

National Protected Area Systems Analysis

Protected Area Categories

Introduction

There exist a total of 94 protected areas in Belize (per January 1, 2005 including archaeological reserves and “accepted” private reserves)(Figure 1). Several of these reserves, particularly in the Marine realm have gazetted management zonation. When these zones are taking into account the number of “management units” increases to 115. There is also some overlap. Particularly the “Spawning Aggregations”, which are technically “Marine Reserves”, have often been created partly inside already existing marine reserves and should possibly best be considered a zonation category within these marine reserves.

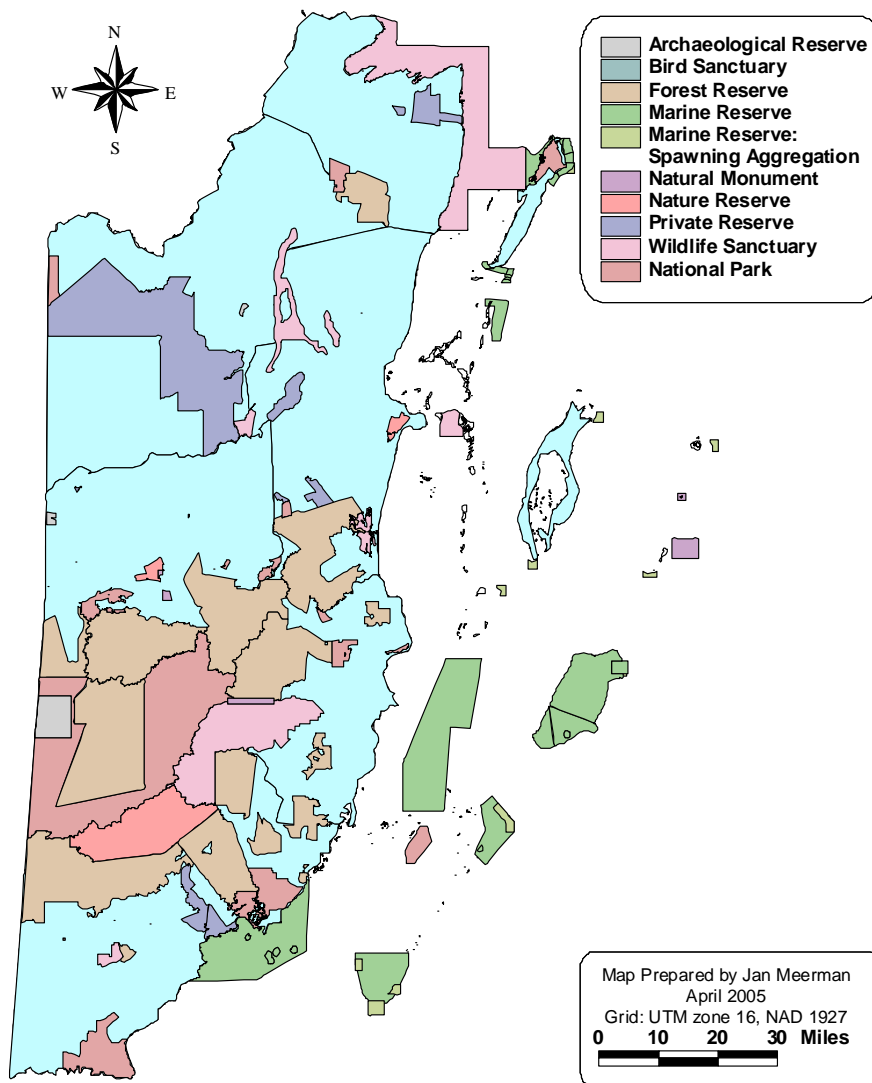


Figure 1. Protected Areas Map of Belize as per January 1, 2005.

A total list of these protected areas can be found in appendix 1. There exist many categories of protected areas but they can be grouped in the following broad categories:

Bird Sanctuaries



Figure2. Bird Sanctuaries

The 7 Bird Sanctuaries are some of the oldest protected areas (Crown Reserves) that have biodiversity conservation in mind. They were gazetted in 1977 for the protection of waterfowl nesting and roosting colonies. All of them are tiny islands with a combined surface of 14.7 acre/6.0 ha.

There is surprisingly little information on these bird sanctuaries. No recent counts or species occupation data appear to be available. This is a clear data deficiency. Particularly given how easy it would be to gather such data on an annual basis.

