

Chapter Two: Background

BELIZE – NATIONAL CONTEXT

Geography

Belize is located at the northernmost point and on the Caribbean coast of the Central American isthmus. Known as British Honduras until 1973, Belize is bounded to the north and part of the west by Quintana Roo, Mexico, to the south and the remainder of the west by Guatemala, and to the east by the Caribbean Sea (Map 1). Its inner Caribbean coastal waters are shallow and are sheltered by

a line of coral reefs, dotted with islets called “cayes”, extending almost the entire length of the country (GOB 2003a). Belize is the least densely populated country in the Central American isthmus and in the entire American mainland, with a population of approximately 257,000 (CSO 2001). It is also the second smallest country in the region. The area of the mainland and cayes is 8,867 square miles. The country's greatest length from north to

south is 280 kilometers and its greatest width is 109 kilometers. It has approximately 18,000 square miles of territorial sea (Belize Explorer 2002).



Map 1: Belize – Regional Location



Map 2: Administrative Districts of Belize

The country is divided into six administrative districts: Corozal District and Orange Walk District to the north, Cayo District in the west, Belize District in the center, and Stann Creek District and Toledo District in the south (see Map 2, p.12). The only two inland districts are Cayo and Orange Walk, while the other four districts are located along the Caribbean coast. The climate is subtropical, tempered by trade winds. Temperatures in coastal districts range from about 10°C (50°F) to about 35.6°C (96°F); inland the range is greater. Rainfall varies from an average of 1,295 millimeters in the north to 4,445 millimeters in the extreme south. The dry season usually extends from February to May and there is sometimes a dry spell in August (GOB 2003a).

Cultural setting

Belize is a multi-ethnic and multi-lingual country, predominated by Mestizos (people of Spanish and Maya descent) and Creoles (people of European and African descent). The Mestizos make up about 49 percent and the Creoles about 25 percent of the population. The other two major population groups are the Maya and the Garifuna, which comprise eleven percent and six percent of the population respectively. There are three Maya ethnic groups in Belize: the Yucatec, the Kekchi, and the Mopan. The Yucatec live mostly in the northern and western areas of Belize. Most of the Mopans and the Kekchis are concentrated in Belize's southernmost region, the Toledo District, where they comprise about 60 percent of the population (or about 15,000 people). The remainder of the population is comprised of East Indians (people of Indian and African descent), Mennonites, Chinese, and a spate of North American and British expatriates. The official language of the country is English, although Spanish and Creole (a local dialect derived from the English language) are also widely spoken. To a lesser extent (in terms of population size of the respective ethnic group), Garifuna, Maya Mopan, Maya Kekchi, Maya Yucatec, German/Deutsch, Indian and Chinese are also spoken. For the majority of the population in the Toledo and Stann Creek Districts of Southern Belize, the primary language is either Garifuna, Mopan Maya, or Kekchi Maya.

Political system

Formerly a British colony, Belize gained its political independence from Great Britain on September 21, 1981. Its political system is based on the principles of parliamentary democracy based on the Westminster System. The Queen of England is the constitutional Head of State, represented by a Belizean Governor General, whom she appoints. The Head of Government is the Prime Minister, who is the leader of the political party that commands the majority of seats in the House of Representatives. Members of the Executive Branch of Government, selected from among the National Assembly, are appointed by the Governor General on the advice of the Prime Minister. The bicameral National Assembly consists of the Senate (twelve members appointed by the governor general – six on the advice of the prime minister, three on the advice of the leader of the opposition, and one each on the advice of the Belize Council of Churches and Evangelical Association of Churches, the Belize Chamber of Commerce and Industry and the Belize Better Business Bureau, and the National Trade Union Congress and the Civil Society Steering Committee), whose members are appointed for five-year terms, and the House of Representatives, which comprises 29 seats. Members of the House of Representatives are elected by direct popular vote to serve five-year terms. The Honorable Said W. Musa was re-appointed as Prime Minister by the Governor General for another five-year term after leading the People's United Party (PUP) to re-election on March 4, 2003. The PUP controls 22 seats in the House of Representatives, while the opposition United Democratic Party, headed by the Honorable Dean O. Barrow, controls seven seats. The Honorable John Briceño was re-appointed as Deputy Prime Minister and holds the ministerial portfolios of Natural Resources, the Environment, Commerce and Industry.

The administration of the six districts is jointly run by a number of Government functionaries, namely the District Accountant, the Officer Commanding the District Police, and the Heads of various Government departments based in the districts. Each district town has a locally elected Town Council of seven members. Belize City is administered by a nine-member City Council, and the capital, Belmopan City, is administered by a seven-member City Council. Local Government in the villages is carried out with the help of locally elected

village councils of seven members (GOB 2002). Maya villages in the two southern districts, Toledo and Stann Creek, are jointly governed by village councils and *alcalde* councils.²

Economic setting

Belize's current economic base dates back to the mid-20th century when there was a shift from the production of forestry products such as logwood, mahogany and *chicle*³ towards large-scale plantation-type agriculture with citrus and banana cultivation in the south of the country and sugarcane in northern Belize (GOB 2003c).

A new shift is currently taking place. The Government of Belize's Medium Term Economic Strategy 2003-2005 states that: "The economy of Belize is gradually undergoing transformation from one that is primarily agricultural to one that is more service-oriented; the service sector contributed 59.5 percent to the Gross Domestic Product (GDP) in 2001 whilst the primary sector contributed just 16.8 percent. Belize has a farming population of about 16,979 operating on a total land area of 265,000 acres, of which 146,000 are for crops and 119,000 acres for pastures. During 2001 the contribution of agriculture to GDP amounted to 11.3 percent, and 88.9 percent of total export earnings. The principal source of income is sugar, bananas, and citrus fruit production. In 2001, citrus exports replaced sugarcane as the largest contributor to foreign exchange earnings followed by sugarcane in second place and bananas in third place. Citrus, sugar, and banana export revenues in 2001 amounted to \$95.1M (includes fresh fruits and by-products), \$59.4M and \$42.8M, respectively, totaling \$197.3 M for these three traditional commodities.⁴ Belize is also experiencing increased levels of expansion and development of new export commodities such as papayas, habanero peppers and aquaculture" (GOB 2002). Marine products (including farmed shrimp) and small manufacturing also make notable contributions to exports.

Although Belize's economic base has shifted to agriculture, the textile industry and the wood industry also serve as important sources of income. However, the industries that have seen the most rapid development over the past five years (1998-2003) have been the tourism and financial services (GOB 2003b). Tourism, in particular, has experienced a phenomenal increase. According to the Belize Tourism Board (BTB), 2002 saw the highest number of overnight visitors (arriving by land and air) in Belize's history.

Cruise passenger arrivals experienced an increase of over 500 percent compared to arrivals the previous year (BTB 2003a). Additionally, according to the BTB, the figure for total overnight arrivals in 1998 was 176,054; four years later, after three major hurricanes, and an overall decline in international travel after 9/11, Belize's tourism arrivals grew by 13.3 percent. There was also a 4.5 percent growth in the number of hotels in 2002 (BTB 2003a).

