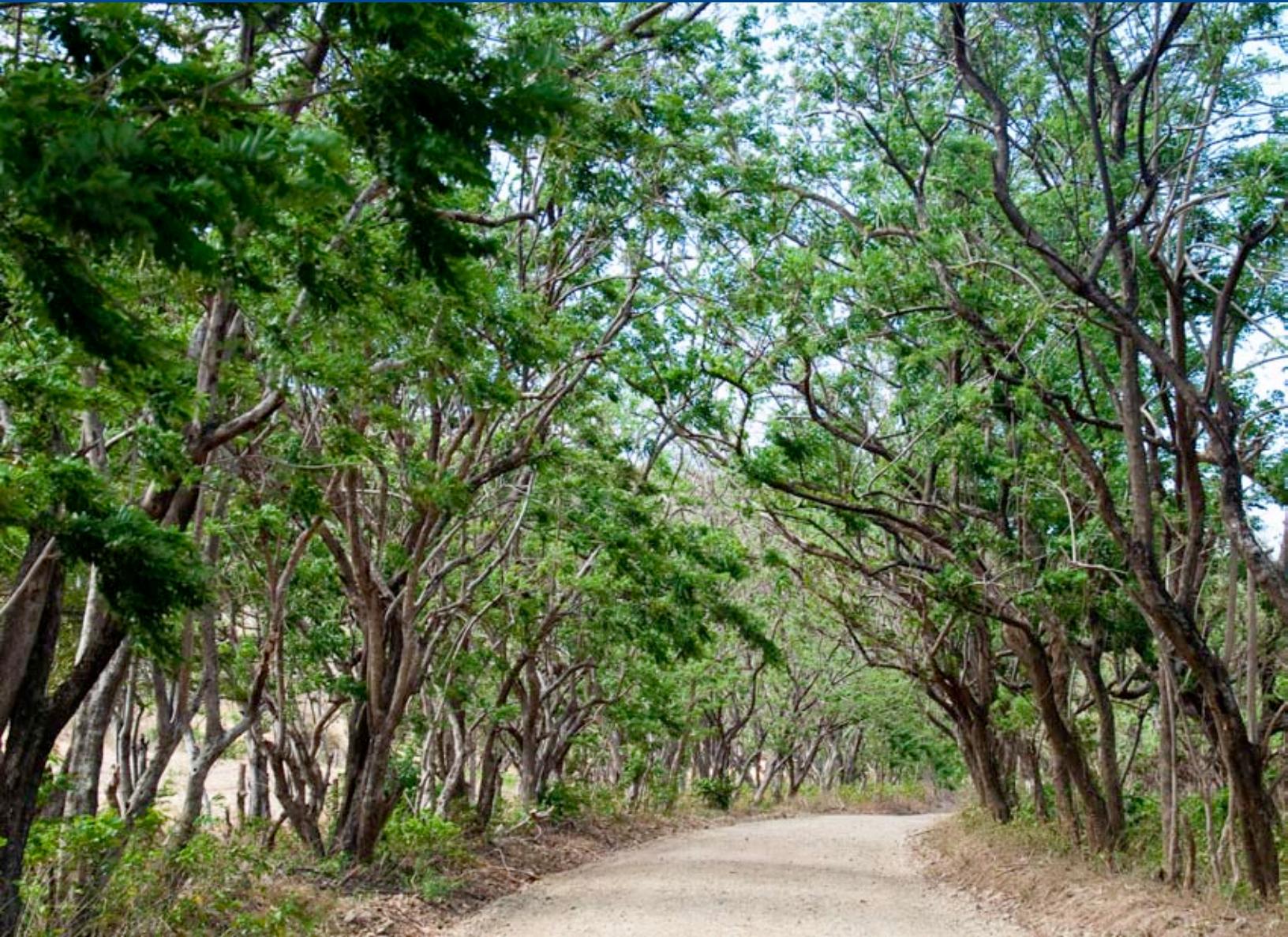




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PASO DEL ISTMO TOURISM

RECOMMENDATIONS FOR ROADWAY SIGNAGE
FROM SAN JUAN DEL SUR TO OSTIONAL AND
INTERPRETIVE PANELS AT LA FLOR WILDLIFE REFUGE



TECHNICAL REPORT

PASO DEL ISTMO TOURISM

RECOMMENDATIONS FOR ROADWAY SIGNAGE FROM SAN JUAN DEL SUR TO OSTIONAL AND INTERPRETIVE PANELS AT LA FLOR WILDLIFE REFUGE