Archaeological Reserves

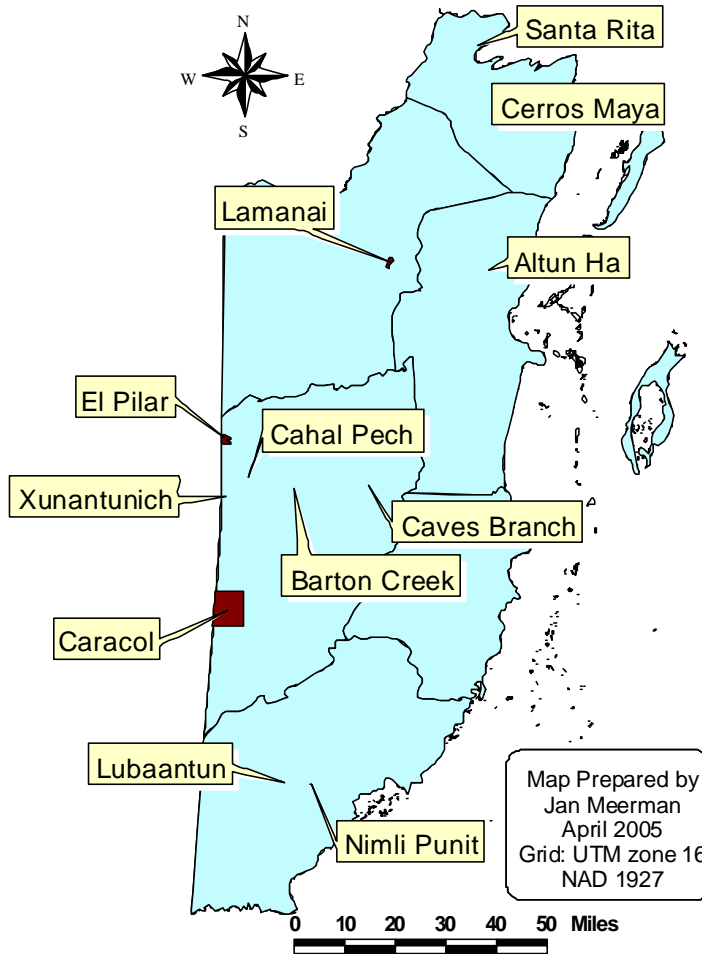


Figure 3. Archaeological Reserves

Archaeological Reserves include a number Maya Sites managed by the National Institute for Culture and History (NICH). Total surface of these sites is approximately 27,826 acres or 11,261 ha (0.7 % of national territory). It is important to notice that essentially all Archaeological Sites are protected under the Ancient Monuments and Antiquities Act of 1972 (Revised 1980). The 12 archeological reserve sites listed here are the only ones included in the analysis. Additional Sites were only available as point data and as such could not be used in the area calculation.