The Belizean economy's relative strength in a large part is due to an abundance of land, forest, and water resources, Belize's proximity to the U.S. market, and the country's historically close ties to the United Kingdom. Belize's environmental resources also create substantial opportunities in the nature-based tourism market. Although historically Belize has not been significantly impacted by hurricanes, during 2000 and 2001 two substantial hurricanes and one tropical storm did adversely affect the Belizean economy, illustrating the vulnerability of Belize to natural disasters. The declining preferred market access, available to certain export products such as bananas and sugar under various international arrangements, is another challenge for Belize (GOB 2003b).

CONSERVATION IN BELIZE

Ecological characteristics

The natural vegetation of Belize consists of a mosaic of major formations, according to underlying geology, terrain, soil type, wetness, salinity, altitude and rainfall pattern (PFB 1996). The Central American Ecosystems Mapping Project⁵ identified a total of 85 terrestrial ecosystems for Belize, as well as two marine ecosystems (sea grass beds and coral reefs). Based on data obtained from 1996 and 1998 satellite imagery, it was calculated that approximately 15,867 square kilometers, or 69.1 percent of Belize, was under some form of forest (including shrublands) cover; 804 square kilometers of this figure was Pine Forest (five percent of total forest cover) (Meerman & Sabido 2001). The terrestrial ecosystems are grouped into nine major ecosystem classes and two broad land uses. The nine major broad ecosystem classes are water, wetland, coastal savanna (marine salt marsh), mangrove and littoral forest, lowland savanna, lowland pine forest, submontane pine forest, lowland

broadleaf forest and shrublands, and submontane broadleaf forest. The two broad land use types are agricultural uses (which include aquaculture and forest plantations) and urban areas. Table 1 lists the broad ecosystems classes and land uses by cover. All of these major ecosystem classes occur in Southern Belize, where this Master's Project was based.

The most characteristic feature of Belize is the presence of extensive areas of natural habitat and relatively low but growing levels of human disturbance. As a result, the country continues to harbor viable populations of a range of species of conservation concern that are under pressure throughout the rest of their Central American range. Belize is also within a local center of endemism and lies on migration routes for both Nearctic and Neotropical bird species (PFB 1996). Over 540 bird species have been recorded in Belize, of which over 80 are of special conservation concern. Over 150 mammal species have been recorded in Belize. Of these, forty-three are considered endangered, threatened, rare and/or hunted throughout their ranges, with thirteen officially designated as being of international concern and listed in the CITES appendices, IUCN Red Data Books or under the US Endangered Species Act (PFB 1996). Amongst the less charismatic wildlife species, 111 species of reptile fauna have been recorded, and 40 amphibian species have also been recorded to date, although this figure remains tentative. There is very limited information available on freshwater fish and invertebrates (PFB 1996).

Suitable wildlife habitat is in serious decline throughout the Central American region. With large blocks of contiguous habitat still in existence, Belize plays an important role for survival of nearctic and neotropical migrants, and threatened mammalian populations. Protected areas in Belize cover adequate areas of critical habitat. These protected areas are necessary to maintain viable populations and are used as the principal tool for conservation of these species (PFB 1996). Additionally, Belize's protected areas form a crucial part of the Maya Forest Region and the Mesoamerican Biological Corridor, connecting the remaining forests in Peten, Guatemala, to the forests of Calakmul, Chiapas (Mexico).

Table 1: Broad Ecosystem Classes and Land Uses by Cover

Cover	% ±	km ² ±
Lowland broadleaf forest and shrubland	51.4%	11,803
Agriculture, all subclasses	16.7%	3,835
Submontane and montane broadleaf forest	10.0%	2,296
Lowland savanna including pine savanna	8.8%	2,021
Mangrove and littoral forest	4.2%	964
Submontane pine forest (dense)	2.1%	482
Water	2.1%	482
Wetland	1.9%	436
Lowland pine forest (dense)	1.4%	321
Coastal savanna (marine salt marsh)	1.1%	253
Urban	0.5%	115

Source: Central American Ecosystems Map – Belize (Meerman & Sabido, 2001)

Protected areas establishment and legal framework

Belize is blessed with an abundance of natural and cultural resources located in both marine and terrestrial settings, and the recognition of their importance has been manifested to a large extent by the declaration of 71 protected areas across the country (see Appendix II).

These protected areas have been declared under a number of different legal instruments. These include the National Parks System Act, the Forest Act, the Fisheries Act, and the Ancient Monuments and Antiquities Act. As a result, various governmental agencies have jurisdiction over the protected areas and the present institutional framework is diffuse (see Figure 1, p.19). The Forest Department of the Ministry of Natural Resources, Environment, Commerce and Industry (MNRECI) has statutory responsibility for the protected areas established under the National Parks System Act and the Forest Act. These include the following categories of aquatic and terrestrial protected areas: national parks, wildlife sanctuaries, natural monuments, nature reserves, and forest reserves. Under the Fisheries Act, the Fisheries Department (Ministry of Agriculture, Fisheries and Cooperatives) is legally responsible for most of the marine reserves. The Department of Archaeology (Ministry of Tourism) has jurisdiction over the archaeological reserves.

In response to their human and financial limitations and constraints, some of these agencies have delegated management of several protected areas to third parties, particularly, non-governmental (NGOs) and community-based organizations (CBOs), via the signing of co-management agreements. Additionally, there are a few private reserves that are officially recognized by the Government of Belize although no legal instrument exists to fully incorporate them within the national protected areas system.



Figure 1: Government Agencies with Legal Jurisdiction over Protected Areas

Given that there are at least five different management entities that have responsibility for management of these areas, there are significant overlaps in responsibilities, particularly between the Forest and Archaeology Departments in areas with high concentrations of cultural and natural resources. Overlaps also occur between the Fisheries and Forest Departments in the coastal zone and intertidal wetlands and waterbodies (PFB 1996). The need for cross-sectoral coordination has already been recognized for the coastal zone, leading to the creation of the interdepartmental Coastal Zone Management Authority.⁶ However, this only addresses the coastal/marine component of the protected area system.

Most of the protected areas – 47 national parks and reserves – have been declared under the National Parks System Act (NPSA) of 1981 and the Forest Act: eighteen Forest Reserves, sixteen National Parks, seven Wildlife Sanctuaries, three Natural Monuments, and three Nature Reserves. Two natural monuments – Half Moon Caye and Blue Hole on Lighthouse

Reef Atoll – have been designated as World Heritage Sites and thus have international recognition. The Crooked Tree Wildlife Sanctuary is Belize’s only Ramsar Site having been designated under the Convention of Wetlands of International Importance Especially as Waterfowl Habitat.

