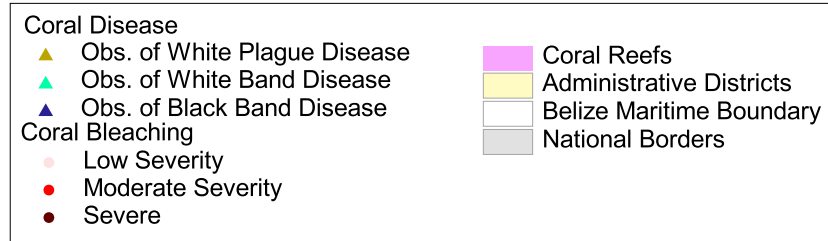
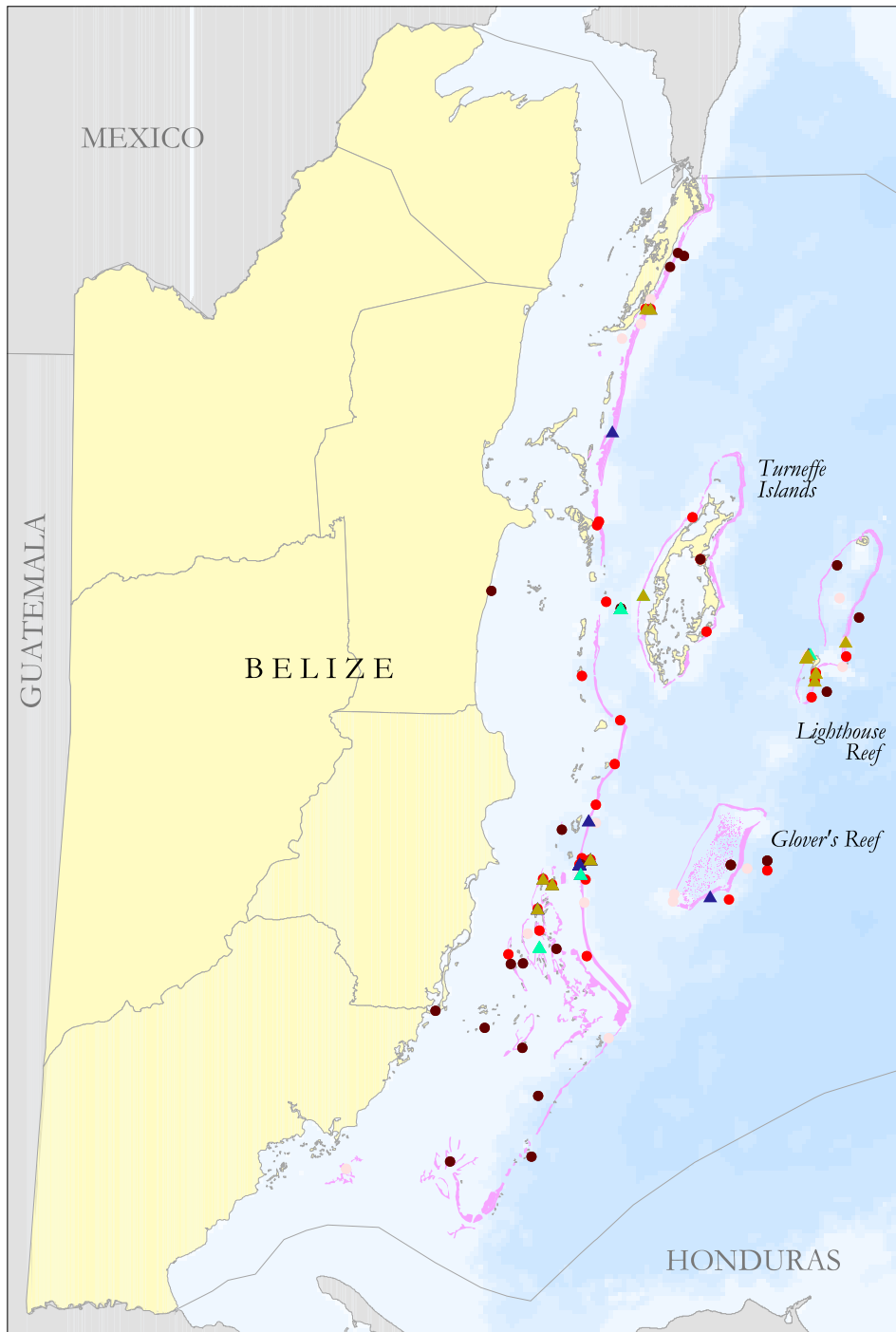


Threat from Natural Disturbances - Coral Bleaching, Coral Disease and Hurricanes

Coral bleaching and coral disease were identified as important threats to coral reefs by local stakeholders and scientists at the expert mapping workshops. There were over 80 observations of coral bleaching in Belize between 1995 and 2004, with most observations during the 1998/99 El Nino/La Nina. Incidence of coral bleaching will further increase with rising ocean temperature. Many coral diseases have been observed in Belize, though Black Band, White Band, and White Plague appear to be the most common. Factors causing increased incidence of disease are unclear. Pathogens that cause disease are more easily transported in our globalized world; disease might be more common in areas stressed by other pressures, such as pollution, or after coral bleaching. Coral bleaching and coral disease are two major threats to coral reefs in Belize, that are very difficult to control.

Several of Belize's reefs have been affected by repeated and/or coinciding events in recent years. Widespread bleaching took place for the first time off Belize in September 1995, when bleaching occurred throughout the Caribbean. In the autumn of 1998, the reefs were again disturbed by a mass bleaching event, with some individual colonies bleaching more than 90 percent, over large geographic areas. The same year Hurricane Mitch, a Category 5 storm, impacted much of the coast when reefs experienced battering waves for several days. Bleaching caused catastrophic coral loss in Belize's lagoonal reefs, while the hurricane caused widespread coral destruction in fore reefs and outer atoll reefs. Then, Hurricane Keith followed in 2000 and Iris in 2001. These storms had different paths, intensities, and impacts but they both reduced coral cover at a number of locations.



Data Sources: Reefbase, Coral Bleaching Dataset, download from <http://www.reefbase.org> on 1 May 2005. Disease data from UNEP-WCMC, 2000

Reefs at Risk in Belize

A collaboration between the World Resources Institute, Belize Coastal Zone Management Authority and Institute, and many other partner organisations in Belize. Datasets available on the Belize Coastal Data CD (email datacen@coastalzonebelize.org for more information).