Extractive Reserves

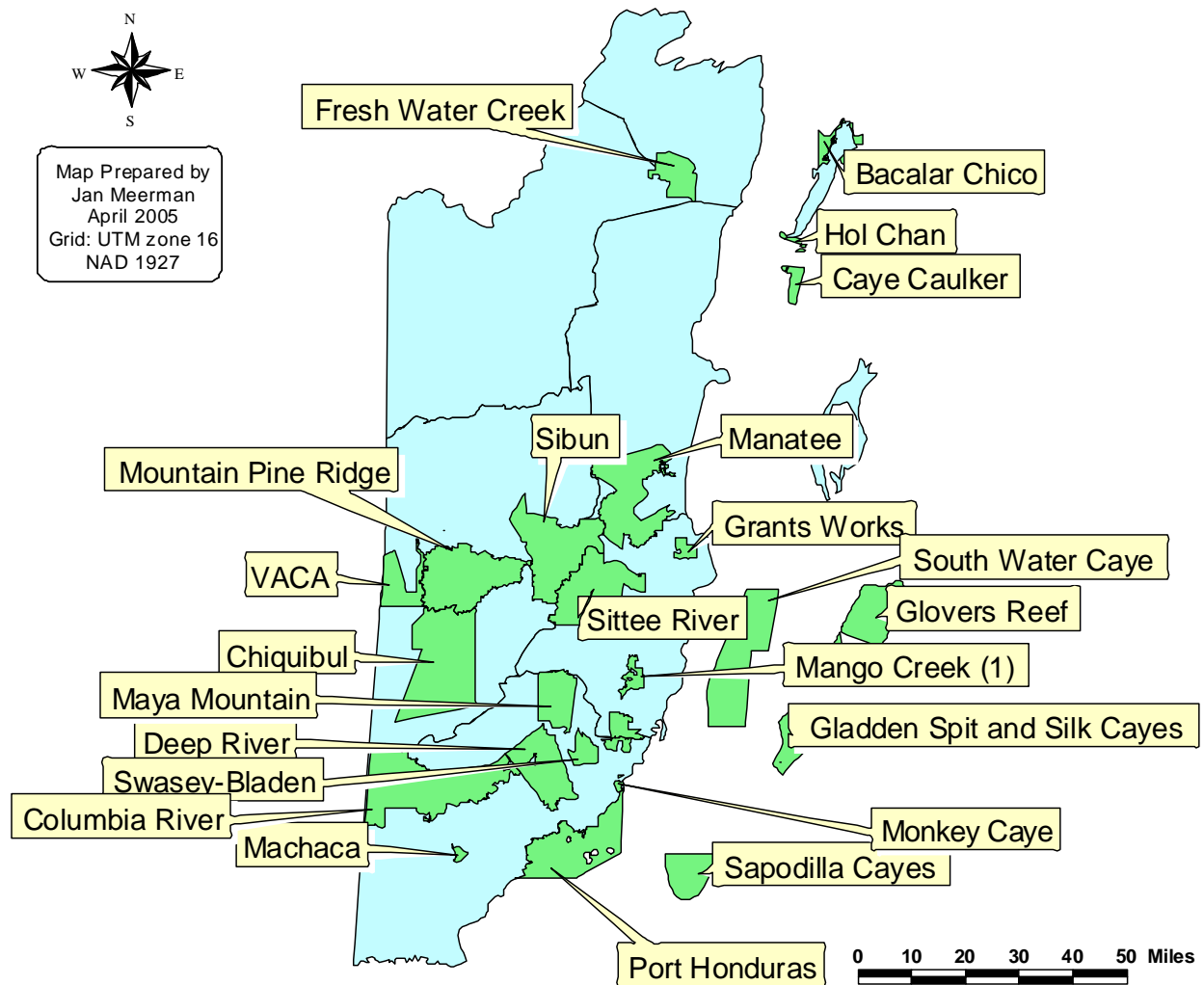


Figure 4. Extractive Reserves

The Extractive Reserves form a grouping of 16 Forest Reserves and 8 Marine Reserves. These management categories were created for the management of extractive resources. This is the largest section of Protected Areas Categories (50 % of total protected area acreage):

- Forest Reserves: 939,809 acres; 380,328 hectares = 9.3 % of Total National Territory
- Marine Reserves: 372,730 acres; 150,839 hectares = 3.7 % of Total National Territory
- Combined coverage 13.0 % of Total National Territory