There are thirteen marine protected areas (MPAs) in Belize. The first MPA – Half Moon Caye – was designated in 1982. Eight of the MPAs were declared under the Fisheries Act, and the others under the NPSA. The eight marine reserves established under the Fisheries Act are: Hol Chan (1987), Glovers Reef (1993), Bacalar Chico (1996), South Water Caye (1996), Sapodilla Cayes (1996), Caye Caulker (1998), Port Honduras (2000), and Gladden Spit (2000). The other areas were declared under the NPSA but are technically MPAs as well because they protect marine environments: these are Half Moon Caye Natural Monument (1982), Laughing Bird Cay National Park (1991), Bacalar Chico National Park (1996), Corozal Bay (Manatee) Wildlife Sanctuary (1998), Blue Hole Natural Monument (1998), and Swallow Caye Wildlife Sanctuary (2002). It is interesting to note that Bacalar Chico was designated under both the National Parks System and Fisheries Acts, and Caye Caulker under both the NPSA and the Forest Act.

Despite their legal designation under the current legal framework, long-term security for protected areas does not exist. Protected areas and Forest Reserves or sections within them can be de-reserved (that is, removed from protected status) by Ministerial fiat. Forest Reserves have been especially subject to official and unofficial de-reservation. Sections of Swasey-Bladen Forest Reserve, Columbia River Forest Reserve, and Freshwater Creek Forest Reserve have been de-reserved for banana cultivation, small-scale agriculture, and sugarcane plantations, respectively (GOB 2000c). Furthermore, as noted in a UNDP/GEF project report:

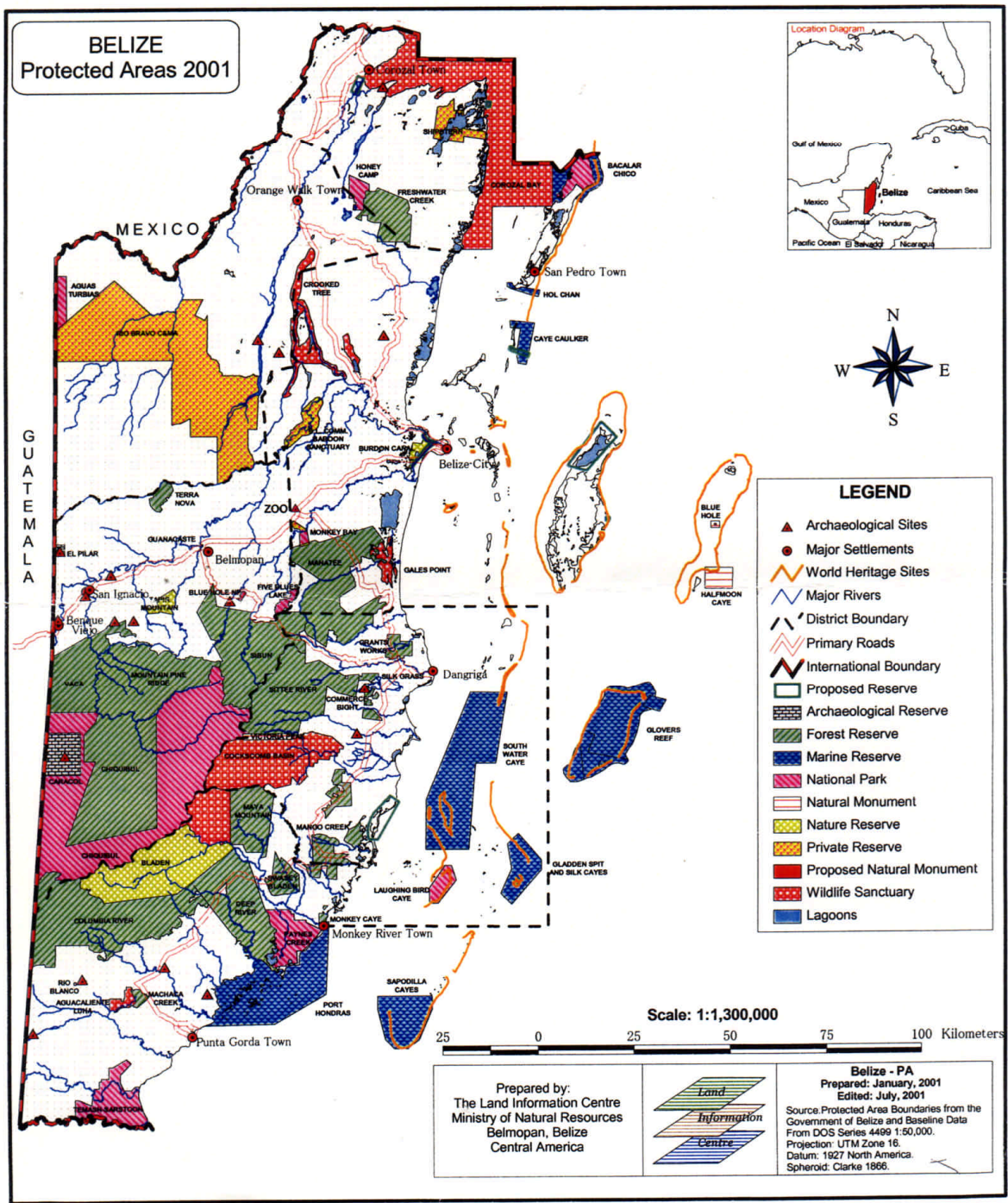
The National Parks System Act gives the Minister great discretionary powers to deviate from the Act, and as such provides little guarantee for long-term conservation of biodiversity in [protected areas (PAs)]. Numerous licenses to extract resources in PAs (where this is not normally allowed) or to cultivate crops inside PAs have been granted by applying such discretionary powers. In at least one of the PAs included in the project, a human settlement, including sugarcane fields, exists within the PA, allowed by a former Minister, and large tracts of what was previously part of the PA have been ‘de-reserved’. (Ravndal 2002:11)

Long-term conservation planning and donor investment in protected areas necessitates stricter legal security.

The *de facto* management of most protected areas is based on principles and practices specified in the *National Protected Areas Systems Plan for Belize* (PFB 1996). While this 1996 document was never signed into law, it guides on-the-ground management practices and national-level policy making for a number of protected area management agencies. Furthermore, according to a recent World Bank/WCS survey of the Belizean protected area (PA) legal framework, there is no mention of “public participation, collaboration, or the creation and function of any type of advisory committees for protected areas” (Barborak et. al. 2002:7).⁷ As shown in Figure 1, management is further complicated by the fact that protected areas management roles and responsibilities fall under the umbrella of three government departments – the Forest Department, Fisheries Department and the Department of Archeology – each located within a separate Ministry. Ministerial portfolios expand and contract in response to current affairs and political affiliation; this means that funding, staff, projects, and goals are also in flux. Changes in portfolios have the potential to create conflicts of interest; for example, the Ministry of Natural Resources and Environment includes the portfolios of Commerce and Industry.

Although more than 40 percent of Belize has been designated as protected area, there is very little management on-the-ground due to limited financial support, human resources, and technical expertise. Of the 71 national parks and protected areas, less than 25 percent have management plans and personnel (Pinelo 2000). Many parks are considered “paper parks” in reference to the lack of on-the-ground management. Despite their legal designation, it is

recognized that activities such as *milpa* farming or shifting cultivation, looting of archeological sites and hunting and fishing continue to some extent within protected area borders. Management consists of a diffuse assortment of public agencies, NGOs, and community organizations that rarely coordinate efforts or openly share information and resources. Additionally the complex social and political environment of protected areas is characterized by diverse and competing interests including industry and mining bodies, indigenous groups, refugee communities, and other public and private stakeholders whose perspectives and resources are not often represented in protected areas management. Greater integration of interests, needs, and concerns of various actors is essential to the long-term viability of Belize's natural resources and protected areas.



