

Part IV

SOUTH GUANACASTE: GENERAL LAND USE PLAN AND ACTION PROJECTS

Chapter 14

SOUTH GUANACASTE: OVERVIEW OF THE GENERAL LAND USE PLAN

14.1 INTRODUCTION

In this chapter the general land use plan for South Guanacaste's coastal areas will be explained. The draft general land use plan was formulated by the JICA Study Team together with the ICT counterparts in the course of the study since February 2000. The draft general land use plan covers the Maritime Terrestrial Zones (MTZs) and the hinterlands behind the MTZs. For the MTZs, the general land use plan should be used as a legal guide to the formulation of coastal regulatory plans, in accordance with the Maritime Terrestrial Law. On the other hand, for the hinterlands of MTZs, the general land use plan should be used as a reference for ICT, INVU and municipal governments to guide private investments and development activities in appropriate locations and on proper scales. The general land use plan could be a basis on which ICT, INVU, municipal governments, private businesses, community organizations and NGOs play a variety of roles in promotion of sustainable tourism in coastal areas.

14.1.1 Organization of This Chapter

In this chapter, the draft general land use plan will be described in the following order:

- Land Use Plan as seen from the Regional Level
- Land Use Plan within Tourism Centers
- Guidelines for each Land Use Zone and Specific Areas

The description of Land Use Plan by district (administrative unit) will be given in Chapter 15.

14.1.2 Land Use Zones

In Chapter 5 of Volume 2 of the Final Report, the JICA Study Team recommended a land use zoning system for the coastal areas. This is summarized in Table 14.1. The draft general land use plan is presented using the land use zoning system.

Table 14.1 Land Use Zones in Coastal Areas (both MTZs and their Hinterlands)

Large Land Use Zone	Detailed Land Use Zone
Tourism Development Zone [T]	Tourism Amenity Core Area (TAN) Planned Tourism Development Area (TAP) Spontaneous Tourism Development Area (TAE) *Local Tourism-Related Commercial Area (TAC) *Local Cabin Development Area (TCD)
Mixed Zone [M]	Mixed Tourism and Community Area (MIX)
Community Zone [C]	Community Core Area (CAN) Community Residential Area (CAR) *Small Area for Local Residents (CAP) *Artisanal Fishermen's Base (CBP)
Other Zone [O]	Other Land Use Area (OAT)
Future Zone [F]	Future Development Area (FAD)
Nature Zone [N]	ICT-Municipality Natural Area (NIM) Private Natural Area (NAP) *Daytime Tourism Activity Base (NAD)
Wetland [H]	
SINAC's Nature Protected Area [S]	

Note: An asterisk (*) indicates spot land allocation. The zone names without asterisk marks mean areal zoning.

14.2 LAND USE PLAN AS SEEN FROM THE REGIONAL LEVEL

14.2.1 Administrative Jurisdiction of the Coastal Areas

There are four kinds of territories in terms of administrative jurisdiction in the coastal areas of the South Guanacaste Region:

- MTZs of ICT's Jurisdiction
- Natural Protected Areas under SINAC of MINAE
- Wetlands Registered by MINAE
- Private Properties

The General Land Use Plan is to specify land uses for the 150m restricted zones along the coastlines which do not include wetlands, and for the 150m belts behind wetlands.

Table 14.2 Administrative Jurisdiction in the Coastal Areas of South Guanacaste

	Types of Coastal Areas	Length of Coastal Lines (km)	Length of the Area behind Wetlands (km)
ICT	Maritime Terrestrial Zones (MTZs) except MINAE's Wetlands ⁽¹⁾	91.2	53.7
MINAE	Natural Protected Areas of SINAC ⁽²⁾	50.5	-
	Wetlands (part of MTZs and legally protected) ⁽³⁾	14.4	-
	Private Properties	No Data	-
Total		156.1	53.7

Source: (1): Measurements made by JICA Study Team by GIS based on ICT data

(2): MINAE's most recent GIS data on SINAC Natural Protected Areas

(3): Field Visits by JICA Study Team and Interpretation of TERRA Project GIS Maps and Aerial Photographs

14.2.2 Tourism Development Zones in Coastal Areas

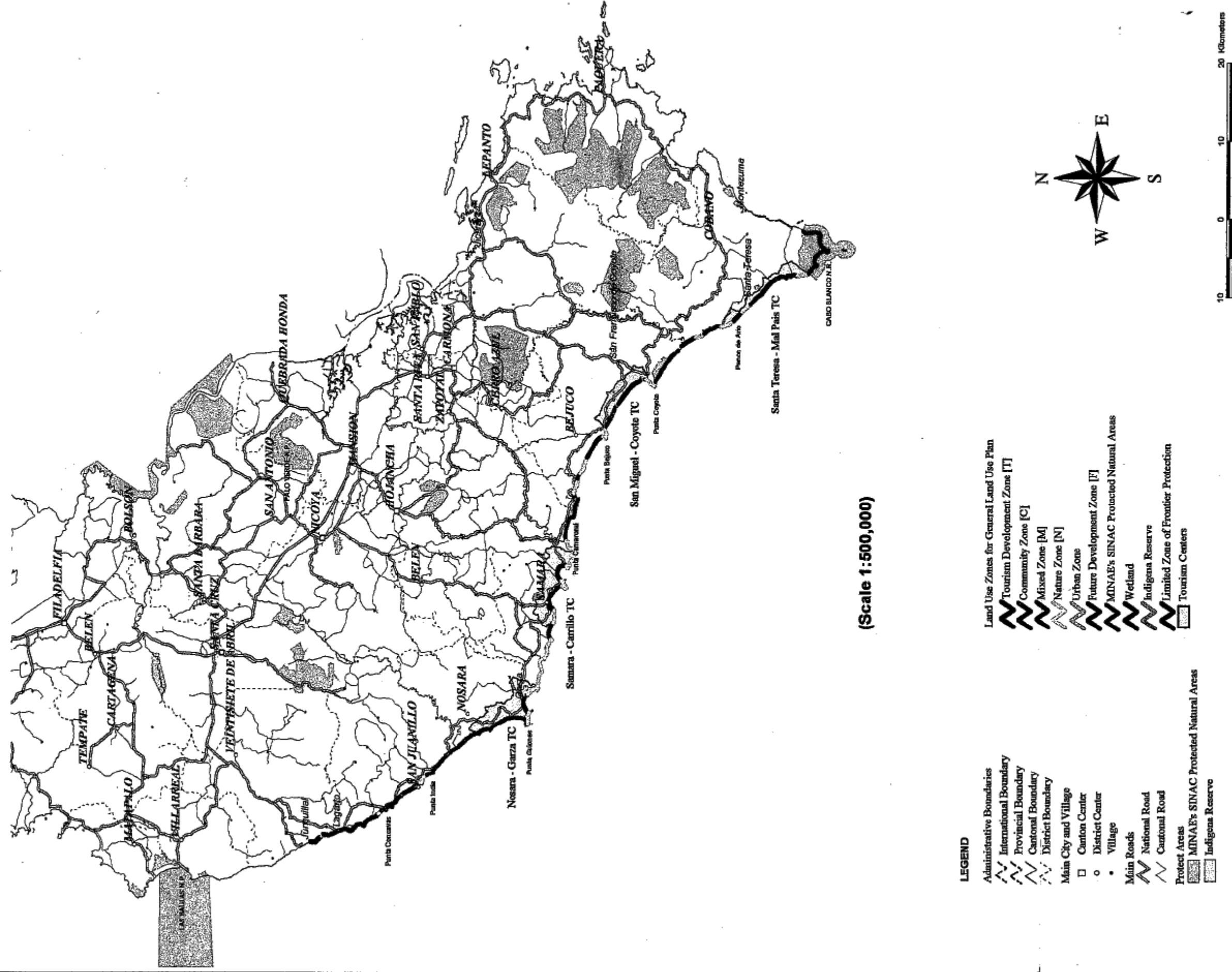
In the South Guanacaste Region four Tourism Centers and eight Limited Tourism Development Areas are identified. Tourism Development Zones are mostly allocated within the Tourism Centers. Outside the Tourism Centers, a small amount of Tourism Development Zones is allocated to Limited Tourism Development Areas.

Table 14.3 Tourism Centers and Limited Tourism Development Areas in South Guanacaste

Order	Name	Code	District	MTZs
				Coastal Length (km)
Primary Tourism Center	Samara-Carrillo	TC-1	Samara	12.7
Secondary Tourism centers	Nosara-Garza	TC-2	Nosara	5.9
	San Miguel-Coyote	TC-3	Bejuco	12.1
	Santa Teresa-Mal Pais	TC-4	Cobano	17.6
Limited Tourism Development Areas	Junquillal South	LT-1	27 de Abril	0.8
	Lagarto	LT-2	Cuajiniquil	0.5
	Pitahaya	LT-3	Cuajiniquil	2.5
	Azul	LT-4	Cuajiniquil	0.9
	San Juanillo	LT-5	Cuajiniquil	1.7
	Ostional	LT-6	Cuajiniquil/ Nosara	*
	Islita	LT-7	Bejuco	0.6
	Manzanillo	LT-8	Cobano	2.5
Total				57.8

Note: *Behind MTZ

Figure 14.1 Tourism Development Zones, Nature Zones, Future Development Zones and Tourism Centers in the General Land Use Plan for South Guanacaste



(Scale 1:500,000)

LEGEND

- Administrative Boundaries
 - International Boundary
 - Provincial Boundary
 - Cantonal Boundary
 - District Boundary
 - Main City and Village
 - Canton Center
 - District Center
 - Village
 - Main Roads
 - National Road
 - Cantonal Road
 - Protect Areas
 - MINAE's SINAC Protected Natural Areas
 - Indigenous Reserve
-
- Land Use Zones for General Land Use Plan
 - Tourism Development Zone [T]
 - Community Zone [C]
 - Mixed Zone [M]
 - Nature Zone [N]
 - Urban Zone
 - Future Development Zone [F]
 - MINAE's SINAC Protected Natural Areas
 - Wetland
 - Indigena Reserve
 - Limited Zone of Frontier Protection
 - Tourism Centers

14.2.4 Natural Zones and Future Zones in MTZs

As described in the previous section, Tourism Development Zones are confined to a limited number of tourism centers and limited tourism development areas. Natural Zones (ICT Natural Areas) and Future Development Zones are allocated between these tourism centers. By allocating land use zones in this way, a focal development pattern could be induced in coastal areas, as shown in Figure 4.1. Table 14.4 shows a summary of allocation of land use zones. Table 14.5 shows the list of ICT Natural Areas and their reasons for establishing ICT Natural Areas here. Table 14.6 gives the list of MINAE SINAC's Protected Natural Areas.