Conservation management categories

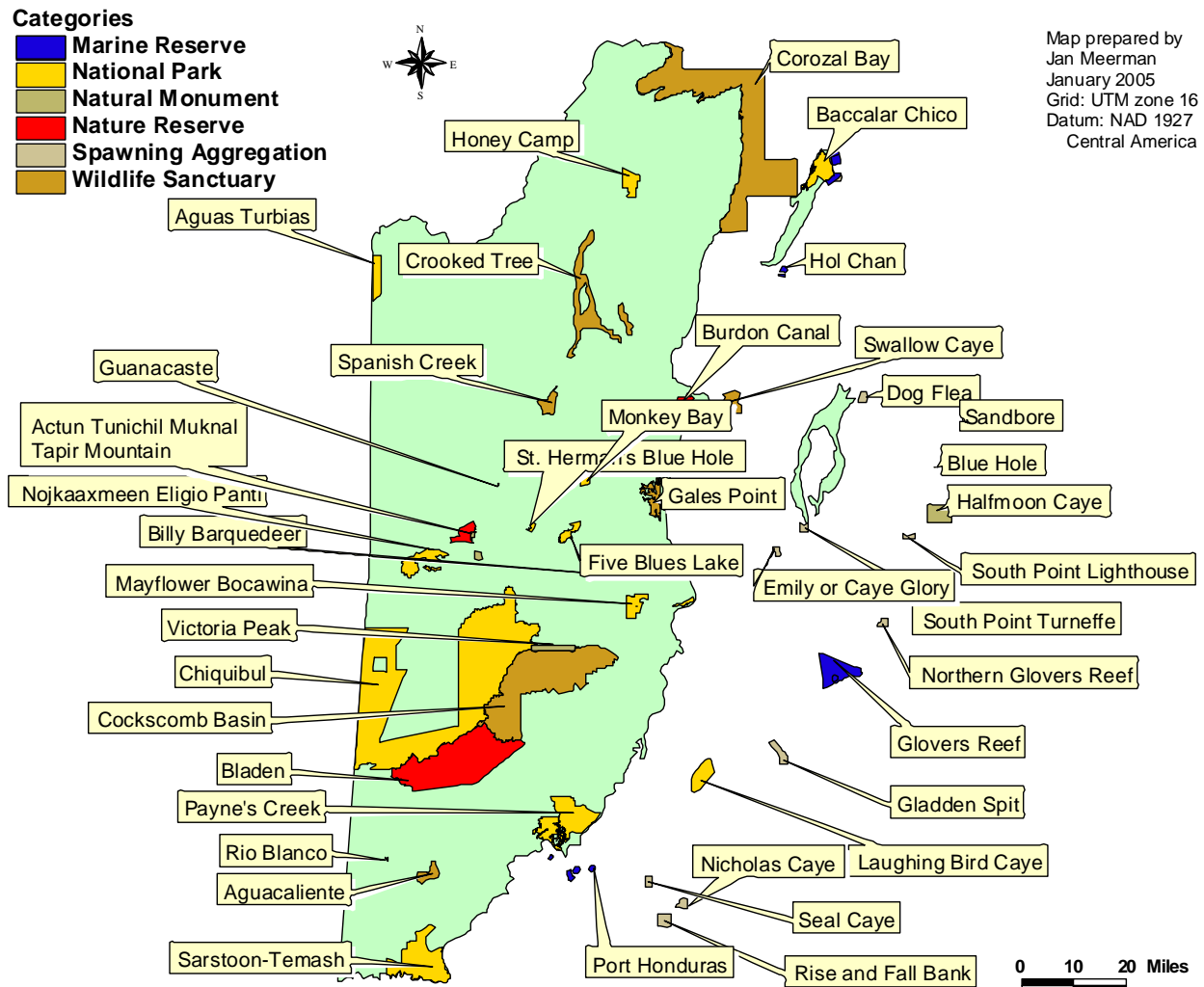


Figure 5. Areas with a stricter conservation mandate

This grouping represents management categories with conservation purposes in mind. This can be conservation of biodiversity (Nature Reserve, Wildlife Sanctuary), natural resources (Marine Reserves), landscapes and special features (National Park, Natural Monument). While these are not designed for extractive use, some forms of extraction are often allowed and these protected areas certainly allow for non-extractive uses. All combined they comprise of a total of 53 areas falling in 6 different classes (including conservation/wilderness/no-take zones of marine reserves). Note that many of the protected Spawning Aggregations fall entirely or largely within already existing marine protected areas. The total national coverage is 9.3 % of the total national territory. There exists the “Sarteneja No Hunting Zone” which seems largely forgotten and does not have any basis in the Park Systems Act.

