Unregulated coastal development, overfishing, climate change, and pressures from tourism threaten Belize’s world-famous reefs and mangroves. Until 2007, the importance of benefits from these ecosystems and their substantive contribution to the national economy were not adequately reflected in national investment priorities and policy decisions.

The study Coastal Capital: Belize addressed this issue by assessing the contribution of reef- and mangrove-associated tourism, fisheries, and shoreline protection services to Belize’s economy. In 2007, the estimated value from these three ecosystem services was US$395–559 million—significant when compared to Belize’s total gross domestic product (GDP) of just US$1.3 billion. In the years since, the Belizean government and civil society have taken significant steps to protect coral reefs and mangroves.

Coastal Capital: Belize findings have been used to justify new fishing regulations such as banning parrotfish harvest and spearfishing in marine protected areas (MPAs), mangrove legislation, a successful damage claim against a ship that ran aground on the Belize Barrier Reef and an offshore oil drilling ban. Growing into a role model beyond national borders, a replication of this study triggered MPA establishment in St. Maarten in 2010. The Jamaican government was also awarded damages for a ship grounding in 2011, citing the Belize case as precedent.

Meaningful stakeholder engagement
Workshops help develop a comprehensive partnership between relevant NGOs, MPA co-managing organisations, government, and academia. Early and frequent contact with knowledgeable partners is crucial to design the study, identify policy applications, collect data and communicate results to decision makers.

Training in valuation
MPA stakeholders are offered multiple training opportunities for application and replication of valuation methods in their MPAs. By developing templates, compiling relevant data (e.g., on MPA uses) and revising monitoring efforts, they are able to produce economic estimates.

Valuation of reefs and mangroves
Valuation focuses on those ecosystem services particularly relevant to local economies that are relatively easy to measure, using largely existing information.

Coastline resource use
Data collection on coastline resource use involves a variety of informants, including tourism, fisheries, and forestry sectors, as well as spatial data. The process pulls together the best available ecological and socioeconomic data for the valuation.

Targeted communication
Study results are strategically packaged into various mediums, e.g., pamphlets, videos, or user manuals to reach key audiences. These materials are highlighted at public events and technical or policy meetings. Participating stakeholders lead dissemination efforts, effectively communicate to decision makers and use results to negotiate new regulations.

This solution was implemented by World Resources Institute (WRI) in collaboration with the Belize office of WWF-Central America. Many other partners in Belize also provided data, reviewed the analytical approach and results, and guided outreach.