Table 14.4 Summary of Allocation of Land Use Zones in MTZs in the General Land Use Plan of the South Guanacaste Region

	Land Use Zone	Code	Length of Coastline (km)		Length of the Area behind Wetlands (km)
ICT ⁽¹⁾	Tourism Development Zone	T	20.0	12.8%	2.2
	Mixed Zone	M	12.4	7.9%	-
	Community Zone	C	3.2	2.0%	-
	Future Zone	F	10.5	6.7%	-
	Natural Zone (ICT-Municipality Natural Area)	N	45.1	28.9%	51.5
MINAE	Wetlands ⁽²⁾	H	14.4	9.2%	-
	SINAC's Natural Protected Areas ⁽³⁾	S	50.5	32.4%	-
Total			156.1	100%	53.7

Source: (1): MTZ: JICA Study Team General Land Use Plan

(2): Field Visits by JICA Study Team and Interpretation of Terra Program's GIS Maps and Aerial Photographs.

(3): MINAE's most recent GIS data on SINAC Natural Protected Areas

Table 14.5 Natural Zones (ICT-Municipality Natural Area) in South Guanacaste

Land Use Code	Name and Location	Major Resource for Natural Zones					Length of Coastal Line (km)	District
		Steep Slope	Forest	Wetland	Buffer	Scenic Beauty		
NIM-1	Boca Venado		X	X			1.4	27 de Abril
NIM-2	Boca Rio Tabaco			X			0.6	Cuajiniquil
NIM-3	Boca Rio Cuajiniquil		X	X			0.2	Cuajiniquil
NIM-4	South of San Juanillo		X		X		2.2	Cuajiniquil
NIM-5	Between Punta Guiones and Punta Garza	X	X		X		2.7	Nosara
NIM-6	Between Rio Garza and Punta Escondido		X	X			1.3	Nosara
NIM-7	Between Punta Escondido and Estero Medina	X	X			X	3.5	Hojancha
NIM-8	Between Estero Medina and Estero Barrigona	X	X			X	2.7	Hojancha
NIM-9	Between Estero Barrigona and Estero Ciego		X	X			1.3	Hojancha
NIM-10	Between Estero Ciego and Punta Samara	X	X			X	1.8	Hojancha
NIM-11	West of Matapalo Hill		X	X			0.2	Hojancha
NIM-12	Between Punta Indio and Playa Carrillo	X	X			X	2.7	Hojancha
NIM-13	Between Punta Carrillo and Punta El Indio	X	X			X	0.6	Hojancha
NIM-14	Between Punta El Indio and Playa Camaronal	X	X				6.3	Hojancha
NIM-15	Between Punta Islita and Playa Islita	X	X			X	0.4	Bejuco
NIM-16	Between Playa Islita and Estero Corozalito	X	X				2.1	Bejuco
NIM-17	Between Estero Corozalito and Playa Bejuco		X				2.4	Bejuco
NIM-18	Between Punta Bejuco and Punta San Miguel	X	X			X	1.8	Bejuco
NIM-19	Between Estero Jabilla and Playa Coyote		X				0.3	Bejuco
NIM-20	Rancho Floriania		X				0.5	Bejuco
NIM-21	Between Estero Coyote and Punta Coyote	X	X			X	1.6	Bejuco
NIM-22	Between Punta Coyote and Playa Caletas		X	X	X		0.7	Bejuco
NIM-23	Estero Chapeton North							
NIM-24	Estero Chapeton South		X	X			1.2	Cobano
NIM-25	Between Punta Pochote and Playa Hermosa	X	X			X	2.7	Cobano
NIM-26	Peñon de Ario	X	X			X	1.8	Cobano
NIM-27	Between Playa Cuevas and Cabo Blanco Strict Nature Reserve	X	X		X	X	1.9	Cobano

Source: Measurements made by JICA Study Team by GIS based on ICT data

Table 14.6 MINAE's SINAC Protected Natural Areas in Coastal Areas of South Guanacaste

Code of General Land Use Plan	Code of SINAC ²⁾	Name	Type	Length of Coastal Line (km) ¹⁾	Area (ha) ²⁾	Remark
S-1	V06	Ostional	National Wildlife Refuge	16.6	352	Turtle Nesting
S-2	V28	Werner Sauter	National Wildlife Refuge (Mixed)	-	140	Dry Tropical Forest
S-3	V20	Camaronal	National Wildlife Refuge (Mixed)	6.7	234	Turtle Nesting
S-4	V24	Estica Ltda.	National Wildlife Refuge (Private)	-	42	Dry Tropical Forest
S-5	-	Playa Caletas	National Wildlife Refuge (Mixed)	3.4	N.A.	Wetland and Turtle Nesting
S-6	Z25	Peninsula de Nicoya	Protection Zone	-	21,748	
S-7	N01	Cabo Blanco	Strict Nature Reserve	23.8	1,269	Lowland Tropical Moist Forest (Terrestrial)
Total				50.5		

Source:1) JICA Study Team Measurements by GIS
2) SINAC, MINAE (2000)

Table 14.7 Wetlands in South Guanacaste

Code	Name	District	Remark
H-433	Estero Congo	27 de Abril	
H-434	Boca Rio Tabaco	Cuajiniquil	
H-a	Boca Rio Rosario	Cuajiniquil	
H-435	Estero Ostional	Cuajiniquil	Ostional Wildlife Refuge
H-436	Nosara	Nosara	Ostional Wildlife Refuge
H-437	Estero Garcia	Nosara	Playa Guiones & including Boca Rio Rempujo
H-438	Garza	Nosara	
H-b	Estero Medina	Samara	Playa Barco Quebrado
H-c	Estero Barrigona	Samara	
H-439	Estero Ciego	Samara	Playa Buenavista
H-440	Cangrejal	Samara	Rio Lagarto (mangroves mostly cut down)
H-d	Estero Mala Noche	Samara	
H-e	Estero Sangrado	Samara	Playa Carrillo (West)
H-f	Boca Dormilona	Hojancha	Estero Crocodillo (Playa Carrillo, Centre)
H-441	Carrillo	Hojancha	Playa Carrillo (East)
H-442	Camaronal	Zapotal	Camaronal Wildlife Refuge
H-443	Estero Corozalito	Bejuco	
H-444	Laguna Bejuco	Bejuco	
H-445	Estero Bejuco	Bejuco	
H-446	Estero Jabilla	Bejuco	
H-447	Milagro	Bejuco	Behind Playa Coyote
H-448	Estero Coyote	Bejuco	
H-449	Caletas-Pencal	Bejuco	Playa Caletas Wildlife Refuge
H-450	Estero Rio Bongo	Bejuco	Playa Ario
H-451	Estero Chapeton	Cobano	Playa Ario
H-g	Estero Manzanillo	Cobano	

Source: Inventario de los Humedales de Costa Rica, SINAC-UICN

14.3 LAND USE PLAN WITHIN TOURISM CENTERS

Each tourism center covers the MTZ and its hinterlands. The boundary of each tourism center is defined taking into account natural conditions, future demand for tourism facilities and local socio-economic conditions.

Within the tourism center, not only Tourism Development Zones but also other land use categories, such as Community Zones and Natural Zone, are delineated.

In each tourism center, the Tourism Development Zones include a Tourism Amenity Core Area, Planned Tourism Development Areas, Spontaneous Tourism Development Areas and Mixed Tourism and Community Areas. These land use categories for Tourism Development Zone are set for the following purposes:

Tourism Amenity Core Area (TAN): Center of the tourism zone, with commercial facilities (restaurants, cafes, bars, souvenir shops, grocery stores) and public facilities (public space for food and souvenir stalls, tourist information center, public parking lots, bus station, public showers, toilet facilities and litterbins)

Planned Tourism Development Area (TAP): Areas with relatively high and middle density development of hotels. Larger lots of land and infrastructure should be provided to attract private investments in middle-sized hotels. Existing residents and others should be relocated from these areas.

Spontaneous Tourism Development Area (TAE): Areas with relatively low-density development of tourism facilities (hotels, cabins and other tourism-related businesses). No planned efforts are made to attract tourism facilities here.

Mixed Tourism and Community Area (MIX): Areas with relatively low-density development of tourism facilities (hotels, cabins and other tourism-related businesses). Existing community areas (housing and public facilities) and small businesses (cabins and stores) should be allowed to remain here. As a result, relatively small-scale and low-density development of mixed tourism and community will be induced.

***Local Tourism-Related Commercial Area in Tourism Amenity core Area (TAC):** This does not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for tourism-related commerce for local communities, at the stage of regulatory planning.

***Local Cabin Development Area (TCD):** This does not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for cabin development by local communities' initiatives, at the stage of regulatory planning.

Community Core Areas (CAN): Areas in which existing public facilities and commercial areas for local people should be preserved. If necessary, additional lands for these functions should be secured at the stage of regulatory planning, especially for the relocation of existing public facilities from the areas designated as TAN and TAP.

Community Residential Areas (CAR): Areas in which existing settlement areas for local people should be preserved. If necessary, additional lands for this purpose should be secured at the stage of regulatory planning, especially for the relocation of local people's houses from the areas designated as TAN and TAP.

***Small Area for Local Residents (CAP):** This does not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for existing housing areas for local people at the stage of regulatory planning. This land use category is specified in the areas outside the Tourism Center. Since it is difficult to identify all the existing houses, they should be studied carefully to delineate these areas at the stage of regulatory planning.

***Artisanal Fishermen's Base (CBP):** This does not cover the whole area that is specified, but the designation indicates that in the area there is a need for special land allocation for an artisanal fishermen's base, such as fish collection center and boat mooring space.

ICT-Municipality Natural Area (NAI): Areas in which natural vegetation should be retained or restored by not allowing further development. However, existing houses and facilities could remain in the areas. Daytime tourism and recreational activities are also allowed.

***Daytime Tourism Activity Base (NAD):** This does not cover the whole area that is specified, but the designation indicates that even in the area of NAI, special land allocation for daytime tourism and recreational activities is allowed.