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in collaboration with

MARENA

Paso Pacífico

Nicaragua, August 2009



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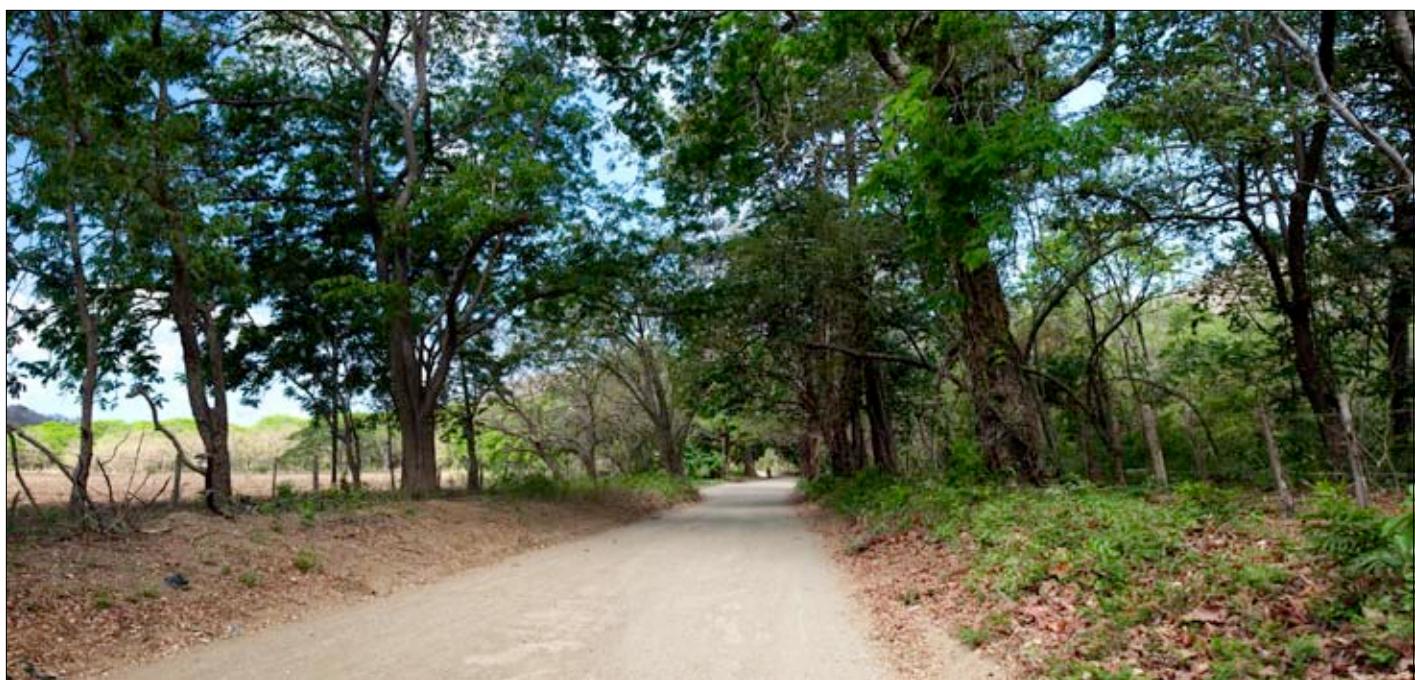
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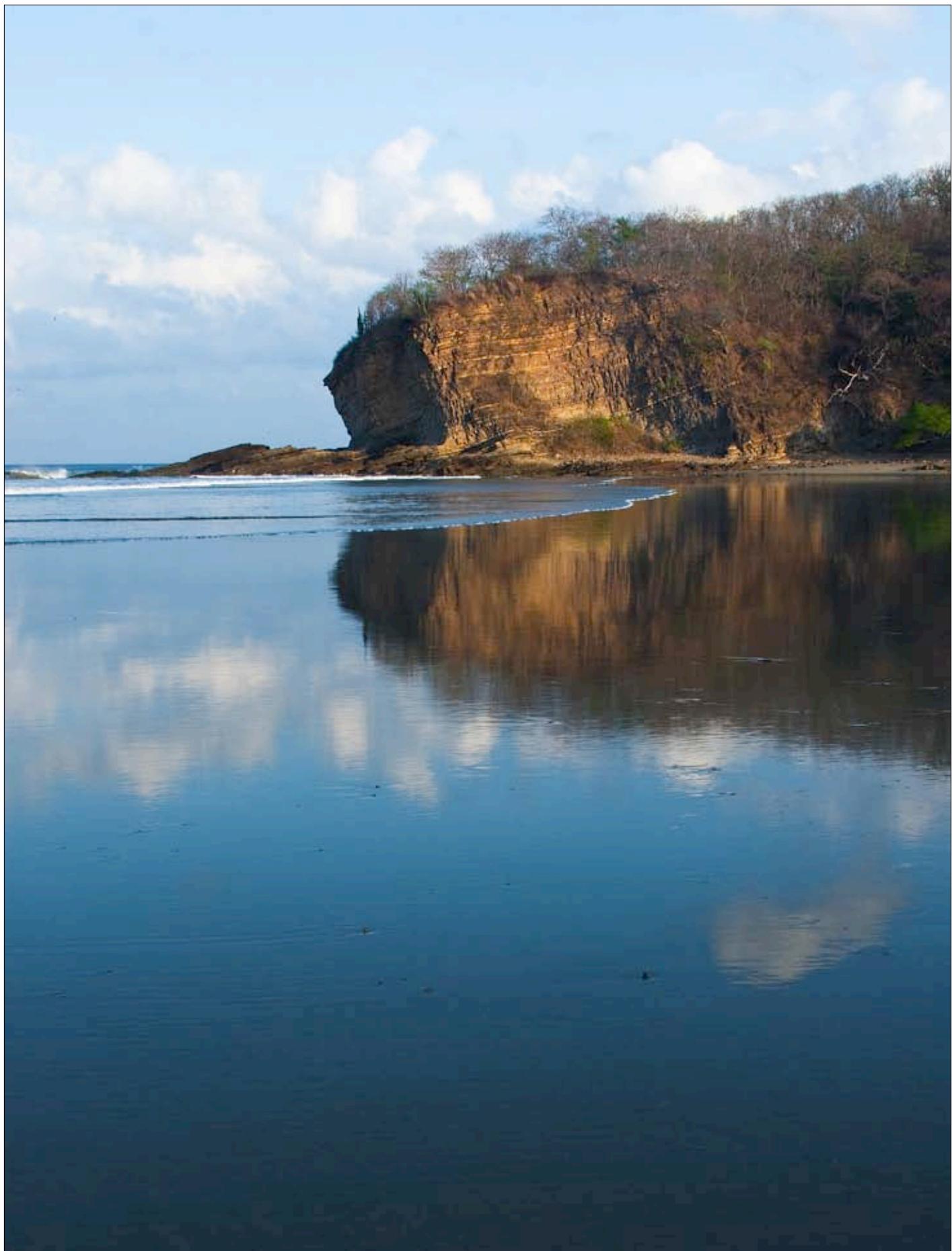
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San Juan del Sur to Ostional Road near Escamequita.