Map 3: Belize Protected Areas

Regional, national, and international conservation initiatives

Demonstrating a commitment to conservation, Belize is a signatory to various regional and international environmental treaties such as the *Central American Convention on Biological Diversity Protection*, and the protection of *Priority Protected Areas of Central America* and the *Alliance for Sustainable Development*. Belize is also a signatory to various international environmental treaties regarding: Biodiversity, Climate Change, Desertification, Endangered Species, Hazardous Waste, Law of the Sea, Ozone Layer Protection, Ship Pollution, and Wetlands (CIA 2002).

Preservation of biological diversity is the focus of several regional, national and international initiatives. The Nature Conservancy (TNC) and the Toledo Institute for Development and Environment (TIDE) promote the protection and conservation of a million-acre land management unit known as the Maya Mountain Marine Area Transect (MMMAT) as part of their “ridges to reefs” conservation approach (TNC 2003b) The Mesoamerican Biological Corridor (MBC) and the Mesoamerican Barrier Reef System (MBRS) are both long-term multifaceted projects funded by the Global Environment Facility (GEF), a multi-lateral funding mechanism geared toward environmental programs and projects in the developing world. The MBC is a regional initiative (including seven Central American countries and southern Mexico) that seeks to: 1) protect key biodiversity sites; 2) connect these sites with corridors managed in such a way as to enable the movement and dispersal of animals and plants; and 3) promote socially equitable and culturally sensitive development that conserves biodiversity (Miller et al. 2001).

The MBRS project is a fifteen-year plan, which aims to protect the vulnerable and unique barrier reef system that stretches along the coast from Mexico to Honduras. The Belize Barrier Reef was declared a World Heritage Site in 1996 yet damaging fishing practices, agricultural and industrial runoff and episodic coral bleaching present a challenge to preserving the extensive reef systems. Objectives of this project include: 1) Development of integrated management plans for the sustainable use of coastal and marine ecosystems and the diverse resources, goods and services they provide; 2) strengthening local and national capacity for environmental management through education, information sharing and training;

3) standardization of ecosystem monitoring and facilitation of its execution and dissemination of results throughout the region; 4) strengthening of institutions and programs for maintenance of water quality and prevention of contamination, particularly in trans-boundary situations; and 5) establishment of transnational coordination and cooperation mechanisms for harmonization of policies (including laws, standards, regulations and enforcement mechanisms) related to the conservation and sustainable use of the MBRS (GEF 2001).

The Tri-national Alliance for the Gulf of Honduras (TRIGOH) is a tri-national network – consisting of conservation organizations from Belize, Guatemala and Honduras – of coastal and marine protected areas which seeks to coordinate conservation initiatives and overcome conflict in the biologically rich Gulf of Honduras. This regional alliance was founded in 1996.

Relevant organizations and agencies

With a rapidly expanding trade deficit and reduced post-hurricane growth rate, the Government has focused on decentralization and privatization of public activities as a means to overcome budgetary constraints. Various resource management-related development and conservation activities have been delegated to quasi-governmental enterprises such as the Toledo Development Corporation (TDC) and the Coastal Zone Management Authority (CZMA), as well as to various NGOs.

In the realm of biodiversity and natural resource management, the Protected Areas Conservation Trust (PACT) acts as the primary in-country funding agency for protected areas management. The Trust is intricately linked to the overall management and development of protected areas in Belize. PACT aims to provide a “sustainable means of funding for activities to help conserve the natural and cultural treasure of Belize” through exit fees levied on foreign visitors and protected areas entrance fees (PACT 2001). While the Fund does provide much needed revenue for resource-starved Government and non-governmental agencies it is not sufficient to manage and maintain Belize’s extensive protected areas system.

Management of protected areas has also been entrusted to private organizations such as the Belize Audubon Society (BAS), TIDE, and the Toledo Association for Sustainable Tourism and Empowerment (TASTE) through various co-management agreements. In a *de jure* sense these legally binding agreements between a Government agency (Fisheries Department or Forest Department) and NGOs or community-based organizations (CBOs) theoretically allow for protected area management responsibilities to be jointly shared by the parties to the agreement. Fourteen protected areas are being administered by NGOs and CBOs under co-management arrangements with the Forest Department. These include the eight protected areas managed by the BAS – Cockscomb Basin Wildlife Sanctuary, Victoria Peak Natural Monument, Blue Hole National Park, Tapir Mountain Nature Reserve, Guanacaste National Park, Blue Hole Natural Monument, Half Moon Caye Natural Monument, and the Crooked Tree Wildlife Sanctuary. Six other sites are managed by CBOs under co-management arrangements with the Forest Department: these include Caye Caulker Forest Reserve, Five Blues Lake National Park, Laughing Bird Caye National Park, Mayflower Bocawina National Park, Noj Kaax Meen Eligio Panti National Park, and Rio Blanco National Park. The Sarstoon-Temash Institute for Indigenous Management (SATHIM) has recently embarked on a World Bank-funded project to institute a co-management system for the Sarstoon-Temash National Park, the southernmost of all the Belizean protected areas.

TIDE has signed a co-management agreement with the Fisheries Department for Port Honduras Marine Reserve, and is a member of the committee that has been charged by the Forest Department with overseeing the management of Payne’s Creek National Park. TASTE is presently negotiating a co-management agreement for the management of the Sapodilla Cayes Marine Reserve. Ya’axche’ Conservation Trust (YCT) manages its own property, known as Golden Stream Corridor Preserve. TIDE also owns and manages private property.

Devolution of management responsibility, however, is not accompanied by necessary financial resources. Where communities have sought to establish co-management agreements with Government agencies, the lack of human and financial capacity remains a substantial barrier to carrying out management responsibilities. While decentralization of protected area management grants freedom for innovation and a level of on-the-ground management

unlikely under GOB control, means are lacking to ensure that managing organizations are held accountable to GOB, local populations, and other stakeholders.

TOLEDO DISTRICT: CONTEXT AND ISSUES

The Toledo District lies at a crossroads. Accelerated development of the area looms in the future as the Southern Highway nears completion and the road to Guatemala is planned. This road would traverse areas of traditional Maya occupancy, an area referred to as the “Maya heartland” or the “Maya Homeland.” Different people have different visions for the future of Southern Belize.⁸ Some envision increased economic development through industrial agriculture, shrimp farms and large-scale infrastructure projects. Others envision an eco-regional conservation scheme to protect one of the last remaining wilderness areas that runs unbroken from the Upland forests of the Maya Mountains to the coast. Many people are trying to maintain their traditional livelihoods in areas that others have demarcated as distinct political units, logging concessions, and “protected” zones. Concentrated biodiversity coupled with a complex organizational landscape translates into high visibility for the locale. Issues that affect resource management unfold at various scales and within overlapping realms of activity. Some take place at international, national, regional, or local levels while others transect any number of levels. Many issues are chronic concerns or rapidly emerging situations. They can be generally categorized as issues pertaining to economic development, society and culture, and environment.