Table 14.8 Land Use Zones in MTZ by Tourism Center, South Guanacaste

Tourism Center		Length of Coast Line (km)							
		Tourism Zone T	Mixed Zone M	Community Zone C	Future Zone F	Nature Zone N	Wetland H	Urban Zone U	Total
Order	Name								
Primary	Samara-Carrillo	4.3	1.9	0.1	0.0	5.8	0.6	-	12.7
	(%)	34%	15%	1%	0%	46%	5%	0%	100%
Secondary	Nosara-Garza	1.2	0.0	0.4	0.0	4.0	0.3	-	5.9
	(%)	20%	0%	7%	0%	68%	5%	0%	100%
Secondary	San Miguel-Coyote	4.7	2.3	0.2	0.0	4.2	0.7	-	12.1
	(%)	39%	19%	2%	0%	35%	6%	0%	100%
Secondary	Santa Teresa-Mal Pais	3.8	5.1	2.3	0.0	6.4	0.0	-	17.6
	(%)	22%	29%	13%	0%	36%	0%	0%	100%
Total	(km)	14.0	9.3	3.0	0.0	20.4	1.6	-	48.3
	(%)	29%	19%	6%	0%	42%	3%	0%	100%

Table 14.9 Spot Land Allocation for Community Zones in South Guanaacaste

District	P Code	Name	Location			MTZ Land Use				Spot Land Allocation				Existing population	Data Source	Type	No. of fisherman
			mainly MTZ	MTZ & hinterland	mainly hinterland	CAN	CAR	MIX	CAP	TAC	TCD	CBP					
Cuaajiniquill	P-01	Lagarto	X			X		X						97	EBAIS	B	35
	P-02	Pitahaya*	X					X						few	-	C	-
	P-03	San Juanillo		X		X								137	EBAIS	B	40
	P-04	Ostional	(X)					X	X					404	EBAIS	A	-
Nosara	P-05	Garza	X			X	X						179	EBAIS	B	50	
Sámara	P-06a	Cangrejal	X				X							129	EBAIS	A	60
	P-06b	Sámara (Central Area)	X					X	X					421	EBAIS	-	-
	P-06c	Matapalo	X											160	EBAIS	-	-
	P-06d	Malá Noche	X											38	EBAIS	-	-
Hojancha	P-07	Puerto Carrillo			X						X	X	X	230	Field	A	15
Bejuco	P-08	Isilita			X						X			60	Field	C	-
	P-09	Pilas de Bejuco			X						X			270	Field	C	-
	-	Playa Bejuco*												-	-	-	10
	P-10	San Miguel	X			X	X					X	X	30	Field	C	-
	P-11	Puerto Coyote	X			X								20	Field	C	-
	P-12	Puerto Coyote South*	X											few	-	C	20
Cobano	P-13	Manzanillo	X								X			20	Field	C	few
	P-14	Bello Horizonte			X							X	X	152	EBAIS	B	-
	P-15	Santa Teresa		X			X	X				X	X	368	EBAIS	A	-
	P-16	Mal País	X			X						X	X	128	EBAIS	B	30