Early morning at El Coco beach.

I.0 INTRODUCTION AND BACKGROUND

I. I PURPOSE AND SCOPE OF PROJECT

This project evaluates the current roadway signage from San Juan del Sur to the community of El Ostional and provides recommendations for improvements which will help MARENA, NGOs and local communities achieve their objectives for conservation and sustainable development. It also provides design recommendations for visitor information and interpretive panels at the La Flor Wildlife Refuge, as well as a map of visitor opportunities and services along the road corridor. Detailed sign designs are provided to help guide the development of recommended signs. The recommended sign designs are in accordance with Government of Nicaragua Ministry of Transportation signage guidelines and MARENA signage guidelines for wooden secondary road signs.

I. 2 FIELDWORK AND TEAM

An initial visit was conducted by Jerry Bauer in September 2008, followed by more detailed assessment from April 19 to 26, 2009 by Jerry Wylie and Jorge Paniagua. Overall project design and management was provided by Jerry Bauer and administrative assistance was provided by Sandra Coria. All are part of the USDA Forest Service, International Institute for Tropical Forestry team operating in support of USAID/Nicaragua environmental programs or the Conservation and Sustainable Tourism in Critical Watershed (CTSCC) Project.



A rocky view of Escamequita beach.



Seagulls are part of the ecosystem at El Ostional beach.

2.0 EXISTING SITUATION

2.1 PRIMARY ROADWAY SIGNS

Figure I a-p shows examples of the current roadway signage from San Juan del Sur to El Ostional. There is currently one new metal roadway directional sign (for El Ostional) at the junction of the road going to Ostional on the eastern side of San Juan del Sur. This corner is also cluttered with commercial signs of various sizes and conditions promoting businesses to the south (Figure Ia & Ib).