Private Protected Areas

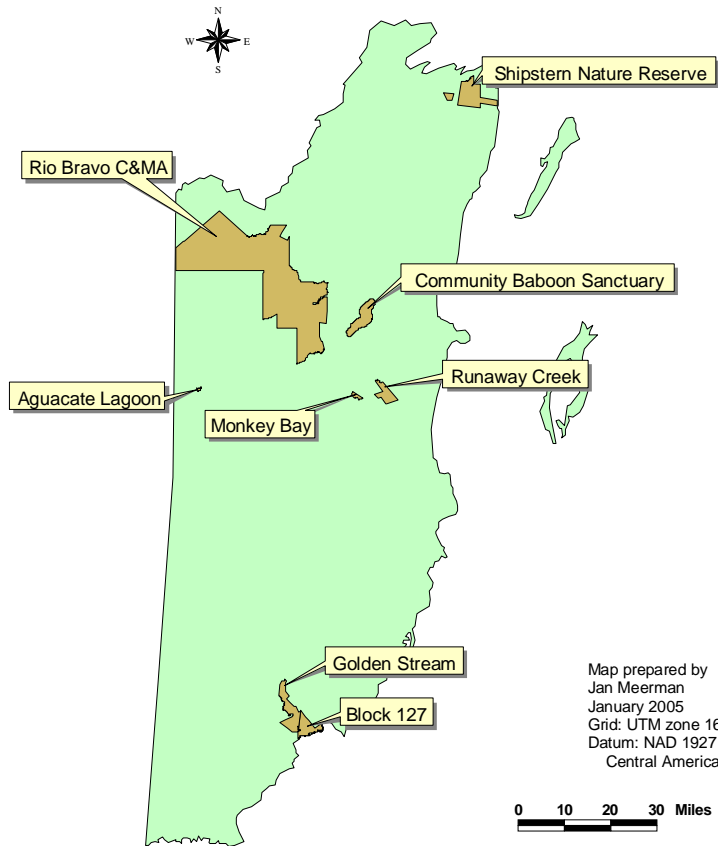


Figure 6. Some Private Protected Areas

In this management category, only those protected areas are included that have a standing agreement with Government (Rio Bravo Conservation and Management Area and Block 127) and those others that have a de-facto recognition + have a management in place (Shipstern, Community Baboon, Runaway Creek, Aguacate Lagoon, Monkey Bay and Golden Stream).

Following this classification, there are 8 Private Protected Areas covering 325,346 acres or 131,663 hectares (3.2 % of National Territory). Most of these Private Reserves are essentially multiple use reserves including managed extraction of resources.

The Belize Association of Private Protected Areas (BAPPA) has a membership of landowners that are trying to manage their land holdings as for conservation purposes (including those land holdings recognized here).

Total overview of Protected Area Statistics

Table 1. Total overview of Protected Area Statistics

	STATUS	COUNT	ACRES	HECTARES	%
Conservation Management Categories	Marine Reserve incl. SPAG	11	26,595	10,763	0.26
	National Park	16	412,031	166,744	4.09
	Natural Monument	5	16,359	6,620	0.16
	Nature Reserve	3	111,228	45,013	1.10
	Spawning Aggregation adds ¹	11	916	371	0.01
	Wildlife Sanctuary	7	368,786	149,243	3.66
			53		378,754
Archaeological Reserves	Archaeological Reserve	12	11,261	27,826	0.68
Bird Sanctuaries	Bird Sanctuary	7	6	15	0.00
Extractive Reserves	Forest Reserve	20	939,809	380,329	9.33
	Marine Reserve	17	372,730	150,839	3.70
				531,168	13.02
Private Reserves	Private Reserve	8	325,346	131,663	3.23
% of national territory under protection				1,069,426	26.22
Surface	Land		5,467,841	2,212,765	
	Marine ²		4,609,230	1,865,300	
	Total		10,077,071	4,078,065	

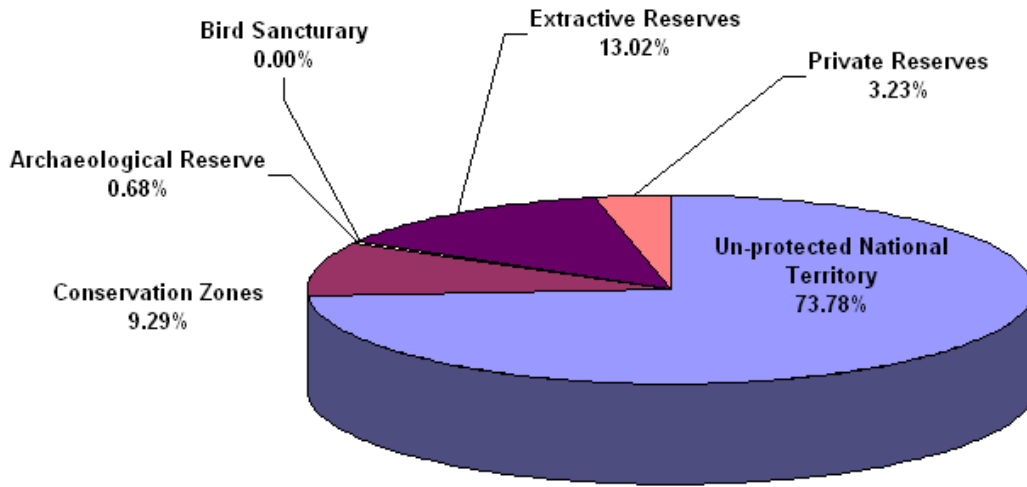
Based on Table 1, the amount of the national territory under some form of conservation management is 26.22 %. A graphic presentation of how this percentage is subdivided is represented in Table 2.

¹ Note that the acreage of "Spawning Aggregations adds" only refers to what is not already within another protected area.

² See report on the calculation of the marine territory of Belize available as a separate document on resource CD. Exclusive economic zone not considered in the calculation.