* not a community

** Classified by population (A: more than 200, B: between 50-200, C: less than 50 or not a community)

Figure 14.2 General Land Use Plan of Sámara-Carrillo Primary Tourism Center

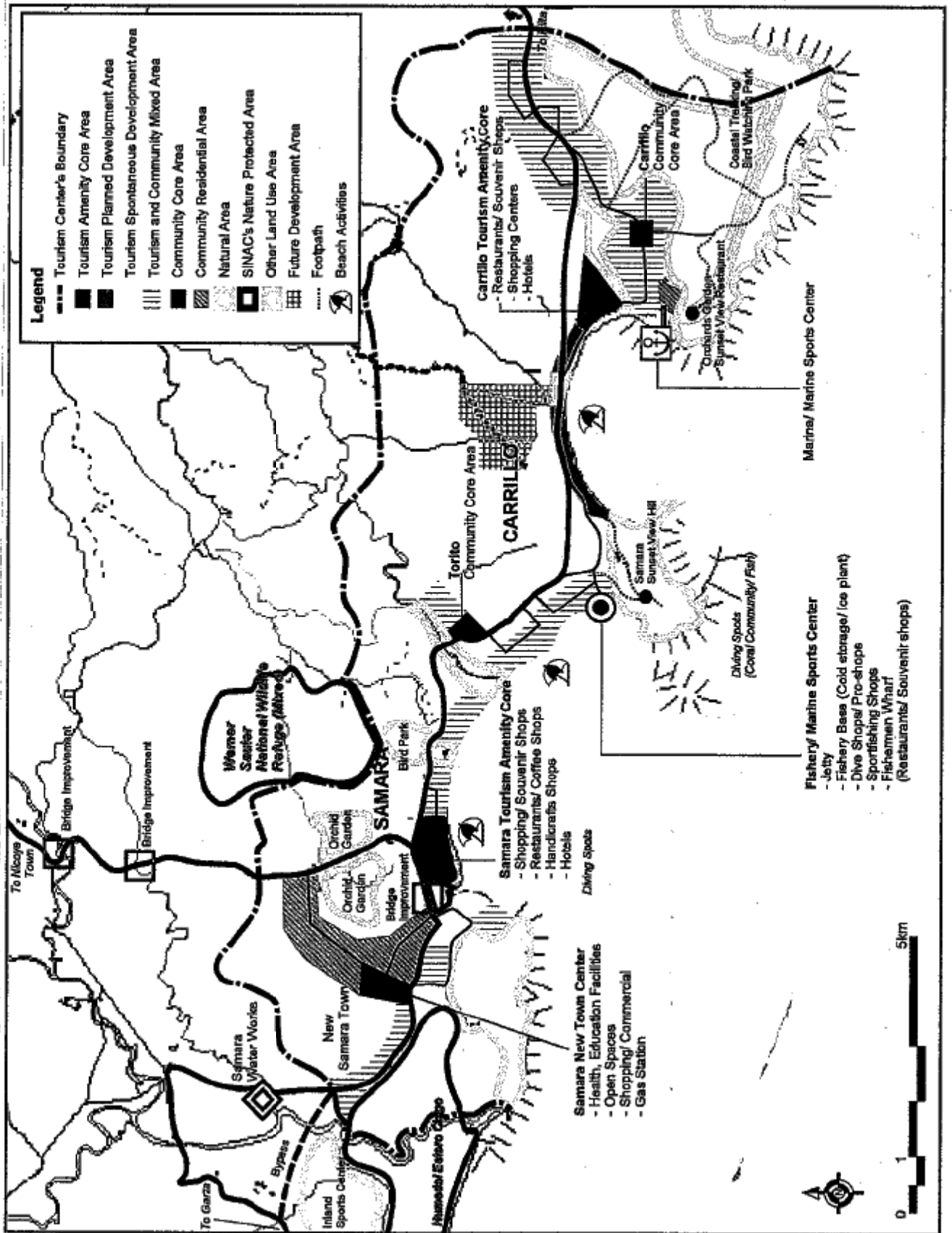


Figure 14.3 General Land Use Plan of Nosara-Garza Secondary Tourism Center

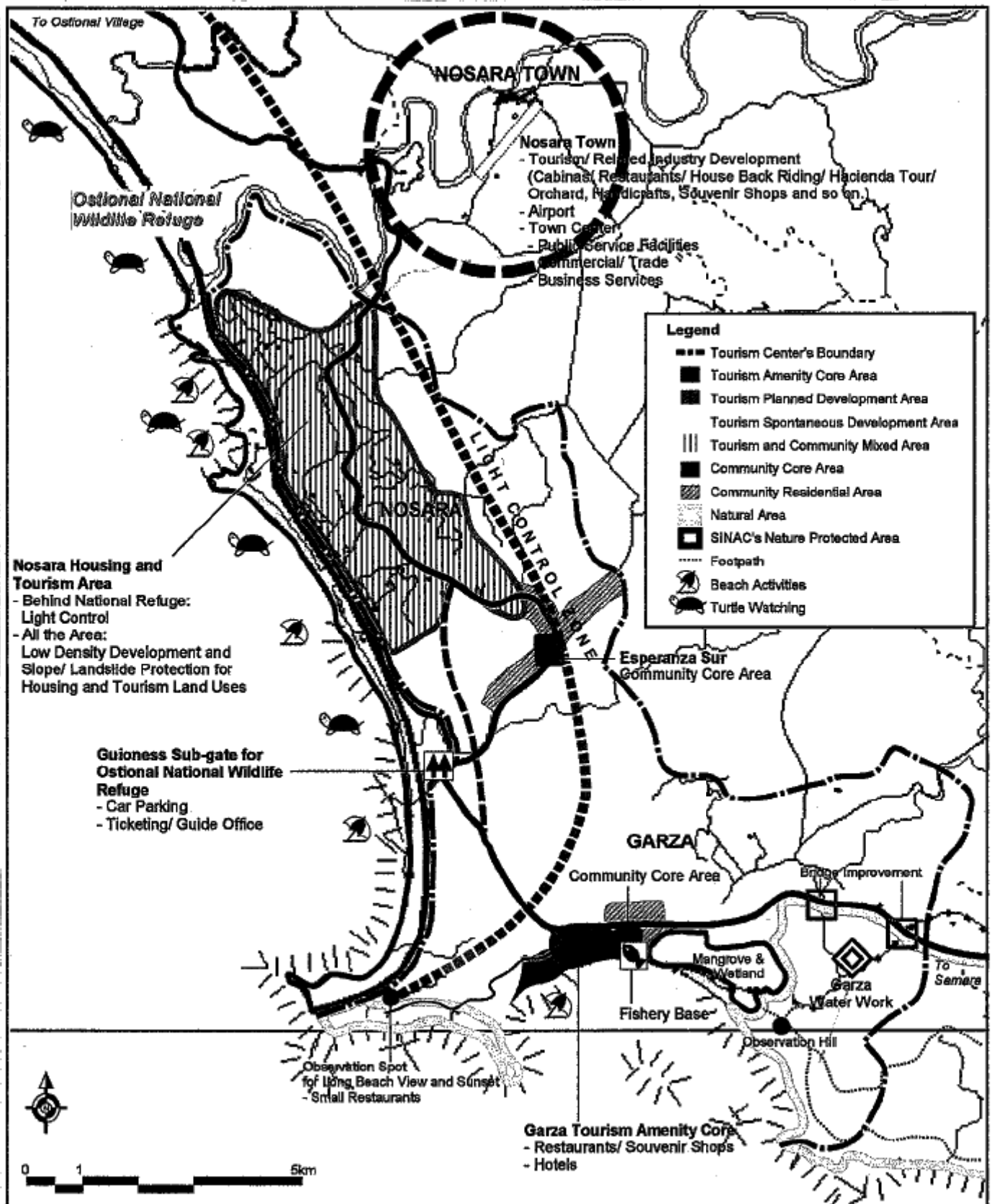


Figure 14.4 General Land Use Plan of San Miguel-Coyote Secondary Tourism Center

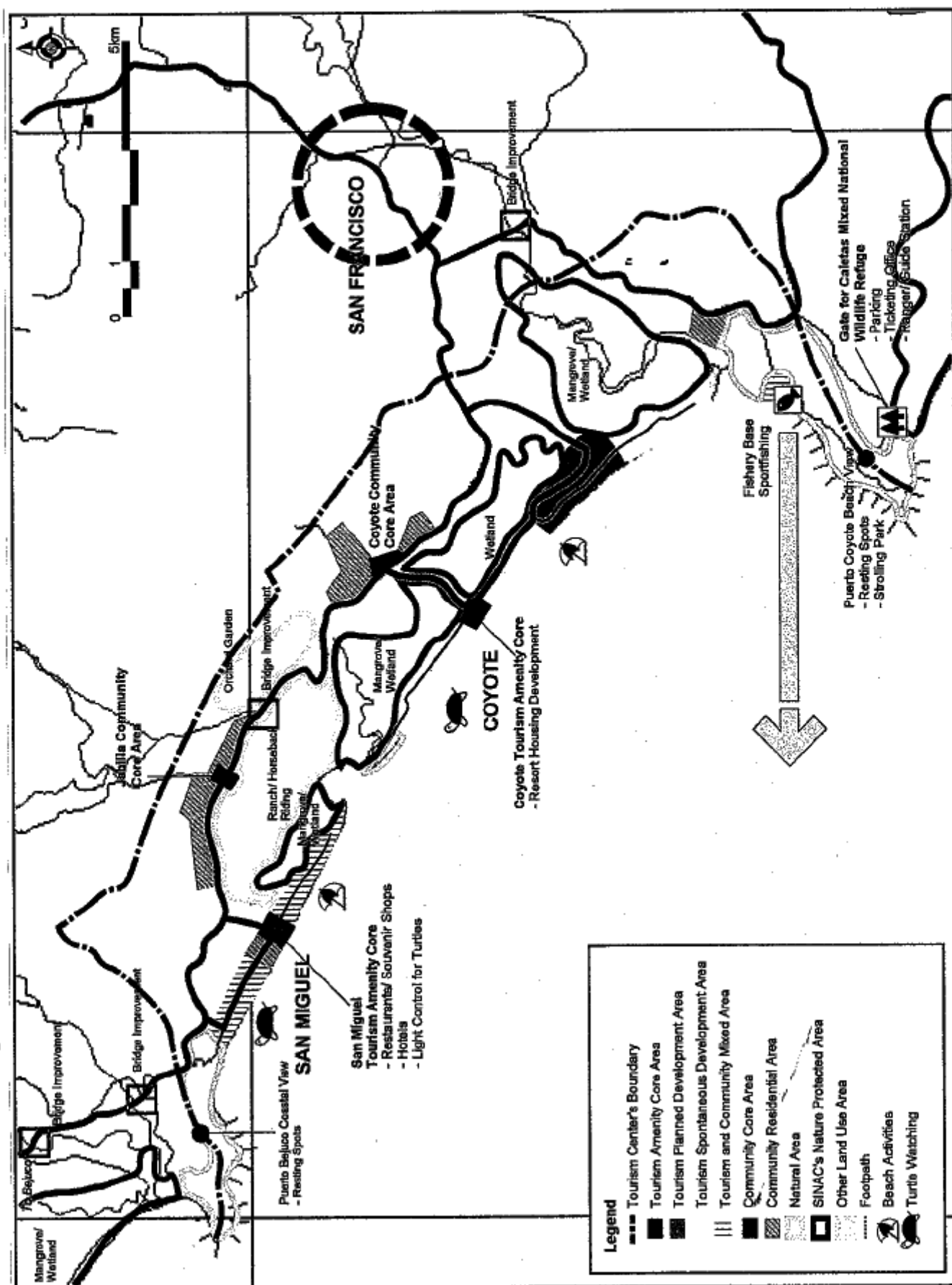
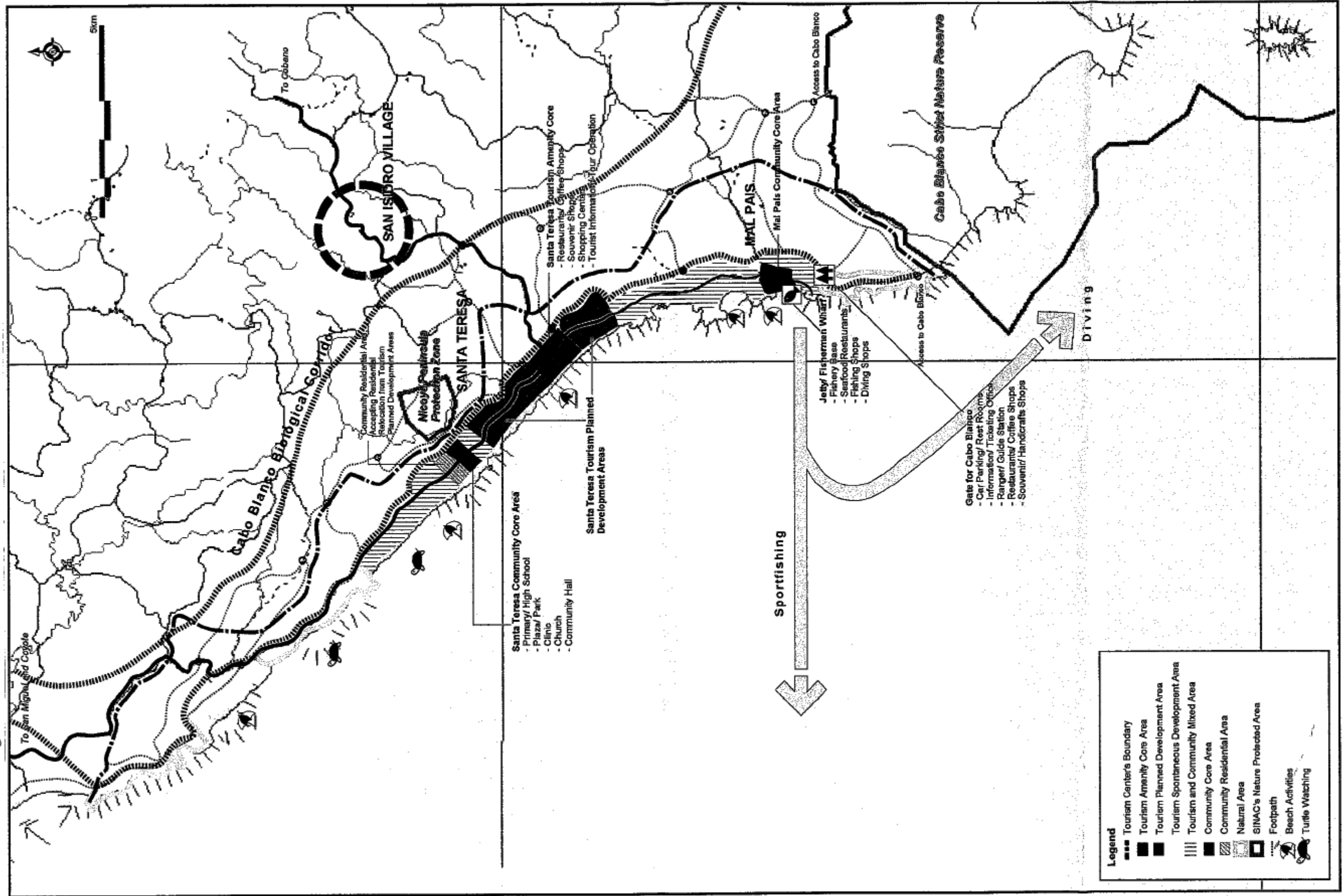


Figure 14.5 General Land Use Plan of Santa Teresa-Mal Pais Secondary Tourism Center



Chapter 15

SOUTH GUANACASTE: LAND USE PLAN BY DISTRICT

15.1 INTRODUCTION

In the earlier chapters, coastal tourism and land uses are discussed at the regional level. This chapter will explain the general land use plan at the local level by discussing key points and reasons for locating land use zones in each district (administrative unit).

15.2 27 DE ABRIL DISTRICT

In the South Guanacaste Region, 27 de Abril District of Santa Cruz Canton has a limited area from Punta Cerritos to just north of Lagarto Village. 27 de Abril District has no tourism centers, but there is one limited tourism development area in Junquillal South. Junquillal Village is just outside of the South Guanacaste Region. Behind Junquillal Village, there is a large wetland, called Estero Congo (H-433). An ICT-Municipality Natural Area (NIM) is located in a small area north to the river mouth (Boca Venado. A Future Development Area (FAD) is located in the south of Boca Venado.

15.3 CUAJINIQUIL DISTRICT

(1) Tourism

Cuajiniquil District of Santa Cruz Canton has no tourism centers, but there are four limited tourism development areas: 1) Lagarto, 2) Playa Pitahaya, 3) Playa Azul and 4) San Juanillo.

The beautiful beaches and coral reefs of Playa San Juanillo and Playa Pleito, and sea turtle nesting on the Ostional National Wildlife Refuge are major tourism resources that could attract international tourists, as well as domestic tourists.

However, the beaches and headlands in Cuajiniquil District are relatively small, the sand quality of the beaches is relatively poor, except for Playa San Juanillo and Playa Pleito. Therefore, tourism development zones are located in limited areas of Cuajiniquil District.

Table 15.1 Land Use Zones in MTZs by District, South Guanacaste

Canton	District	Length of Coast Line (km)													
		Tourism Zone [T]				Mixed Zone [M]	Community Zone [C]			Future Zone [F]	Nature Zone [N]	Wetland [H]	SINAC's Nature Protected Natural [S]	Total	
		Tourism Amenity Core (TAN)	Planned Tourism Development Area (TAP)	Spontaneous Tourism Development Area (TAE)	Total		Community Core Area (CAN)	Community Residential Area (CAR)	Total						
Santa Cruz	27 de Abril	0	0	0.8	0.8	0	0	0	0	1.6	1.4	0	0	3.8	(100%)
	Cuajiniquil	0	0	2.9	2.9	2.5	0.2	0	0.2	8.9	2.4	0.1	5.3	22.3	(100%)
	Sub-total	0	0	3.7	3.7	2.5	0.2	0	0.2	10.5	3.8	0.1	5.3	26.1	(100%)
Nicoya	Nosara	0.4	0.5	0.3	1.2	0	0.2	0	0.2	0	4	0.3	11.3	17.2	(100%)
	Samara	0.7	0.9	0.3	1.9	1.9	0	0	0	0	12.5	3.3	0	19.6	(100%)
	Sub-total	1.1	1.4	0.6	3.1	1.9	0.2	0.2	0.4	0	16.5	3.6	11.3	36.8	(100%)
Hojancha	Hojancha	0.3	1.8	0.3	2.4	0	0	0	0.1	0	7.1	0.1	0	9.7	(100%)
	Zapotal	0	0	0	0	0	0	0	0	0	0	0	3.5	3.5	(100%)
	Sub-total	0.3	1.8	0.3	2.4	0	0	0	0.1	0	7.1	0.1	0	9.7	(100%)
Nandayure	Bejuco	0.5	0.9	3.9	5.3	2.3	0	0.2	0.2	0	9.8	7.8	6.6	32.0	(100%)
	Sub-total	0.5	0.9	3.9	5.3	2.3	0	0.2	0.2	0	9.8	7.8	10.1	35.5	(100%)
	Cobano	0.5	1.9	3.1	5.5	5.7	2.0	0.3	2.3	0.0	7.9	2.8	23.8	48.0	(100%)
Total (km)		2.4	6	11.6	20.0	12.4	2.4	0.8	3.2	10.5	45.1	14.4	50.5	156.1	(100%)
		(1.5%)	(3.8%)	(7.4%)	(12.8%)	(7.9%)	(1.5%)	(0.5%)	(2.0%)	(6.7%)	(28.9%)	(9.2%)	(32.4%)	(100%)	

Source: The JICA Study Team's General Land Use Plan, South Guanacaste

So far little tourism development has taken place in Cuajiniquil District because the road from Santa Cruz and to San Juanillo and the road from Nosara Town to San Juanillo are in bad condition. In particular, there is a lack of bridges on several rivers. Considering the road distance and absence of several bridges between Santa Cruz and San Juanillo, it is better for San Juanillo Area to have an access strategy toward Nosara Town through Ostional Village, rather than to Santa Cruz in the short and medium terms (for the next five years).

