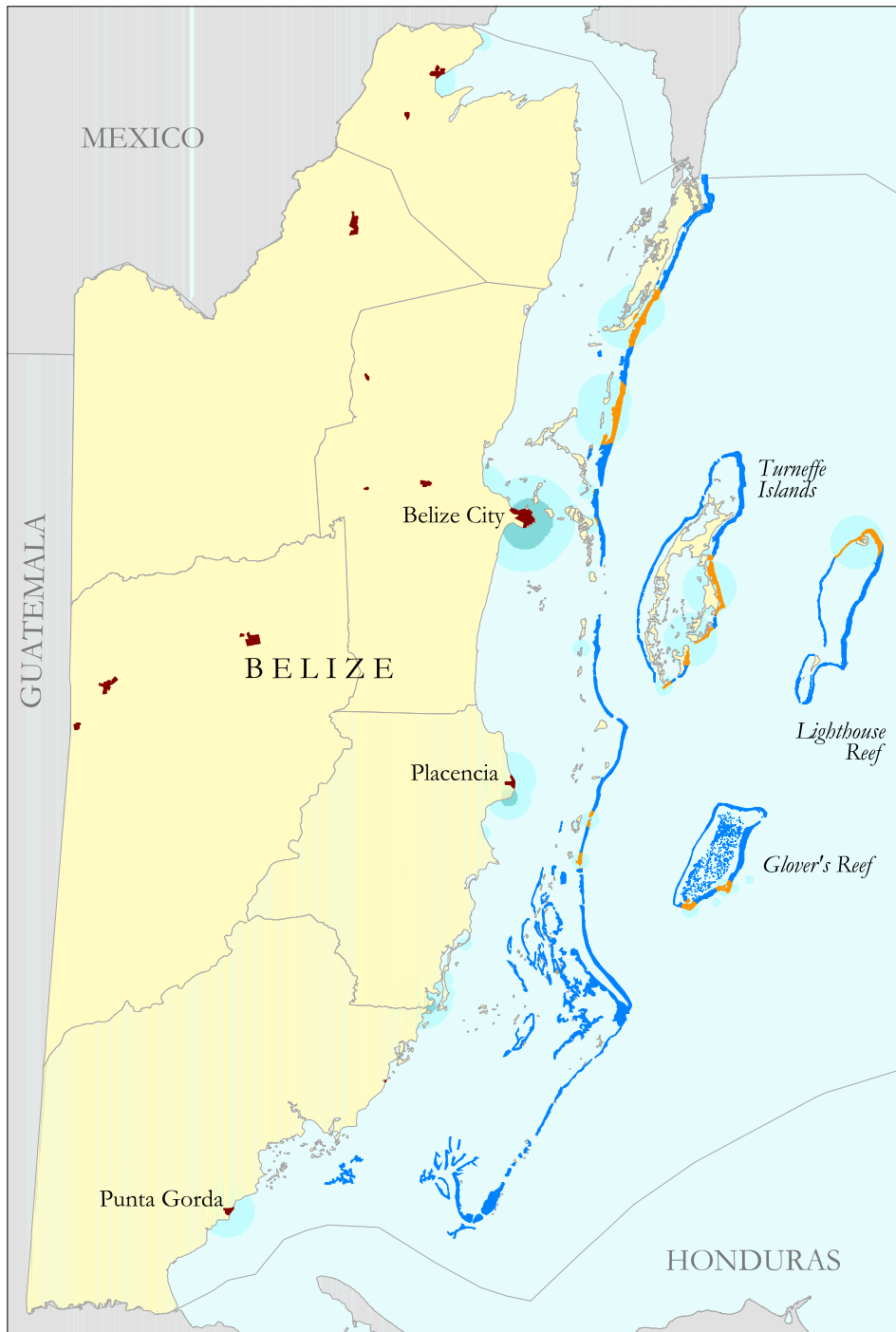


Coastal Development in Belize - Modeled Threat

This map shows threats to coral reefs from coastal development evaluated through spatial modeling of threat based on the location of population, infrastructure and tourism development. Threats to coral reefs from coastal development were also evaluated through "expert mapping" by local stakeholders and scientists (shown on previous map, "Coastal development threat in Belize - expert mapping"). These approaches are complementary, with the expert-based approach capturing local perception of priority threats, and the modeled approach identifying areas that merit closer examination for potential management intervention.

Poorly managed coastal development can threaten coral reefs through dredging, land reclamation, mining of sand and limestone, dumping of spoils, and runoff from roads and construction. Sewage discharge is also a growing threat to coral reefs, as coastal communities expand. Tourism is an important driver of coastal development, with over 240,000 tourists and 850,000 cruise ship visitors in 2004, and tourism projected to grow at 6 percent per year. Threats to reefs from coastal development in Belize were evaluated on the basis of distance to human settlement (ranked by size), ports, airports, and tourism centers. Coastal development threat was identified as threatening to coral reefs along the Northern Barrier reef and on parts of the three atolls. Threat was also identified near Belize City and Placencia, but not reaching out to the reef.



Data Sources: Modeled threat to coral reefs from coastal development from the "Reefs at Risk in Belize" analysis, World Resources Institute (WRI), 2005.

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).