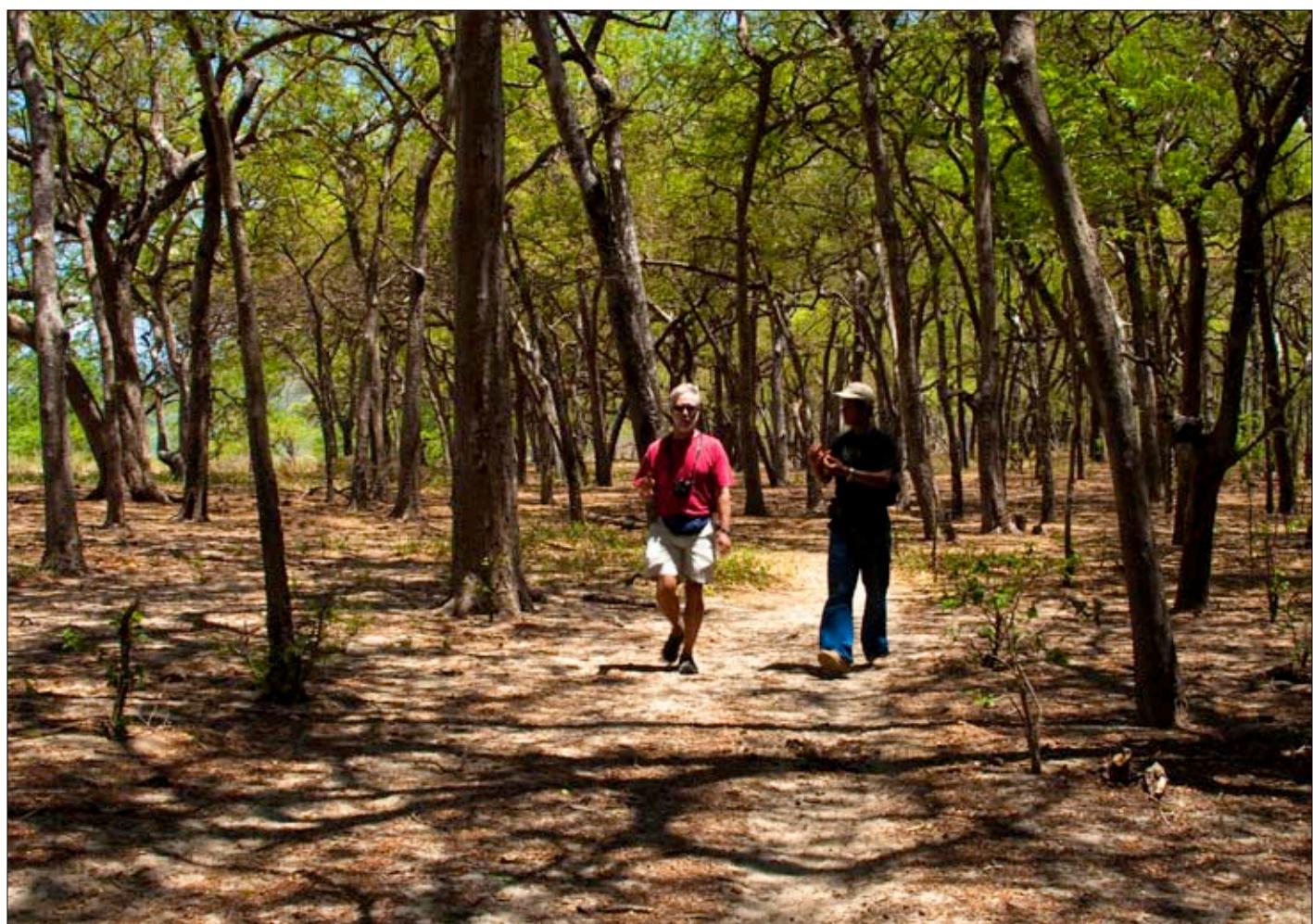
None of the “caseríos” (small groups of houses) along the road are identified by signs. Previously, there was one sign welcoming visitors to El Ostional, but it was removed during construction of new sidewalks and roadways.

At Escameca Grande a wooden roadway sign is located at the entrance to a private reserve, Escameca Grande, that is partially rotted and should be replaced (Figure If).