(2) Nature

A Future Development Area (FAD) is located in the western part of Cuajiniquil District. The Future Development Areas (FADs) are reserve lands for future tourism development in the period after 2010. These areas have less potential for tourism development than other areas in South Guanacaste. Considering the beach quality and remoteness from the major national highways, it is wise to reserve the areas for future development, rather than allowing scattered development along the coast. It is necessary to review and revise the General Land Use Plan before deciding to change land uses in the future development areas.

Ostional National Wildlife Refuge is located in the southern part of Cuajiniquil District.

To the south of San Juanillo Village, an ICT-Municipality Natural Area (NIM) is located as a buffer zone to the refuge.

(3) Community

Cuajiniquil District has three coastal communities: Lagarto, San Juanillo and Ostional. The whole area of Lagarto Village is inside the MTZ. Lagarto Village is covered by Lagarto Limited Tourism Development Area, in which Community Core Area (CAN) is set so that existing public and commercial facilities (primary school, community hall and small store) could be kept there, and the other areas are designated as Mixed Tourism and Community Area (MIX).

The people of Lagarto Village are mostly concerned with artisanal fishing. There is a fish collection center on the beach. An Artisanal Fishermen's Base (CBP) is set for Lagarto Limited Tourism Development Area so that special land allocation for fishing activities could be arranged at the stage of regulatory planning.

The settlement area of San Juanillo Village is partly covered by San Juanillo Limited Tourism Development Area. San Juanillo Village is the center of Cuajiniquil District. Villagers'

households are mostly related to artisanal fishing activities. They have a fish collection center on the beach.

In San Juanillo Limited Tourism Development Area, the area of local people's settlement and public facilities is set as a Community Core Area (CAN), and the other areas are designated as Mixed Tourism and Community Area (MIX), so that local communities stay as they are and prospective tourism facilities could also be located in the area.

An Artisanal Fishermen's Base (CBP) is located in the San Juanillo Limited Tourism Development Area to enable special land allocation to fishing activities at the stage of regulatory planning.

Part of Ostional Village is located in Ostional National Wildlife Refuge. In the future more tourists will visit the refuge, as surrounding tourism centers, such as Samara-Carillo and Nosara-Garza, grow. In the future, efforts at managing tourists will become more important both for nature conservation and to increase local employment opportunities like tourist guiding and souvenir shops.

15.4 NOSARA DISTRICT

(1) General

Nosara District is largely divided into two parts:

- 1) Southern part of Ostional National Wildlife Refuge
- 2) Nosara-Garza Secondary Tourism Center

(2) Tourism

The tourism development zones of Nosara-Garza Secondary Tourism Center are located in the following three parts:

- Areas behind Playa Pelada and Playa Guiones (so called Nosara)
- Coastal Areas of Playa Garza

Nosara has about 140 tourist rooms near the coast and houses on the hill belong mostly to foreigners. Garza, on the other hand, has a beautiful beach with just one hotel and two cabins (about 50 rooms). It is considered that the accumulation of tourism facilities and houses in Nosara will soon reach a critical level in terms of environmental impact to the Ostional National Wildlife Refuge as tourism facilities increase. Garza could provide a potential site for tourist facilities to accommodate prospective tourists attracted by the Ostional refuge.

Garza also could provide a local community atmosphere based on artisanal fishing and agriculture. In this sense, Nosara and Garza are defined as an integrated tourism center.

In order to integrate the Nosara-Garza tourism center, good roads within the tourism center and the access road to Nosara airport should be improved. The road access to Ostional and San Juanillo from Garza is also essential for enhancing the attractiveness of Nosara-Garza Secondary Tourism Center.

Nosara Town has an airstrip with scheduled flights to and from San Jose. Nosara Town will become a more important urban center with tourist service functions for an increasing number of tourists at Nosara-Garza Tourism Center and the Ostional refuge.

A Planned Tourism Development Area (TAP) is located in Garza to attract new investment in tourism facilities in the western part of the Garza Bay. A Tourism Amenity Core Area (TAN) is designated to create an improved center with tourism amenities along the main street of Garza.

(3) Nature

Ostional National Wildlife Refuge is the most important natural resource in Nosara District. However, tourism to the refuge has not been well managed. It is essential for Tourism on the refuge to be managed, but efforts will be effective only in collaboration between MINAE, tourist hotels and local communities.

In the area between Rio Garza and Punta Escondido, which has steep slopes, ICT-Municipality Natural Area (NIM) is designated as a buffer zone to the Ostional National Wildlife Refuge.

Garza Wetland along the Garza River also provides important natural resources that can be utilized for nature tourism. Most of the area surrounding the Garza Wetland is designated as ICT Natural Areas, except for the areas along the main road to Samara, because it is often inundated in the rainy season. Careful land use allocation is needed at the stage of regulatory planning.

(4) Community

In Nosara District there is a coastal community at Garza. Garza residents are mostly concerned with artisanal fisheries. Its community settlements spread along the main street running along the beach. Tourism Core Area (TAN), Community Core Area (CAN) and Community Residential Area (CAR) are located from west to east over the existing settlement

areas. The development of the tourism amenity core needs some relocation of the existing houses and other facilities. In the Community Core Area (CAN), the existing public facilities and houses can remain. The area to the north of the road could provide space for housing relocated people.

An artisanal Fishermen's Base is located in Garza. Land should/ could be specifically allocated to enable fishing activities and tourism activities to co-exist on the beach. A Local Tourism-Related Commercial Area is also located in Garza's Tourism Amenity Core Area (TAC). Land should be especially allocated for local people's tourism-related commercial activities at the stage of regulatory planning. Fishermen and their families are encouraged to combine fishing and tourism businesses even on a small scale.

15.5 SAMARA DISTRICT AND HOJANCHA DISTRICT

(1) General

The coastlines of Samara District and Hojancha District are largely divided into two parts:

- ICT Coastal Natural Areas between Samara and Garza and
- Samara-Carrillo Primary Tourism Center.

(2) Tourism

Samara District and Hojancha District have two major tourism areas, namely Playa Samara and Playa Carrillo, in the South Guanacaste. The tourism potential of these two beaches have not yet been fully utilized. However, some negative impacts of tourism development, such as beach water pollution, garbage and potable water shortage, are noticeable. Moreover, lack of tourism amenities is apparent. Some local efforts to deal with these problems have just started, for example, by initiating garbage collection on the beach and the Blue Flag Program in Playa Samara. More serious attention needs to be paid to these issues.

Playa Samara and Playa Carrillo are five km apart. Carrillo has an airstrip with scheduled flights. These two beach tourism areas should be integrated and developed as a Primary Tourism Center in order to increase the availability and variety of tourism facilities and urban services. Samara and Carrillo should be connected by good hard-surface road.

Samara needs a center with improved amenities. Samara also needs a space for middle-sized (over 50 rooms) and large-sized (over 100 rooms) hotels. Tourism Amenity Core Area (TAN) and Planned Tourism Development Area (TAP) are designated in the central part of Samara. These areas need redevelopment efforts, involving the relocation of some people,

houses and other facilities to outside of the MTZ, in order to achieve an attractive tourism environment.

Local settlements are scattered along most of the beach areas of Samara.. The beachfront areas not designated above as Tourism Amenity Core Area (TAC) or Planned Tourism Development Area (TAP) are designated as Mixed Tourism and Community Area (MIX).

In the hinterlands of MTZ in Samara, some tourism facilities have already been located. More than 60% of the total number of incoming hotels will be located in the hinterlands. In view of the important role played by the hinterlands in the tourism development of Samara much attention should be given to the planning and development of these areas. In addition, as explained in the community section below, a new town is needed to accommodate relocated people and an increasing population, and to improve public facilities.

In Carrillo one resort hotel and about ten cabins are currently located in the eastern part of Carrillo Bay. The beachfront areas have not yet been developed. A Tourism Amenity Core Area (TAN) is recommended near the airstrip. The present hotel and cabin area is designated a Mixed Tourism and Community Area (MIX). The western part of the Carrillo Bay is designated a Planned Tourism Development Area (TAP), except for a small part for ICT-Municipality Natural Area (NIM) in the central part of the Bay.

(3) Nature

The coastal areas between Samara and Garza are mostly steep slopes and wetlands. The wetlands are legally protected. The steep slope areas should be protected to prevent natural disasters, such as landslide, and disturbance of scenery. In the General Land Use Plan these areas are designated ICT-Municipality Natural Areas (NIMs) so that natural vegetation is retained or restored by preventing further development.

The situation of the areas between Samara and Carrillo and between Carrillo and Camaronal National Wildlife Refuge is similar to that between Samara and Garza. Since some of these areas are private properties, Private Natural Area (NAP) designation is recommended for those areas in the General Land Use Plan. The other coastal areas with steep slopes and wetlands in the MTZ are designated as ICT-Municipality Natural Areas (NIM).

These natural areas (both NIM and NAP) are important for enhancing the attractiveness of Samara-Carrillo Primary Tourism Center by allowing daytime access and daytime activities on the beaches and headlands. Types, locations and access for such daytime utilization need to be carefully selected at the stage of regulatory planning.

(4) Community

In the coastal areas, Samara District has Samara Village, and Hojancha District has Carrillo Village.

Samara is the largest community along the coast in South Guanacaste. Samara has five settlement areas. Central Samara, Cangrejal, Matapalo and Mala Noche are located inside the MTZ. Canta Rana and Torito are located in the hinterlands of the MTZ.