Economic development issues

Poverty and economic development

The bulk of Belize’s protected areas and reserves are located in Southern Belize, a part of the country that had for many years been referred to as “the forgotten district” in terms of economic development. Poverty and illiteracy rates are highest in the Toledo District – the most economically disadvantaged district in the country. 1993 and 1996 poverty assessments established that Toledo is the most indigent district in Belize (GOB 2000c).

Characterized by a largely rural agrarian population, many of Toledo's diverse ethnic groups maintain their cultural traditions as small scale agriculturalists that depend on their natural environment for medicinal herbs, food, timber, and construction materials.

Over the past five years, Southern Belize, especially the Toledo District, has received focused attention from the Government of Belize (GOB). In an effort to reduce and eliminate poverty, the Government has instituted "new and special approaches and measures... to assist the south in catching up," including measures that give special benefits to the Toledo District (GOB 1998:1). The GOB, however, also stresses the relationship between environment and development:

Land use planning, environmental management and protection are cross cutting issues which are important in the context of poverty alleviation, health sector development, tourism [particularly eco-tourism and community based tourism], industrial and agricultural development, and disaster mitigation and management. (GOB 1998:14)

Perhaps the most significant intervention has been the improvement of the Southern Highway, which traverses the entire southern region of Belize. Under the *Southern Highway Rehabilitation Project*, some 104 miles of the existing Southern Highway – which connects Southern Belize to the more industrialized and populated northern districts – are being rehabilitated, upgraded and paved from Stann Creek Valley road to Punta Gorda the capital of the Toledo District. Similar to other large road projects in previously isolated areas (Moran 1979), the highway serves as a catalyst for rapid social and environmental change (Cook 1991). In Toledo, plans to upgrade the road prompted the emergence of various public, non-profit and private organizations to address potential social and ecological impacts of the highway many of which are becoming a reality. The highway has already severed previously intact ecological corridors between the upland forests and the coastal plains. Highway improvement will likely augment tourism, agricultural exportation, and timber and mineral extraction by increasing transportation efficiency. There may be a motion for further de-reservation of national forest lands to augment transportation and commerce. Highway development will also increase land speculation and the spontaneous emergence of roadside villages, further destabilizing indigenous villages located near the highway.

Plans are also underway to forge a major transportation route between Southern Belize and Guatemala. The new highway project forms part of the much contested Plan Puebla de Panama funded by the Inter-American Development Bank (Hayden 2003). By linking the Southern Highway to the Pan American Highway across the border, this project is intended to foster Central American market integration. Similar to the Southern Highway, this route will open previously isolated areas to settlement and development. A major overland route to Guatemala has the potential to exacerbate existing tensions between Spanish-speaking Central American immigrants, Mayas, and other Belizeans.

Timber extraction is also an important element in recent development initiatives for Southern Belize. In the mid-1990s, the Government of Belize granted at least seventeen concessions for logging on lands totaling 480,000 acres in the Toledo District. In 1997, the Government granted a permit to a foreign oil and gas exploration company to explore for oil reserves on almost 750,000 acres of land in the Toledo District (ILRC 1998). Hurricane Iris devastated much of the Toledo forests in 2001, in effect destroying the timber industry in Southern Belize. However, in March 2002, the Government approved a two-year permit to a US-based timber company to harvest hurricane-damaged trees of commercial value (with extensions “as long as the remaining salvage is marketable”).⁹ Clearly, the Government’s vision for Southern Belize has been to accelerate the pace of development in a region that has always been regarded as the most economically depressed in the country. This has had serious implications for the protection of natural habitats and conservation of biodiversity in the region. Long-term economic growth and development in Toledo will depend on how well current and new development initiatives are able to balance the needs of people and the environment. Of special concern is how such initiatives will integrate the needs and capabilities of indigenous populations.

Development initiatives

Southern Belize is littered with the remains of defunct development projects. It is a common perception in the region that millions of dollars have been squandered implementing numerous projects without making substantial improvements to inhabitants' lives. This creates difficulties for current and future development attempts in the South. One interviewee who has worked in Southern Belize for many years describes this phenomenon:

Many groups have focused or had focused on development work in Toledo. CARD [and] ESTAP ...were all spending millions to make a difference in Toledo but in each case there is failure in having a sustained impact in improving the overall quality of life there. The health, education, and socioeconomic and other statistical indicators in the district still reflect appalling levels of poverty as compared to other parts of the country. Small pockets or groups might have benefited in the short-term from these projects but overall for the money spent hardly any of the intended goals have been realized. There is also a tendency for the project ideas to be conceived outside of Toledo with project implementers that are hardly in tune with or connected to the unique dynamics of the area. They [individuals and implementers] tend to work in the district with an agenda already externally packaged for how things should be done. Apparently there is very little sensitivity to local culture and little consultation with local stakeholders about what it is that they truly and deeply need in their development process. Development projects tend to be addressed in a piecemeal basis but there is no overall strategic planning and concerted efforts for development in the region. (Enriquez 2002)

Recently, the Government has been investing substantial resources in social and economic development projects and programs aimed at the South. Through the Environmental and Social Technical Assistance Project (ESTAP), the GOB adopted “a holistic approach to regional development” in the face of the Southern Highway’s rehabilitation, through the development of a *Regional Development Plan for Southern Belize*.

The goals of this Regional Development Plan include the following: 1) enhance the quality of life of all peoples in the region; 2) ensure the efficient and sustainable allocation, and utilization of resources in the region; 3) promote and accelerate sustainable economic growth, and social development in the region; and, 4) increase and enhance the meaningful participation and contribution of the region’s peoples in the overall development of Belize (GOB 2000c:1).

Implementation of this ambitious Plan now rests in the hands of the quasi-governmental Toledo Development Corporation (TDC) – created in early 2002. With limited resources and staff, how this nascent organization will fulfill its mandate is not yet apparent. The corporation’s current Director, Ludwig Palacio, explains the role of TDC in Toledo:

TDC will be run by a Board of Directors that will liaise with the Ministry of Economic Development, which is the Ministry that will work directly with the TDC. So there is significant Government interest. In fact, it was a vision of the Government to do it that way, because Toledo has been stagnant for so many years. This present Government has been giving it quite a bit of thought, of thinking to see what needs to be done in order to have the South develop at a quicker pace. I think that they are looking at the TDC to accomplish it – to address that particular problem of stagnation.

Another regional project Community-initiated Agriculture and Resource Development (CARD) is a seven year community-focused, sustainable livelihoods project initiated March 2000 under the Ministry of Agriculture, Fisheries and Cooperatives. The project seeks to “develop the productive potential of land use systems in a sustainable way and to ensure accessible support services to poor small holder families in the southern regions of Belize” (TIDE 2000). These types of initiatives affect resource management by influencing income-generation alternatives that relate to land use and natural resources.