2.2 SIGNAGE AT LA FLOR WILDLIFE REFUGE

A few information signs, mostly in poor condition, exist at La Flor. An old wooden sign is located at the entrance to the Refuge; a small sign showing entrance fees and a small wooden arrow sign painted with, “Parquero” are located in the Parking lot; near the parking lot is a sign with, “Oficina Administrativa” and, “Información”; and at the beginning of the Los Tamarindo trail there is a wooden sign in very poor condition (the board has fallen off the post). In addition, there are no directional signs for the new public restrooms (Figure Ii to In).

Information on sea turtles is displayed on the wall of the administration building, but it is of mixed quality, in generally poor condition and, due to its location, it is not seen by most visitors (Figure Io to Ip).



“Los Tamarindos” trail at La Flor Wildlife refuge is ideal for a nice and shady walk.

Figure 1. Examples of current signage along the San Juan del Sur and Ostional Road and La Flor Wildlife Refuge.



a



b



c



d



e



f



g



h



DICIEMBRE	1.530	25	3.099	—
ENERO	3.074	198	70.681	830
TOTAL	6.604	198		
TORTUGAS MARINAS ANIDANTES Campaña 2006				
MESES	ARRIVADAS	SOLITARIOS	TOTAL	TORTUGUIL
JURO	—	860	860	—
AGOSTO	15,901	403	15,804	—
SEPTIEMBRE	99,050	224	44,274	—
OCTUBRE	83,633	3,666	87,239	—
NOVIEMBRE	21,863	168	22,031	—
DICIEMBRE	12,677	223	12,900	—
ENERO	5,750	212	5,962	—
TOTAL	183,374	4,967	189,030	188,92
	JORNADA	2007 - 2008.	REFUGIO DE VIDA SILVESTRE "LA FLOR"	
O	1,620	186	1,806	33,001
AGOSTO	9,208	923	9,631	72,495
SEPTIEMBRE	—	918	918	—





The tropical dry forest meets the ocean to bring us great views in this part of the Country.

3.0 DISCUSSION OF SIGNAGE

3.1 WHAT MAKES A GOOD SIGN?

Effective directional or informational signs follow a set of simple guidelines. These include the following rules of thumb (from Bauer, et. al. 2003):

Materials

- Use high-tech synthetic materials (plastic, metal) along highways and in highly developed settings.
- Use natural and unfinished materials and styles (wood, stone) in more rustic settings.

Design

- Keep sign design simple and uncluttered.
- Focus on primary message.
- Maintain empty space (“white space”), especially on margins.
- Limit the use of logos to signs at visitor centers or administrative headquarters.
- Keep logos small, similar size, and at the bottom of the sign.
- Use light colored letters on a dark background.
- Orient directional arrows so that they point away from the text.
- Place all directional arrows together on the same side of the sign.
- Be sure directional arrows are large enough to be visible from a distance.
- Place the most important information toward the top of the sign panel.
- Consider using special features of the protected area in the sign design (for example the shape of a volcano as an icon or the shape of the sign.)

Text

- Use as few, simple words as possible.
- Use an easy-to-read sans serif font style (for example FUTURA, ARIAL BLACK or HELVETICA).
- Use capital letters in titles and in short, directional signs.
- Avoid all capital letters in long text.
- Provide adequate spacing between letters, words, and lines of text.
- Avoid using more than two different font styles in a small sign.
- Do not try to put all the information for a protected area in a single sign.
- Give readers only the information they need at a specific location.
- Adjust the size of letters to the viewing distance.
- Emphasize the most important information with the largest font size.

Site Selection

- Place signs at intersections where the public could be confused or require specific information.
- Locate signs where they can be easily read by a moving vehicle or by visitors walking.
- Avoid placing signs where they interfere with natural processes or obstruct scenic views.
- Avoid placing signs where they create safety hazards.
- The faster the vehicle movement, the more the viewer is focused toward the center of the roadway (smaller cone of view) and the closer signs need to be to the road.
- Locate signs where they will not be obscured by other signs and obstacles.
- Avoid adding to a roadway sign clutter (“sign fiesta”).
- Signs placed high above the roadway may not be illuminated by vehicle headlights at night, and thus hard to read.

Sign Supports and Orientation

- Support the sign panel at the proper viewing height (eye level).
- Raise sign panels above ground vegetation and other possible obstructions.
- Orient signs so they can be viewed from on-coming vehicle traffic.
- Construct sign supports strong enough to support the weight of the sign panels.