Central Samara is the central place and settlement area with public facilities and shops for the five local settlements of Samara. However, since Samara needs a tourism amenity core and space for new large and middle-sized hotels, the settlement area of Central Samara is designated a Tourism Amenity Core Area (TAN) and Planned Tourism Development Area (TAP). Some of the existing houses and public facilities need to be relocated outside the MTZ in Central Samara. Therefore a new town is needed for such relocated houses, public and commercial facilities.

In the future Samara needs to upgrade its urban and tourism facilities/ services. Therefore, the new town of Samara should have enough space for locating such urban facilities, including a hospital and a high school with a tourism course, as well as housing for the local population

Matapalo, a local settlement area near Playa Samara, has a community atmosphere, which is different from that of beach tourism towns. Matapalo is designated as Mixed Tourism and Community Area (MIX) so that they are not eliminated from the prospective revised regulatory plan. If they want to, local people can initiate the transformation of their community area into a good community-based tourist site by creating an atmosphere of beach tourism while retaining the community settlement, rather than waiting for new tourism facilities to come into the area.

In Samara, a Local Tourism-Related Commercial Area (TAC) is designated in the Tourism Amenity Core Area (TAN) in Central Samara for the purpose of encouraging local communities' participation in the tourism sector. A Local Cabin Development Area (TCD) is located in the Mixed Tourism and Community Area (MIX) so that special land allocation is possible in the MIX area.

The center of Carrillo Village is located in the hinterland on the hill. Some of the villagers are fishermen. In the high tourism season, they work in tourism. An Artisanal Fishermen's Base (CBP) is designated at Carrillo and a Community Residential Area (CAR) is allocated near the existing settlements of Carrillo. At the same time, a Local Tourism-Related Commercial

Area (TAC) and Local Cabin Development Area (TCD) are designated in the western part of Playa Carrillo so that local people can participate in the tourism development in Carrillo.

15.6 ZAPOTAL DISTRICT

Zapotal District has only Camaronal National Wildlife Refuge on its coastal area. The beach of the refuge is important as a marine turtle-nesting site. It could be one of the most important tourism attractions for Samara-Carrillo Primary Tourism Center, when tourism activities in the refuge are appropriately managed. Although the development in the hinterlands of the refuge should not be encouraged, it is essential to implement some light control measures for hinterland development to avoid negative impact on the turtle nesting.

15.7 BEJUCO DISTRICT

(1) General

Bejuco District has San Miguel-Coyote Secondary Tourism Center and Islita Limited Tourism Development Area. , ICT-Municipality Natural Areas (NIMs) are widely distributed over the surrounding tourism areas, in addition to MINAE's natural protected areas.

(2) Tourism

Playa San Miguel, Playa Coyote and part of Puerto Coyote provide long beaches that can be found only here and at Santa Teresa in the South Guanacaste Region. These long beaches could provide San Miguel-Coyote Secondary Tourism Center with distinctive features that are different from Samara, Carrillo and Garza, which have medium-sized beaches. San Miguel and Coyote are two of only a few potential tourism areas in Bejuco District.

At present, due to the remoteness from the major highways and relatively poor road conditions, the San Miguel-Coyote Secondary Tourism Center has a handicap to tourism development. However, because of the prospective opening of the Tempisque Bridge, access to this tourism center could be largely improved. Improvement of regional road access to San Miguel-Coyote Secondary Tourism Center is essential to attract private investment in middle-sized hotels.

Although the existing regulatory plans do not give much space for these kinds of tourist facility development, one Tourism Amenity Core Area (TAN) is located in the San Miguel Section, and another TAN is set in the Coyote Section. Planned Tourism Development Areas (TAP) are only located in the Coyote in order to provide space for middle-sized hotels. In San

Miguel, Mixed Tourism and Community Area (MIX) are located so that the existing people can continue to stay there, and gradually more tourism facilities will be located there.

(3) Nature

The western part of Bejuco District does not have any good beaches. They are steep slope areas and wetlands. In the eastern part of the district, wetlands are widely scattered. Therefore, tourism development should be confined to the San Miguel-Coyote areas and Islita area. The other areas are designated as ICT-Municipality Natural Areas (NIMs).

A part of the large wetlands (Caletas-Penacal) behind Playa Caletas was recently designated as a National Wildlife Refuge. Together with Estero Rio Bongo to the east of the refuge, these wetlands could provide potential sites for ecotourism. Appropriate natural management practices are essential here.

Playa San Miguel and Playa Coyote are important sites of marine turtle nesting. Appropriate light control is needed in beachfront areas. The existing regulatory plans delineate green belts of trees between the development areas and beaches. It is necessary for the local government to conduct law enforcement and monitoring, and to encourage local NGOs, community groups and developers to establish the green belts.

(4) Community

Bejuco District has no coastal communities that have schools and plazas. Villages with such public facilities are located in inland areas. But some hamlets are found in coastal areas, for example, in Playa Islita, Playa San Miguel and the mouth of the Coyote River.

Playa Islita is designated as Small Area for Local Residents (CAP). The hamlet in the mouth of the Coyote River is designated as a Community Residential Area (CAR).

While there are some cabins and summer houses, twenty local households live in Playa San Miguel. They use public facilities, such as schools, in Jabilla, in the hinterland of Playa San Miguel. The existing settlement area in the central area of San Miguel is designated a Tourism Amenity Core Area (TAN). In order to accommodate the relocated population from the TAN, a Community Residential Area (CAR) is located adjacent to the TAN. The other areas in San Miguel are designated as Mixed Tourism and Community Area (MIX).

Local fishermen including those from San Francisco de Coyote Town use the beach of Puerto Coyote. An Artisanal Fishermen's Base (CBP) is located in Puerto Coyote.

In the eastern part of Playa Bejuco, local fishermen from Bejuco Village, Pueblo Nuevo Village and Playa Bejuco use the beach. Artisanal Fishermen's Base (CBP) is located in Playa Bejuco.

15.8 COBANO DISTRICT

(1) General

In the western coasts of the Nicoya Peninsula of Cobano District, tourism development zones are allocated mostly in Santa Teresa-Mal Pais Secondary Tourism Center. In addition, Manzanillo Limited Tourism Development Area is designated to cover Playa Manzanillo.

(2) Tourism

The tourism development in Santa Teresa and Mal Pais has followed that in Montezuma and Tambor. In Santa Teresa and Mal Pais, the majority of tourists are still surfers. Its beaches are some of the best beaches in the South Guanacaste, and have the potential to attract international general tourists including "sun and beach" tourists. In addition, the area has tourism potential for nature experiences in the sea and forests.

However, Santa Teresa-Mal Pais Secondary Tourism Center has the problem of water shortage in the dry season, due to its limited capacity groundwater aquifer. Without a solution to this water problem, further and sustainable tourism development is not expected. ICAA found a good source of groundwater near the Ario River. It is important to make the water resource development and water supply project feasible for further development of Santa Teresa-Mal Pais Secondary Tourism Center. For this reason, too, it is unable by attracting middle-sized hotels to Santa Teresa-Mal Pais Secondary Tourism Center.

At present, nine regulatory plans cover the Santa Teresa-Mal Pais. They were made independently of each other. A well-coordinated regulatory plan is needed to promote the integrated formulation of Santa Teresa-Mal Pais Secondary Tourism Center. By revising the existing regulatory plans, it is necessary to create a space for middle-sized hotels (Planned Tourism Development Area, TAP) and for a tourism central place (Tourism Amenity Core Area TAN).

Manzanillo Limited Tourism Area is to be formed covering two areas, Manzanillo and Bello Horizonte, in Playa Manzanillo. Two Spontaneous Tourism Development Areas (TAEs) are located in Playa Manzanillo.

(3) Nature

Beside the wetlands of Estero Rio Bongo, Estero Chapeton and Cabo Blanco Strict Nature Reserve under the MINAE jurisdiction, ICT-Municipality Natural Areas (NIMs) are designated in the following areas:

- To the south of Estero Rio Bongo (steep slope and buffer to the estero)
- Behind Estero Chapeton (buffer to the estero)
- Between Punta Pochote and Playa Cocal de Penon (to retain natural forest)
- Between Playa Cocal de Penon and Playa Santa Teresa (to protect steep slopes)
- Between Mal Pais Village and Cabo Blanco Strict Nature Reserve (as a buffer zone to the reserve)

The wetlands of Estero Rio Bongo could provide tourists with a place for natural experiences. The ICT-Municipality Natural Area (NIM) to the south of Mal Pais Village also could be a forest area in which natural experiences are possible even outside Cabo Blanco Strict Nature Reserve.

The hinterlands of the MTZs from Manzanillo to Mal Pais are part of biological corridors connecting MINAE's nature protected areas, wetlands and remaining natural forests. These forest hinterlands are also nature-oriented tourism resources.

(4) Community

Cobano District has four coastal communities, namely Manzanillo, Bello Horizonte, Santa Teresa and Mal Pais.

Manzanillo and Bello Horizonte are located in and outside the MTZ of Playa Manzanillo. Only several households live in Manzanillo. Manzanillo is designated as Small Area for Local Residents (CAP).

Bello Horizonte has public and commercial facilities, such as plaza, primary school, health center, church, and mini-market, on which Manzanillo depends. Bello Horizonte's settlements are located both in MTZ and its hinterland, and its center for public facilities is located in the hinterland of MTZ. The MTZ of Bello Horizonte is designated as a Mixed Tourism and Community Area (MIX).

Since Bello Horizonte is a fishing community, an Artisanal Fishermen's Base (CBP) is located in the MIX area of Bello Horizonte. At the same time, Local Cabin Development Area (TCD) is specified for the MTZ of Bello Horizonte, so that local people can participate in tourism development as a result of special land allocation at the stage of regulatory planning.

In Santa Teresa, a Community Core Area (CAN) is located in the area surrounding the plaza so that new public facilities (e.g. senior high school, police station, central park, community hall) could be located in addition to the existing ones.

A Community Residential Area (CAR) is located adjacent to the CAN, as a space for accommodating relocated people and other facilities from Tourism Amenity Core Area (TAN) and Planned Tourism Development Area (TAP) of Santa Teresa.

Attached to the Tourism Amenity Core Area (TAN), a Local Tourism-Related Commercial Area (TAC) is designated. Land should be specifically allocated for this at the stage of regulatory planning.

In Mal Pais, a Community Core Area (CAN) is located to cover the area of existing public facilities and settlements so that they can remain in the area. The other areas in Mal Pais are designated as Mixed Tourism and Community Area (MIX) since there are local residents and other facilities. A Local Cabin Development Area (TCD) is designated to in? the MIX area for special land allocation at the stage of regulatory planning.

Since there are fishermen in Mal Pais, an Artisanal Fishermen's Base (CBP) is located in Playa Mal Pais. It is also important for fishermen to combine artisanal fishing activities with sportfishing and boat tours in the tourism sector.