Tourism

The only English speaking country in Central America with tremendous cultural and ecological diversity, Belize is a popular destination for foreign tourists. According to GOB’s *Medium Term Economic Strategy 2003-2005*, “tourism is the single largest contributor to the country’s economic growth and the largest foreign exchange earner for the country with one out of every four jobs in the tourism industry”. As more traditional industries such as sugar, citrus and banana become less competitive on the world market it is likely that tourism will expand in importance. Additionally the GOB has made a commitment to develop and promote the tourism industry as a means to contribute to the Belizean economy.

According to the Belize Tourism Board Director Tracey Taegar, the Toledo District “offers the best of Belize in a one-stop-destination” with its significant marine and terrestrial natural resources and cultural heritage sites. Ecotourism is growing rapidly in the South and has the

potential to balance much needed economic development with sustainable land use and conservation. The private and non-profit sectors and several community initiatives are attempting to tap into the expanding market. However, foreign investors, with greater human and financial resources are better positioned to take advantage of the tourism market than rural communities. Additionally, the Belize Tourism Board is transitioning away from the small-scale ecotourism of the 1990s and toward large-scale, cruise ship and hotel tourism. This diverts investments from smaller, community-based efforts and increases pressure on archaeological parks, signature national parks, and island dive sites. Retirement immigration is also a significant force in Southern Belize tourism. Belize Tourism Board features a section on “*Retire in Belize*”; outlining the incentives, regulations and application process for those individuals looking to retire in Belize (BTB 2003b). Tourism expansion in the South is hampered by divisions between Government agencies, land-tenure insecurity, and territorial conflict with Guatemala.

Social issues

Territorial conflict

Guatemala claims the southern half of Belize’s territory based on the colonial sovereignty that Spain held over the region via the Captaincy General of Guatemala (Shoman 1994). Throughout the late eighteenth and early nineteenth centuries a series of small wars and treaties between Spain and Britain led to greater British control of Belize and its coastal territories. The British established permanent settlements in the area related to the rise of the logwood and mahogany industries. Following the fall of Spanish rule in the Americas, the ensuing Guatemalan governments continued to contest British claim to Belize. The Mexican and British governments officially recognized their southern and northern border, respectively, in 1893. However, the southern Belizean border remained contentious between the Guatemalan and the British governments. In addition to the Spanish colonial legacy, the Guatemalan government bases its claim to the territory on the fact that Britain never met the terms set in Article 7 of the 1853 Treaty of Belize in which Britain promised to construct a road linking Belize City to the Peten to facilitate cross border trade.

Territorial disputes between Britain/Belize and Guatemala continued to be heated nearly escalating to war several times between 1947 and 1977 (Shoman 1994). Each confrontation was marked by the build-up of Guatemalan troops on the border, which were removed after Britain deployed combat troops and the Royal Air Force to Belize.

These historical events have left much mistrust on both sides of the border and have politicized decision-making that involves border zones like the Toledo District. Over the past two years, Guatemala and Belize have been involved in diplomatic negotiations mediated by the Organization of American States (OAS) and facilitated by official representatives of Guatemala and Belize. The facilitators developed a series of proposals and presented these proposals to their respective governments in August 2002. These proposals sought to institute confidence-building measures between Belize and Guatemala and to resolve the territorial dispute. The proposals, which include a joint development fund to increase cross border trade and exchange between the two countries, may only be implemented after they have been put to a public referendum in Guatemala and Belize, and endorsed by the majority of electors in both countries. Government decisions affect Kekchi and Mopan Maya whose cultural groups span both nations. The GOB's support of projects and programs in Southern Belize carries many geopolitical implications.

Migration

The migration of agricultural labor from Honduras and Guatemala is more common in the South than elsewhere in Belize. The lack of "available" land to accommodate the influx of immigrants and farm workers increases pressure on national, leased and Indian Reservation lands. Clashes concerning land use practices frequently erupt between self-identified Belizeans and more recently arrived farm workers from Spanish-speaking Central American countries. Migrant and resident farm workers and fishermen from Guatemala and Honduras are perceived to hold different understandings of appropriate use of natural resources.

Social networks and civil society

In Belize, the general informality of working relations, tight integration of professional circles, significance of extended family, relatively small geographic and demographic size, and other factors lead to an active civil society and intricate social networks. In response to the challenges wrought by rapid and large-scale development, civil society organizations in Southern Belize have proliferated. In the realm of NGOs, different governing boards often consist of the same individuals or representative organizations. A person may serve on one board as a national forestry official and on another as an outside consultant. Family members, colleagues, and coworkers are often staff members of various organizations or serve on the board of other organizations. In this way, Government ministers, tourism operators, scientific researchers, elementary school teachers, and local hunters may know each other well and communicate on a first name basis. An individual with extensive knowledge of civil society organizations in Belize describes the make-up of Belizean civil society:

In the evening time [high ranking government officials] go home to their villages and they're a part of local civil society. There is that kind of fluidity between different parts of the tripartite structure within Belize. It's inevitable. They will get involved with what interests them. You can look at this as a conflict of interests or as a situation where we have human resources constraints and we have to set up systems of governance so conflicts of interests don't happen but still utilize the fact that many people in Belize wear many hats at the same time. We go from meeting to meeting.... (Anonymous 2002).

If Belize is a country where everyone knows everyone, the Toledo District is a place where it seems that everyone works with everyone. The NGO landscape of Southern Belize is teeming with international NGOs, local conservation NGOs, gender advocacy groups, cultural organizations, and social clubs, among many others. The Maya have formed several NGOs that have been advocating for recognition of their aboriginal rights over lands and natural resources in the region. The Maya NGOs are also interested in making sure that “government projects are to a large extent practical and reflect the needs and priorities of communities” (Ch’oc 2002). Many environmental NGOs have been created to meet the growing environmental and development needs of the Toledo District by managing public and private lands for conservation. International NGOs, such as The Nature Conservancy,

have been flowing into the region to render support to these conservation initiatives. It is joked that there are more acronyms than people in the Toledo District. In this context, the “thickening of civil society” is associated with “fierce” competition to secure funding and inter-organizational “turf” wars.

Environmental issues

Biodiversity

The MMMAT SCP states that “some of the richest bioregions in the New World lie in the Toledo District of Southern Belize” (TIDE 2000). Converging factors such as high rainfall (three to four meters annually), a low population density, diverse terrestrial and marine ecosystems and a healthy population of many endangered species, result in a truly unique and important region. The region contains a multitude of plant and animal species. Southern Belize is home to the jaguar and the puma, manatee, and other rare and endangered species. The southern end of the Mesoamerican Barrier Reef System, the second largest coral reef system in the world, stretches into the Gulf of Honduras. Few areas in Central America can compare with the level of ecological integrity that the Toledo district currently enjoys, capturing the attention of a large contingency of donor agencies, natural resource managers and the international NGOs.

Watersheds and protected areas

Six principal watershed regions are delineated for Belize according to descriptions of principal watersheds from the USAID/GOB Environmental Water Quality Monitoring Program Final Report (Lee and Stednick 1995 in Boles 1999). These include the Northern Watershed Region, the Northeastern Watershed Region, the Central Watershed Region, the Southeastern Watershed Region, the Southwestern Watershed Region, and the Southern Watershed Region. The Toledo District contains most of the Southwestern Watershed Region and a portion of the Southern Watershed Region, both of which it shares with Guatemala. The Toledo portion of these two watershed regions is further broken down into eleven distinct subwatershed areas (see Map 4, p.38).