3.2 GOOD SIGN DESIGN

Proper sign design is essential for the sign to be an effective communication tool. Each sign should only provide the information needed by the motorist or park visitor under a given situation, condition or location. Signs should be designed so that they are safe. They should not be a distraction, especially for the motorist who must take his eyes off the road in order to view and understand the sign message. Figure 2 shows a graphic example of a poorly designed sign and a well designed sign.

3.3 TYPES OF SIGNS

We are limiting the discussion in this report to the kinds of signs that are relevant to this project area, which are few and fairly simple. There are many more types of signs than those listed here. For a more exhaustive description of sign types, see Bauer, et. al. 2003.

Roadway directional signs are used at road intersections to direct travelers to key attractions, such as public beaches, and communities where there are visitor services available. They can be manufactured out of metal or wood.

Community signs can be placed at the boundaries or at the center of a small community to identify the name and welcome visitors. They are unnecessary for communities lacking visitor services or where communities are spread out along the road not clearly defined. Therefore, we are not recommending community signs at this time except for El Ostional.

- Park entrance signs are placed at the legal or psychological entrance to a protected area. Typically, the top panel of the sign will have, "BIENVENIDOS" (welcome), the second panel will show the name and the type of protected area, and the third panel will show appropriate logos. Private protected areas may have a slightly different arrangement.
- Park directional signs are used within the boundaries of a protected area to indicate the location of parking, administrative offices, public toilets, and trails. Typically they are made out of wood.
- Information and interpretive kiosks have from 2 to 6 different panels and can be roofed or unroofed (see Figure 3a & b). Individual panels can include basic visitor information –such as maps, visiting hours, prices and regulations,– as well as more detailed interpretive messages. This is a flexible system; any number of panels and kinds of information can be presented in a kiosk depending on the needs and opportunities within each protected area.
- Panels can be printed on inexpensive vinyl or on more durable materials. Prices range from US\$35 in the vinyl to US\$400-500 for a 24" x 36" durable panel. The vinyl can last a year or more and the external-grade durable plastic panels are guaranteed up to 20 years. Their life can be extended if they are in a protected location.



Currently, there is no signage at the roadway junctions.

Figure 2. Example of bad and good sign design.



a. Bad Sign

b. Good Sign



An old sign wore out by time. This signs need to be replaced every 4 to five years.

Figure 3a. Examples of roofed kiosk structure.



Figure 3b. Examples of unroofed kiosk structures.



At La Flor evaluating locations where interpretative panels could be placed.

Map 1. The San Juan del Sur to El Ostional roadway showing the recommended locations for roadway signs.