Table 15.2 Land Use Zones in 27 de Abril District

Restricted Zones of MTZ along the Coastline						
Area Name	No	Detailed Land Use Code	Zone Name or Area Name	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)
Junquillal South Limited Tourism Development Area (LT-1)	1	TAE	Spontaneous Tourism Development Area		0.8	12
ICT-Municipality Natural Area of Boca Venado	2	NIM-1	ICT-Municipality Natural Area of Boca Venado <<In relation to H-433>>		1.4	21
Future Development Area between Estero Congo and Punta Surco de Piedra	3	FAD	Future Development Area between Estero Congo and Punta Surco de Piedra		1.6	24
Total					3.8	57

Restricted Zones of MTZ adjacent to Wetlands

ICT-Municipality Natural Area Behind Estero Congo (H-433)	B-1	NIM	5.4km	81ha
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Table 15.3 Land Use Zones in Cuajiniquil District

Restricted Zones of MTZ along the Coastline												
Area Name	No.	Detailed Land Use Code	Detailed Land Use Zone	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)						
Future Development Area between Punta Surco de Piedra and Lagarto	1	FAD	Future Development Area		0.6	9						
	2	MIX	Mixed Tourism and Community Area		0.2	3						
Lagarto Limited Development Area (LT-2)	3	CAN	Community Amenity Core Area	P-1 Lagarto *CBP	0.1	2						
	4	MIX	Mixed Tourism and Community Area		0.2	3						
Future Development Area between Lagarto and Rio Tabaco	5	FAD	Future Development Area		5.7	114						
ICT-Municipality Natural Area of Boca Rio Tabaco <<In relation to H-434>>	6	NIM-2	ICT-Municipality Natural Area		0.6	9						
Future Development Area of South of Rio Tabaco	7	FAD	Future Development Area		0.2	3						
Pitahaya Limited Tourism Development Area (LT-3)	8	MIX	Mixed Tourism and Community Area	P-2 Pitahaya *CAP	1.2	18						
	9	TAE	Spontaneous Development Area		1.3	20						
Future Development Area Between Playa Pitahaya and Playa Azul	10	FAD	Future Development Area		1.0	15						
Azul Limited Tourism Development Area (LT-4)	11	TAE	Spontaneous Development Area		0.9	14						
ICT-Municipality Natural Area of Boca Rio Cuajiniquil	12	NIM-3	ICT-Municipality Natural Area		0.2	3						
Future Development Area Between Rio Cuajiniquil and Playa Pleto	13	FAD	Future Development Area		1.4	21						

San Juanillo Limited Tourism Development Area	14	TAE	Spontaneous Development Area	Tourism	P-3 Juanillo	San	0.4	6	
	15	MIX	Mixed Tourism and Community Area	Tourism and Community	*TCD		0.6	10	
		CAN	Community Amenity Core Area						
	16	MIX	Mixed Tourism and Community Area	Tourism and Community	*CBP			0.1	1
		TAE	Spontaneous Development Area						
17	TAE	Spontaneous Development Area	Tourism				0.3	5	
	NIM-4	ICT-Municipality Natural Area							
18	NIM-4	ICT-Municipality Natural Area					1.6	24	
ICT-Municipality Natural Area of South San Juanillo	19	H-a	Wetland of Boca Rio Rosario				0.1	2	
Wetland of Boca Rio Rosario	20	S-1	National Wildlife Refuge		P-4 Oostional		5.3	80 in MTZ (161)	
Northern Part of Oostional National Wildlife Refuge	21				*TAC, TCD				

Restricted Zones of MTZ adjacent to Wetlands

ICT-Municipality Natural Area Behind Tobacco Wetland (H-434)	B-2	NIM	1.6 km	24 ha
ICT-Municipality Natural Area Behind Boca Rio Rosario Wetland (H-a)	B-3	NIM	1.4 km	21 ha

Table 15.4 Land Use Zones in Nosara District

Restricted Zones of MTZ along the Coastline									
Area Name	No	Detailed Land Use Code	Detailed Land Use Zone	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)			
Southern Part of Ostional National Wildlife Refuge (S-1)	1	S-1	National Wildlife Refuge		11.3	170 in MTZ (170)			
	2	NIM-5	ICT-Municipality Natural Area between Punta Guiones and Punta Garza		2.7	41			
Nosara-Garza Secondary Tourism Center (TR-2)	3	TAE	Spontaneous Development Area	P-5 Garza	0.3	5			
	4	TAP	Planned Tourism Development Area		0.5	8			
	5	TAN	Tourism Amenity Core Area		0.4	6			
	6	CAR	Community Residential Area		N.A.	N.A.			
	7	CAN	Community Amenity Core Area	*CBP	0.2	3			
	8	CAR	Community Residential Area		0.2	3			
	9	H-438	Garza Wetland		0.3	5			
	10	NIM-6	ICT-Municipality Natural Area between Rio Garza and Punta Escondido		1.3	20			

Restricted Zones of MTZ adjacent to Wetlands

Spontaneous Tourism Development Area Behind Garza Wetland (H438)	B-4	TAE	0.7 km	11 ha
ICT-Municipality Natural Area Behind Garza Wetland (H-438)	B-5	NIM	1.1 km	61 ha

Table 15.5 Land Use Zones in Samara District and Hojancha District

Restricted Zones of MTZ along the Coastline		No.	Detailed Land Use Code	Zone Name or Area Name	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)
ICT-Municipality Natural Area between Samara and Garza		1	NIM-7	ICT-Municipality Natural Areas between Punta Escondido and Estero Medina		3.5	53
		2	H-b	Estero Medina		0.2	3
		3	NIM-8	ICT-Municipality Natural Area between Estero Medina and Estero Barrigona		2.7	41
		4	H-c	Estero Barrigona		0.4	6
		5	NIM-9	ICT-Municipality Natural Area between Estero Barrigona and Estero Ciego (Playa Buenavista)		1.3	20
		6	H-439	Estero Ciego (Playa Buenavista)		2.2	33
Samara-Carrillo Primary Tourism Center (TR-t)		7	NIM-10	ICT-Municipality Natural Area between Estero Ciego and Puta Samara	P-6 Samara and P-7 Carrillo	1.8	27
		8	MIX	Mixed Tourism and Community Area		0.1	2
		9	TAE	Spontaneous Tourism Development Area		0.3	5
		10	H-440	Cangrejal Wetland (West Samara)		0.2	3
		11	TAN	Tourism Arnenity Core Area	*TAC	0.7	11
		12	TAP	Planned Tourism Development Area		0.3	5
		13	NIM-11	ICT-Municipality Natural Area of West Matapalo Hill		0.2	3
		14	MIX	Mixed Tourism and Community Area		0.6	6

	15	H-d	Estero Mala Noche		0.3		
	16	MIX	Mixed Tourism and Community Area	*TCD	1.2		26
	17	NAP-1	Private Natural Area of Punta Indio	*CBP	2.7		41
	18	NIM-12	ICT-Municipality Natural Area between Punta Indio and Playa Carrillo		0.3		5
	19	TAP	Planned Tourism Development Area		1.2		19
	20	NAP-2	Private Natural Area of Carrillo		0.2		3
	21	TAP	Planned Tourism Development Area		1.2		
	22	TAN	Tourism Amenity Core Area	*TAC	0.3		8
	23	H-441	Carrillo Wetland		0.1		
	24	TAE	Spontaneous Tourism Development Area <<In relation to H-441 Carrillo Wetland>>	*TCD	0.3		9
	25	CAR	Community Residential Area	*CBP	0.1		2
	26	NIM-13	ICT-Municipality Natural Area between Punta Carrillo and Punta El Indio		0.6		9
	27	NIM-14	ICT-Municipality Natural Area between Punta El Indio and Playa Camaronal		6.3		95

Samara-Carrillo Primary Tourism Center (TR-1)
Samara-Carrillo Primary Tourism Center (TR-1)

ICT-Municipality Natural Area between Punta El Indio and Playa Camaronal

Restricted Zones of MTZ adjacent to Wetlands

ICT-Municipality Natural Area behind Estero Medina (H-b)	B-6	NIM	0.4 km	6 ha
ICT-Municipality Natural Area behind Estero Barrigona (H-c)	B-7	NIM	1.6 km	24 ha
ICT-Municipality Natural Area behind Estero Ciego (H-439)	B-8	NIM	5.7 km	86 ha
ICT National Area behind Cangrejal Wetland (H-440)	B-9	NIM	0.8 km	12 ha
Spontaneous Tourism Development Area behind Carrillo Wetland (H-441)	B-10	TAE	1.5 km	23 ha

Table 15.6 Land Use Zones in Zapotal District

Restricted Zones of MTZ along the Coastline						
Area Name	No.	Detailed Land Use Code	Zone Name or Area Name	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)
Western Part of Camaronal National Wildlife Refuge (S-3)	1	S-3	National Wildlife Refuge		3.5	53 in MTZ (164)

Table 15.7 Land Use Zones in Bejuco District
Restricted Zones of MTZ along the Coastline

Area Name	No.	Detailed Land Use Code	Zone Name or Area Name	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)
Eastern Part of Camaronal National Wildlife Refuge (S-3)	1	S-3	National Wildlife Refuge		3.2	48 in MTZ (70)
ICT-Municipality Natural Area between Punta Isleta and Playa Isleta	2	NIM-15	ICT-Municipality Natural Area		0.4	6
Isleta Limited Tourism Development Area (LT-6)	3	TAE	Spontaneous Tourism Development Area	P-8 Isleta *CAP	0.6	9
ICT-Municipality Natural Area between Playa Isleta and Estero Corozalito	4	NIM-16	ICT-Municipality Natural Area		2.1	42
Estero Corozalito	5	H-443	Estero Corozalito		0.8	12
ICT-Municipality Natural Area between Estero Corozalito and Playa Bejuco	6	NIM-17	ICT-Municipality Natural Area	P-9 Pilas de Bejuco *CAP	2.4	36
Bejuco Wetland	7	H-444 H-445	Bejuco Wetland	*CBP	3.9	59
San Miguel-Coyote Secondary Tourism Center (TC-3)	8	NIM-18	ICT-Municipality Natural Area between Punta Bejuco and Punta San Miguel		1.8	27
	9	MIX	Mixed Tourism and Community Area	*TCD P-10 San Miguel	1.0	15
	10	TAN	Tourism Amenity Core Area	*TAC	0.3	5
	11	MIX	Mixed Tourism and Community Area		1.2	18
	12	H-446	Estero Jabilla		0.7	-
San Miguel-Coyote Secondary Tourism Center (TC-3)	13	NIM-19	ICT-Municipality Natural Area between Estero Jabilla and Playa Coyote		0.3	5