These subwatershed areas are: Deep River, Freshwater Creek, Golden Stream, Middle River, Moho River, Monkey River, Pine Ridge Creek, Rio Grande, Sarstoon River, Sennis River, and Temash River. The bulk of Belize's protected areas and reserves (see Map 5, p.39) are located within this agglomeration of subwatersheds.

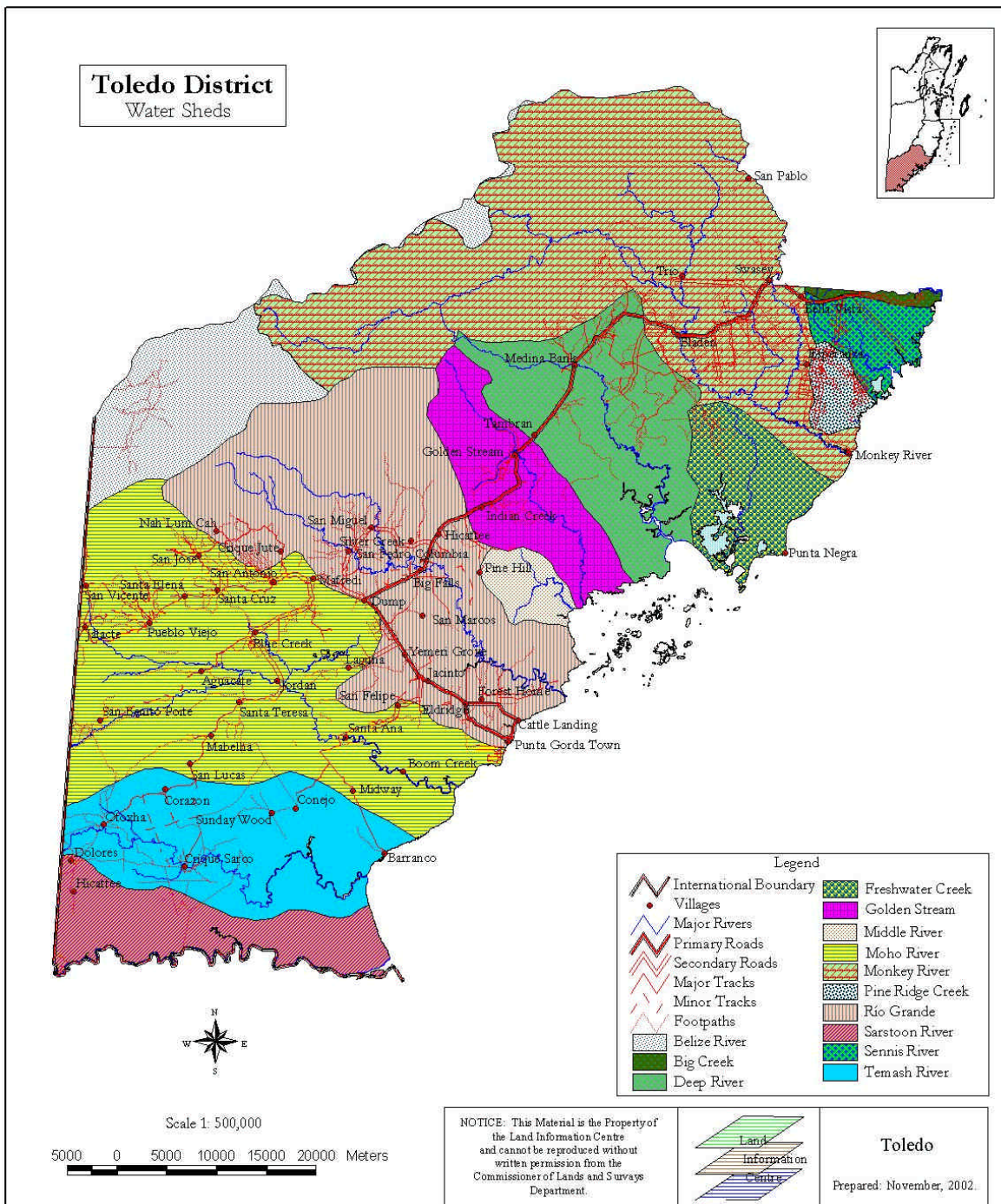
In Southern Belize, the preservation of the natural environment is an over-riding concern across sectors manifested in part by acres under protection. Over 715,000 acres of land in the Toledo District, is under some kind of protected area status (see Table 2, p.37). This includes three national parks, two wildlife sanctuaries, one nature reserve, seven forest reserves, two marine reserves, two archaeological sites, and a number of private reserves.

The Port Honduras Marine Reserve and the Sapodilla Cayes Marine Reserve protect fragile coral reefs and other marine resources, and mangrove cayes. Forest Reserves in Southern Belize cover an estimated 350,000 acres (see Table 2, p.37). Private protected areas include Boden Creek Ecological Reserve and the Golden Stream Corridor Preserve (the only officially registered private reserve in the region). Outside of officially declared protected areas and reserves, “[there] are little means to make an accurate calculation of how many pieces or blocks of land have been designated by their owners as ‘conservation reserves;’” this is exacerbated by the tendency for developers to designate areas as such “due partly to the costs of drainage or leveling and partly as a sales attraction” (GOB 2000c: 130).