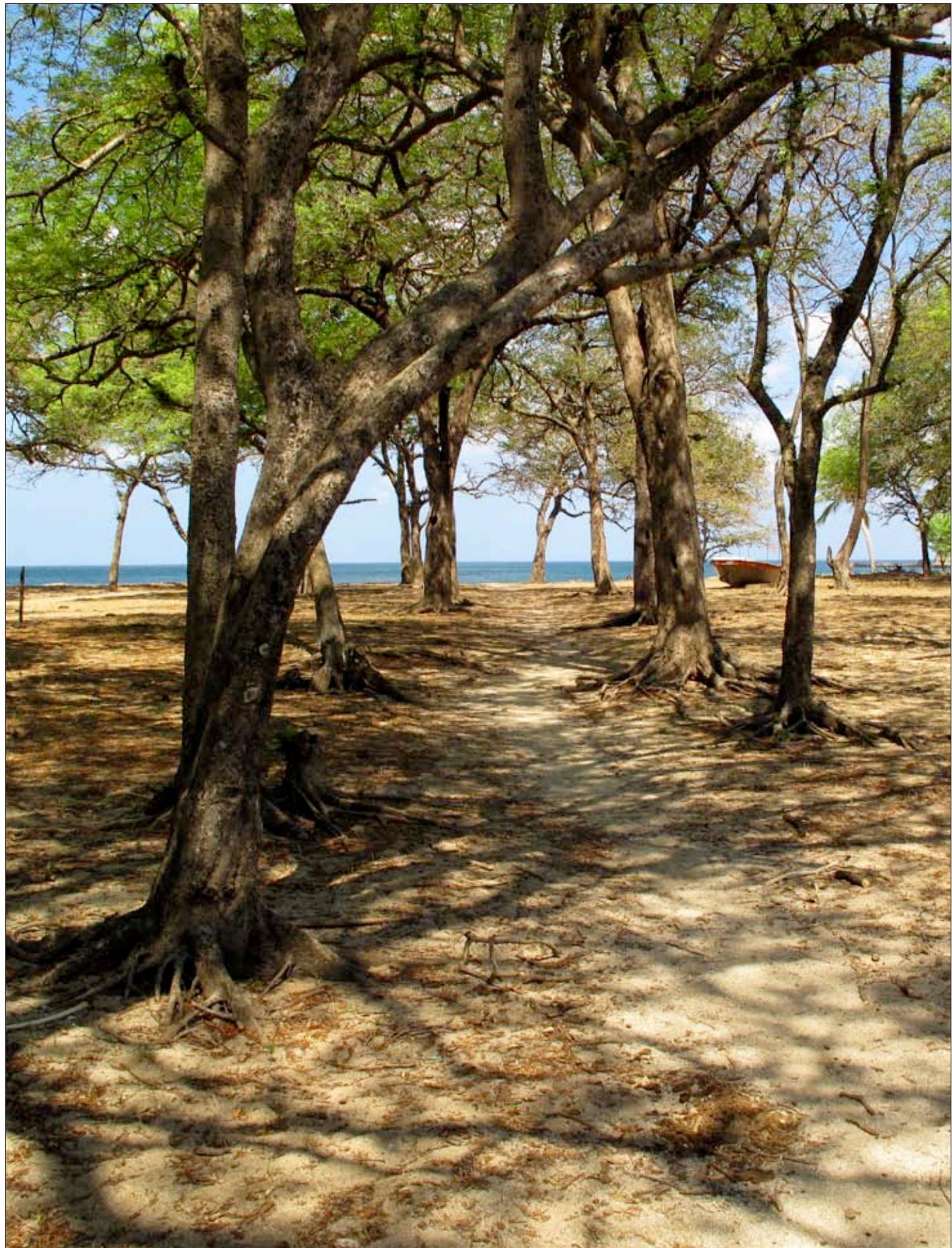
4.0 ROADWAY SIGN RECOMMENDATIONS

New signs are recommended for the following locations (Table 1, Map 1). All distances are from the Highway 16 just west of San Juan del Sur. Details of each sign are presented in Table 1 below. Illustrations and design specifications are provided in APPENDIX A.

1. Add a wooden sign for ,“REFUGIO DE VIDA SILVESTRE LA FLOR” to the existing sign post at the beginning of the road near San Juan del Sur (point A, Map 1). This should match the current sign for ,“EL OSTIONAL” in size.
2. Add a painted wood sign at the next intersection south (point B) showing the direction and distances to El Remanso, La Flor Refuge, and El Ostional. This should be located in the center of the ,“Y” facing traffic coming from the north.
3. Replace the existing roadway wooden sign at the Escameca Grande Private Reserve (point C).
4. Add a painted wooden sign at the entrance to the road to Playa Escamequita (point D) showing the direction and distance to the beach. This sign can be placed on a post or tree near the gate and oriented to face the road so it can be seen from both directions.
5. Add a painted wooden sign at the public (ungated) entrance to Cantamar Playa Yankee (point E) showing the distance to Playa El Yankee. This sign can be placed on a post or tree facing the main road so it can be seen from both directions. The existing wooden sign at the entrance to the La Flor Wildlife Refuge (point F) is in poor condition and should be replaced. In addition, this sign should be placed higher off the ground so that it is not obscured by vegetation.
6. The historic house along side the road near the crossing at the La Flor River (point G) is currently being remodeled by a local community cooperative for use as a possible visitor center. When it is completed, an appropriate sign should be erected along the road.
7. The “T” intersection at the center of El Ostional (point H) is the perfect location for a wooden welcome sign for the community. It can also indicate the direction and distance to the beach.

Table 1. Recommended roadway signs.

Point on figure 4	Distance (km) from A	Material	Content	APPENDIX I
A	0	Wood	Refugio de Vida Silvestre La Flor	Roadway Sign A
B	2.8	Wood	Playa El Remanso 3 km	Roadway Sign B
			Refugio La Flor 17 km	
			El Ostional 22 km	
C	11.3	Wood	Playa Escamequita 1.6 km	Roadway Sign C
D	11.9	Wood	Playa El Yankee 1.8 km	Roadway Sign D
E	13.7	Wood	Escameca Grande	Roadway Sign E
			Reserva Privada	
F	19.4	Wood	Bienvenidos	Roadway Sign F
			Refugio de Vida Silvestre La Flor	
			Centro de Visitantes 250 m	
G	20.3	Wood	(To be determined for future visitor center)	Roadway Sign G
H	24.9	Wood	Bienvenidos	Roadway Sign H
			El Ostional	
			Playa El Ostional 600 m	



The trail to the beach at La Flor Wildlife Refuge.