14	TAE	Spontaneous Tourism Development Area		1.2	18
15	TAN	Tourism Amenity Core Area		0.2	3
16	IAE	Spontaneous Tourism Development Area		0.9	14
17	TAP	Planned Tourism Development Area		0.9	14
18	TAE	Spontaneous Tourism Development Area		1.2	18
19	CAR	Community Residential Area		0.2	3
20	NIM-20	ICT-Municipality Natural Area of Rancho Floriana		0.5	8
21	MIX	Mixed Tourism and Community Area	P-11 Puerto Coyote *CBP	0.1	2
22	NIM-21	ICT-Municipality Natural Area between Estero Coyote and Punta Coyote		1.6	24
23	NIM-22	ICT-Municipality Natural Area		0.7	11
24	S-5	National Wildlife Refuge		3.4	51
25	H-449	Pencal Wetland		2.4	36 in MTZ (150)
ICT-Municipality Natural Area between Punta Coyote and Playa Caletas					
Playa Caletas National Wildlife Refuge (S-5)					
Pencal Wetland					

Restricted Zones of MTZ adjacent to Wetlands

ICT-Municipality Natural Area Behind Estero Corozalito (H-443)	B-11	NIM	3.5 km	53 ha
ICT-Municipality Natural Area Behind Bejuco Wetland (H-444/445)	B-12	NIM	5.7 km	75 ha
ICT-Municipality Natural Area Behind Estero Jabilla (H-446)	B-13	NIM	3.8 km	57 ha

ICT-Municipality Natural Area Behind Estero Milagro (H-447)	B-14	NIM	2.9 km	44 ha
ICT-Municipality Natural Area Behind Estero Coyote (H448)	B-15	NIM	4.5 km	68 ha
ICT-Municipality Natural Area Behind Pencil Wetland (H-449)	B-16	NIM	5.7 km	86 ha

Table 15.8 Land Use Zones in Cobano District

Restricted Zones of MTZ along the Coastline

Area Name	No.	Detailed Land Use Code	Detailed Land Use Zone	Presence of Local Communities	Length of Coastal Lines (km)	Area (ha)
Estero Rio Bongo	1	H-450	Estero Rio Bongo		2.1	32
	2	NIM-23	ICT-Municipality Natural Area Chapeton North		1.2	18
Estero Chapeton		H-451	Estero Chapeton		0.5	8
	3	NIM-24	ICT-Municipality Natural Area Chapeton South		0.3	5
Manzanillo Limited Tourism Development Area (LT-7)		TAE	Spontaneous Tourism Development Area	P-7 Manzanillo *CAP	1.0	15
	H-g	Estero Manzanillo		0.2	3	
	TAE	Spontaneous Tourism Development Area		0.7	11	
Santa Teresa-Mal Pais Secondary Tourism Center (TC-4)	6	MIX	Mixed Tourism and Community Area	P-8 Bello Horizonte *TCD, CBP	0.6	9
	7	NIM-25	ICT-Municipality Natural Area between Punta Pochote and Playa Hermosa		2.7	41
	8	TAE	Spontaneous Tourism Development Area		1.4	21
	9	NIM-26	ICT-Municipality Natural Area of Peñon de Ario		1.8	27
	10	MIX	Mixed Tourism and Community Area	P-9 Santa Teresa *TCD	1.4	21
11	CAR	Community Residential Area		0.3	5	
12	CAN	Community Amenity Core Area		0.3	5	
13	MIX	Mixed Tourism and Community Area		0.3		

Santa Teresa-Mal Pais Secondary Tourism Center (TC-4)	14	TAP	Planned Tourism Development Area		1.2	23
	15	TAN	Tourism Amenity Core Area	TAC	0.5	23
	16	TAP	Planned Tourism Development Area		0.7	11
	17	MIX	Mixed Tourism and Community Area	P-10 Mal Pais	3.0	45
	18	CAN	Community Amenity Core Area		1.7	26
	19	MIX	Mixed Tourism and Community Area	*TCD, CBP	0.4	6
	20	NIM-27	ICT-Municipality Natural Area between Playa Cuevas and Cabo Blanco Strict Nature Reserve		1.9	29
	21	S-7	Nature Reserve		23.8	357 in MTZ (1269)
	Cabo Blanco Strict Nature Reserve (S-7)					

Restricted Zones of MTZ adjacent to Wetlands

ICT-Municipality Natural Area Behind Estero Rio Bongo	B-17	NIM	6.5 km	98 ha
ICT-Municipality Natural Area Behind Estero Manzanillo	B-18	NIM	0.9 km	14 ha

Chapter 16

SOUTH GUANACASTE: PRIORITY ACTION PROJECTS

16.1 INTRODUCTION

Priority action projects are defined as the projects that are composed of important actions in order to overcome difficulties in initiating substantial efforts at sustainable tourism development within the next five years.

The following six fields or directions for actions are identified:

- 1) Land Use Management
- 2) Promotion of Public Investment in Infrastructure
- 3) Promotion of Private Investment in Tourism Facilities
- 4) Local Tourism Promotion and Community Development
- 5) Establishment and Utilization of Nature Areas
- 6) Improvement of Local Public Facilities

In the below sections, a list of priority action projects or priority actions is given.

16.2 LAND USE MANAGEMENT

Land management provides a basis for private investment in tourism facilities and public investment in infrastructure and for regional and local tourism promotion. Therefore, as the first step for any important actions in the region, it is important for the people and organizations concerned to share the knowledge and philosophy of the general land use plan for the region.

(1) For the Region as a Whole

- To approve the general land use plan
- To disseminate the principles of application of the general land use plan
- To inform the people and organizations concerned of the areas in which the making of regulatory plans is not allowed

(2) For Each Tourism Center

It is essential to review/revise the existing regulatory plans, and to make new regulatory plans in order to formulate an integrated regulatory plan for the whole Tourism Center. The following list shows key points or major goals for revising the existing regulatory plans:

Samara-Carrillo Primary Tourism Center

- To formulate an attractive spatial plan for developing Carrillo as a resort using Carrillo Beach, Carrillo Airport and its surrounding areas
- To redevelop the coastal area to form a Tourism Amenity Core, securing space for middle-sized hotels by developing a New Town in the hinterland

Nosara-Garza Secondary Tourism Center

- To form a Tourism Amenity Core in Garza while improving residential and tourism amenities in community areas

San Miguel-Coyote Secondary Tourism Center

- To secure space for middle-sized hotels in Playa Coyote
- To form a Tourism Amenity Core each in Playa San Miguel and Playa Coyote

Santa Teresa-Mal Pais Secondary Tourism Center

- To revise the existing regulatory plans into an integrated regulatory plan to secure space for middle-sized hotel, form a Tourism Amenity Core, form a Community Amenity Core and secure local residential areas by readjustment or reassembly of lands

16.3 PROMOTION OF PUBLIC INVESTMENT IN INFRASTRUCTURE

(1) For the Region as a Whole

In the South Guanacaste Region, water availability is the most critical factor for sustainable tourism development. Among a variety of important infrastructure projects, the following water resource development project is the sole project on a regional scale.

- Water resource development project for tourism and communities for the whole South Guanacaste Region

(2) For Each Tourism Center

Regional Roads

1) Major Principle

- To consolidate the regional road network between MOPT and ICT
- To avoid any public investment in roads other than the confirmed regional road network

2) Road Sections to be Improved

- Carrillo-Samara-Nosara Town
- San Francisco de Coyote-San Miguel
- San Francisco de Coyote-Betel-Bello Horizonte-Santa Teresa (Bello Horizonte-Santa Teresa: Local Road)

Water Supply

While a regional water resources development planning study is needed, it is considered that the following Tourism Centers need water supply projects immediately:

- Santa Teresa-Mal Pais Secondary Tourism Center (Water resource development in Rio Ario area, and water distribution)
- Samara-Carrillo Secondary Tourism Center

Sewage System

The following Tourism Center needs special attention to sewage system development:

- Samara-Carrillo Primary Tourism Center, especially Samara

16.4 PROMOTION OF PRIVATE INVESTMENT IN TOURISM FACILITIES

The general land use and tourism development plan (general plan) is a powerful tool for showing tourism development potential and constraints, allowing private investors to consider investment opportunities in the region.

For the Region as a whole, the following cooperation is essential:

- Cooperation of ICT, CINDE and Regional Chamber of Tourism

For Each Tourism Center, the following cooperation is essential:

- Cooperation of ICT, CINDE and ALDETUS

16.5 LOCAL TOURISM PROMOTION AND COMMUNITY DEVELOPMENT

(1) For the Region as a Whole

For local tourism promotion and community development, central government support or facilitation is essential, although too much dependency on the central government should be avoided. The following two actions or projects are of priority:

- ICT-INA Training Program for Tourism Sector
- Introduction and Empowerment of ICT Regional Officer (ICT officer in charge of regional tourism development and promotion)
 - Cooperation between ICT regional officer and Regional Chamber of Tourism
 - Cooperation between ICT regional officer and ALDETUS (Local Association for Sustainable Tourism)

(2) For Each Tourism Center

ALDETUS (Local Association for Sustainable Tourism) is a key organization and movement for local tourism promotion and community development. ALDETUS should cover a variety of groups of people with different interests. ALDETUS could be organized on the basis of the stakeholder meetings in each tourism area. First of all, it is essential for local stakeholders to establish ALDETUS and start activities for ALDETUS. Therefore, the following actions are of priority:

- Establishment and Operation of ALDETUS
- Action Plans for ALDETUS (Local Association for Sustainable Tourism)
 - Local Tourism Promotion
 - Improvement of Tourist Amenities in Tourism Centers (Samara, Nosara Town, Garza Town, Santa Teresa)
 - Pollution Prevention in Tourism Centers
 - Tourism-Based Community Development

16.6 ESTABLISHMENT AND UTILIZATION OF NATURE AREAS

In South Guanacaste, high priority is given to the following three actions or projects:

- Establishment of Natural Areas
 - Nicoya Peninsula Biological Corridors through collaboration between MINAE, ICT and environmental NGOs
 - ICT Natural Area between Samara and Garza
- Utilization of Natural Areas
 - Management of Tourists on the Ostional National Wildlife Refuge

16.7 IMPROVEMENT OF LOCAL PUBLIC FACILITIES

In order to pursue sustainable regional tourism development, it is essential to pay attention to the living standards of local communities. Among the factors affecting the standard of living are the availability of public facilities and services. The following public facilities are needed for urban centers:

Urban Center	Name of Urban Centers	Functions
Secondary Urban Center	Sámara	- Hospital - Vocational school
	Cóbano Town	- Vocational school
Tertiary Urban Center	Marbella	- Clinic (permanent doctor)
	Bejuco/Pueblo Nuevo	- Clinic (permanent doctor) - High school
	San Francisco de Coyote	- Clinic (permanent doctor)
	Santa Teresa	- Clinic (permanent doctor) - High school