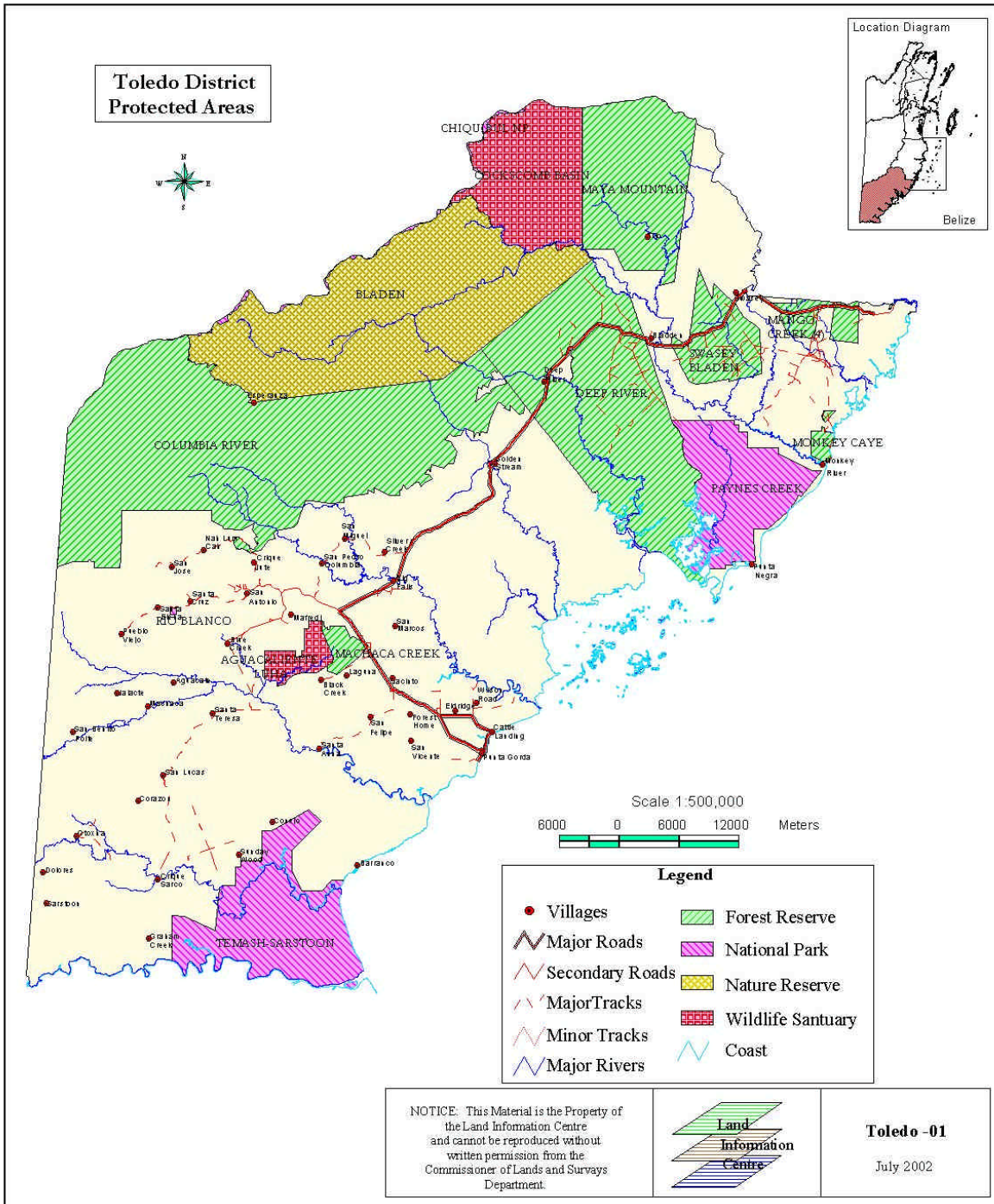
Table 2: Protected Areas of the Toledo District

Protected Area	Year Established	Acreege (acres)	Legislation	Management Agency
National Parks				
Payne’s Creek	1994	31,676	NPSA	Forest Department (management committee in place)
Rio Blanco	1994	100	NPSA	Rio Blanco Maya Association
Sarstoon-Temash	1994	41,898	NPSA	Forest Department (co-management with SATIIM in process)
Wildlife Sanctuaries				
Agua Caliente Luha	1998	5,492	NPSA	Forest Department
Cockscomb Basin	1997 extension	20,000	NPSA	Belize Audubon Society
Nature Reserves				
Bladen	1990	99,670	NPSA	Forest Department (with support from Bladen Consortium)
Forest Reserves				
Columbia River	1997	102,940	Forest Act	Forest Department
Deep River	1990	78,574	Forest Act	Forest Department
Machaca Creek	1998	3,756	Forest Act	Forest Department
Mango Creek	1989	35,549	Forest Act	Forest Department
Maya Mountain	1979	128,111	Forest Act	Forest Department
Monkey Caye	1996	1,460	Forest Act	Forest Department
Swasey Bladen	1989	14,779	Forest Act	Forest Department
Marine Reserves				
Port Honduras	2001	100,378	Fisheries Act	Toledo Institute for Development and Environment
Sapodilla Cayes	1996	33,401	Fisheries Act	Toledo Association for Sustainable Tourism & Empowerment
Archaeological Sites				
Nim Li Punit	1995	121	AMMA	Archaeology Department
Lubaantun	1995	40	AMMA	Archaeology Department
Private Reserves				
Golden Stream Corridor Preserve	1998	9,554		Ya’axche’ Conservation Trust
Boden Creek Ecological Reserve		7,600		Belize Lodge & Excursions

Source: Belize Forest Department (2003)



Map 4: Watersheds of the Toledo District



Map 5: Protected Areas of the Toledo District

Pollution

Despite the tendency of environmental organizations to paint Southern Belize as “pristine,” the region is “impacted by pollution, unsanitary liquid and solid waste disposal practices, and increased use of agro-chemicals, speculative development, deforestation, uncontrolled fires and hunting” (GOB 2000c:139). The banana industry depends heavily on pesticides and fertilizers. While expansion of the citrus and banana industry has leveled off in the Toledo District, aquaculture is rapidly increasing: “Eight of Belize’s fourteen incorporated and licensed shrimp farms are located in the southern region [holding title to around 30,000 acres of land] ...approximately 9,250 acres of which are potentially suitable for production use” (GOB 2000c:46). It is likely that such human activity is responsible for the drastic reduction of coastal mangroves in recent years (Murray et al. 2002). Effluents from agriculture and aquaculture severely impact coastal communities and water quality. Aquaculture to date is largely unregulated yet “...has reached a point where the GOB needs to play a more tangible role, not only in terms of conventionally regulating issues, such as licensees and permits but also in relation to strategic analysis of the constraints of the sub-sector, and articulating a clear and definitive path for its future development” (GOB 2002b).

Hurricanes

Belize lies within the hurricane belt of Central America. In the past three years, four major storms struck Belize causing significant damage to tourist facilities, utilities, roads, bridges, and houses, as well as agricultural and fisheries export earnings. Southern Belize is gradually recovering from the devastation caused by Hurricane Iris in 2001. Estimates of the impact include damage costs over US\$250 million and 13,000 homeless including 62 percent of the rural population (Monk and Penados 2002:7). In the Toledo District, the hurricane caused extensive damage to rural villages, forests, and the agricultural sector. Approximately 310,000 hectares of terrestrial ecosystems were severely damaged in southern Belize; “estimates range from 50-100 years before mature tree species once again dominate the landscape” (Monk and Penados 2002). In the transition period between relief aid and development assistance, rural communities depend increasingly on their local resource base.

Logging

Despite the setback to timber resources as a result of Hurricane Iris, the Toledo District contains extensive forest cover and commercially viable timber. However, unsustainable management and logging activities as well as a “questionable” leasing policy pose serious threats to the sustainability of the District’s timber resources. Commercial timber harvests in neighboring South Stann Creek are already declining due to unsustainable practices (GOB 2000c:140). As of 2002, the Columbia Forest Reserve Management Plan was the only management plan in the District. Short term leases and lack of management plans provide little incentives for sustainable forest management. According to the ESTAP Regional Development Plan:

There is considerably more to sustainable management of forest resources than constructing license plans and counting timber yields.... Sustainable management of forests also depends on development of collateral programs designed to promote plantation forestry, agro-forestry, silviculture, reforestation; better political awareness about the value of forests, particularity with regard to soil and water conservation; enforcement of existing legislation; and development of forest’s recreational and tourism potential. (GOB 2000c:140)