Table 2

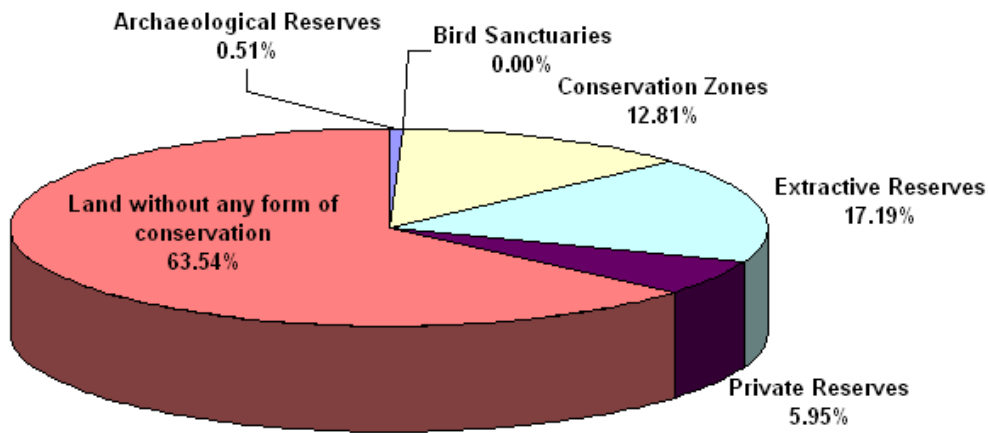
National Territory and Protected Areas



While 26.22 % of the national territory under protection does not sound like much, the picture changes when the terrestrial and marine realms are split up (Tables 2 & 3).

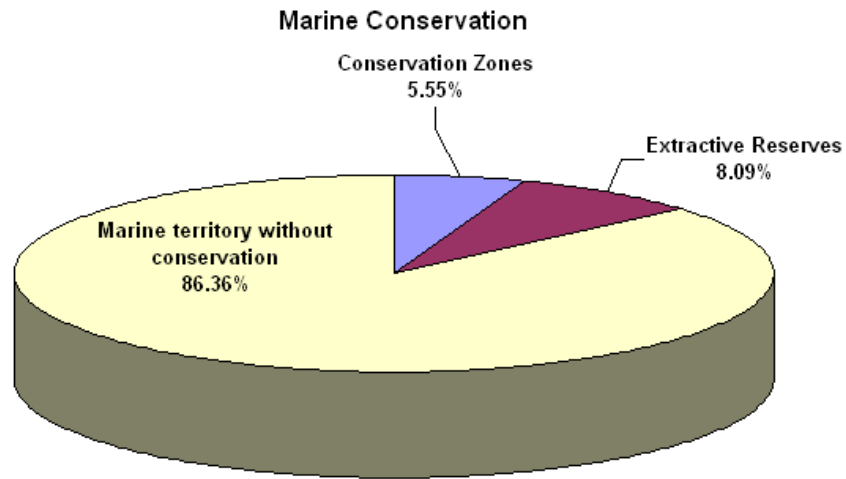
Table 1

Terrestrial Protected Areas



For the terrestrial part (with terrestrial defined as everything that is not seawater), the area under conservation is 36.46 %. Within the terrestrial protected areas, the extractive reserves still form the largest component.

Table 2



The marine realm, compared with the terrestrial realm is largely un-protected. Only 13.64% is protected and the largest part of that is only as an extractive reserve as well. This large under-representation of the marine realm is largely caused by the portion of deep water away from the coastal shelf that has been completely ignored as a conservation target.

Conclusions

- While Belize considers itself as having an extensive Protected Areas System, the reality is that most of that is for the management of resource use and extraction. With the current needs and expectations of the nation of Belize, such a classification of “Management” rather than “Conservation” per se, is probably a more realistic one. A revised “Protected Areas System” should focus on management of its territory for the use that it is best suited for.
- Re-designing the Protected Areas System should lead to a merging of current protected areas reducing the current number of 115 “management units”. In many cases they could be lumped. Examples are Marine Reserves where Spawning Aggregations overlap with other Marine Reserve categories, or the Maya Mountain Block which should be made into one Protected Area with different management zonations based on actual attributes rather than on ancient boundaries.
- The current 115 management units are managed by three departments with a totally different outlook but also with considerably overlap and gray areas. This inefficiency would best be resolved by creating one single agency responsible for all areas of natural resource management.