5.0 LA FLOR WILDLIFE REFUGE RECOMMENDATIONS

5.1 GENERAL RECOMMENDATIONS

A series of informational signs and interpretive panels are recommended near the office to enhance the visitors experience and promote conservation at the La Flor Wildlife Refuge. As additional trails are developed in other areas of the refuge, other signs may be needed.

The new signs can be broken down into three categories:

1. **Visitor Information and Orientation** provides basic information about the park and the location of visitor services such as bathrooms.
2. **Environmental interpretation** reveals hidden meanings and makes emotional and intellectual connections between visitors and the park's natural resources.
3. **Rules and Regulations** for turtles will provide guidelines for visitors to help protect nesting turtles and hatchlings.

5.2 SIGN RECOMMENDATIONS

The existing wooden welcome sign at the entrance should be replaced as per the recommendations in Section 4.0. In addition, the existing wooden signs for parking and entrance fees in the parking lot should be removed. A total of 3 new wooden signs are recommended for the Refuge (Table 2). These are illustrated in APPENDIX A and their locations are shown on Map 2.

Table 2. Recommended signs at La Flor Wildlife Refuge.

TYPE	LOCATION	MATERIAL	TITLE	LANGUAGE
Directional Sign	Trail to Office	Wood	Office & Bathrooms	Spanish only
Trail Sign	Trail junction	Wood	Los Cocos Trail	Spanish only
Trail Sign	Trail junction	Wood	Los Tamarindos Trail	Spanish only

5.3 VISITOR INFORMATION AND INTERPRETIVE KIOSK RECOMMENDATIONS

A total of 8 information and interpretive sign panels are recommended, to be placed in kiosks along the trail that goes from the parking lot to the beach (Table 3). These are illustrated in APPENDIX B and their locations are shown on Map 2.

Beginning at the parking lot, there will be two information panels located at the entrance to the trail leading to the beach. Both will be bilingual. The first is, "WELCOME TO LA FLOR WILDLIFE REFUGE" and has photographs illustrating the diversity of environments found in the refuge. These were selected to show visitors that the refuge is much more than a beach and to encourage them to take time to explore it more thoroughly.

The second panel is, "INFORMACION TURISTICA." The title will be in Spanish only, but with bilingual text. It will include maps of the refuge, entrance fees, and directional signage for the two trails, and public bathrooms. It also identifies El Ostional as the primary gateway community for basic visitor services including tour guides, and basic food and lodging.

A short distance down the path will be two interpretive panels explaining the importance of the forest ecosystem. The first is, "THIS IS THE THREATENED TROPICAL FOREST", followed by, "THIS FOREST IS A PART OF THE MESOAMERICAN BIOLOGICAL CORRIDOR." Because of the amount of information they contain, each panel will be duplicated in Spanish and English. The two English panels will be placed on one side of the trail facing the two Spanish panels. Thus, a total of four panels will be placed at this location.

Nearby we recommend the placement of a small wooden sign indicating the direction of the public bathrooms and office. This sign should be located at the trail to the administrative building. Also, two new small wooden trail signs are needed to identify the beginning of the Tammarindo and Los Cocos trails (these replace existing signs that are in poor condition).

A little further down the trail, towards the beach, we recommend placing three panels interpreting sea turtles. The first panel is, "THIS IS AN IMPORTANT TURTLE NESTING BEACH", followed by, "WHEN DO THEY COME?" and finally, "WHEN DO THE EGGS HATCH?" Each of these panels will answer basic questions asked by most visitors. Because of the amount of information they

contain, each panel will be duplicated in Spanish and English. The three English panels will be placed on one side of the trail facing the three Spanish set.

The final panel will be a bilingual list of rules of behavior all visitors must follow when observing nesting and hatchling turtles. Titled, “HELP US PROTECT OUR TURTLES”, will be located on the beach facing the end of the trail so that every visitor must pass in front of it. This will be a portable sign that can be removed when not needed.

All interpretive panels will be printed on flexible and durable vinyl film that can be easily attached to a simple wooden frame. Two or three related panels can be installed in a roofed kiosk. A possible design for these kiosks is presented in Figures 3A and 3B. The wooden signs can be routed and/or painted on a board.

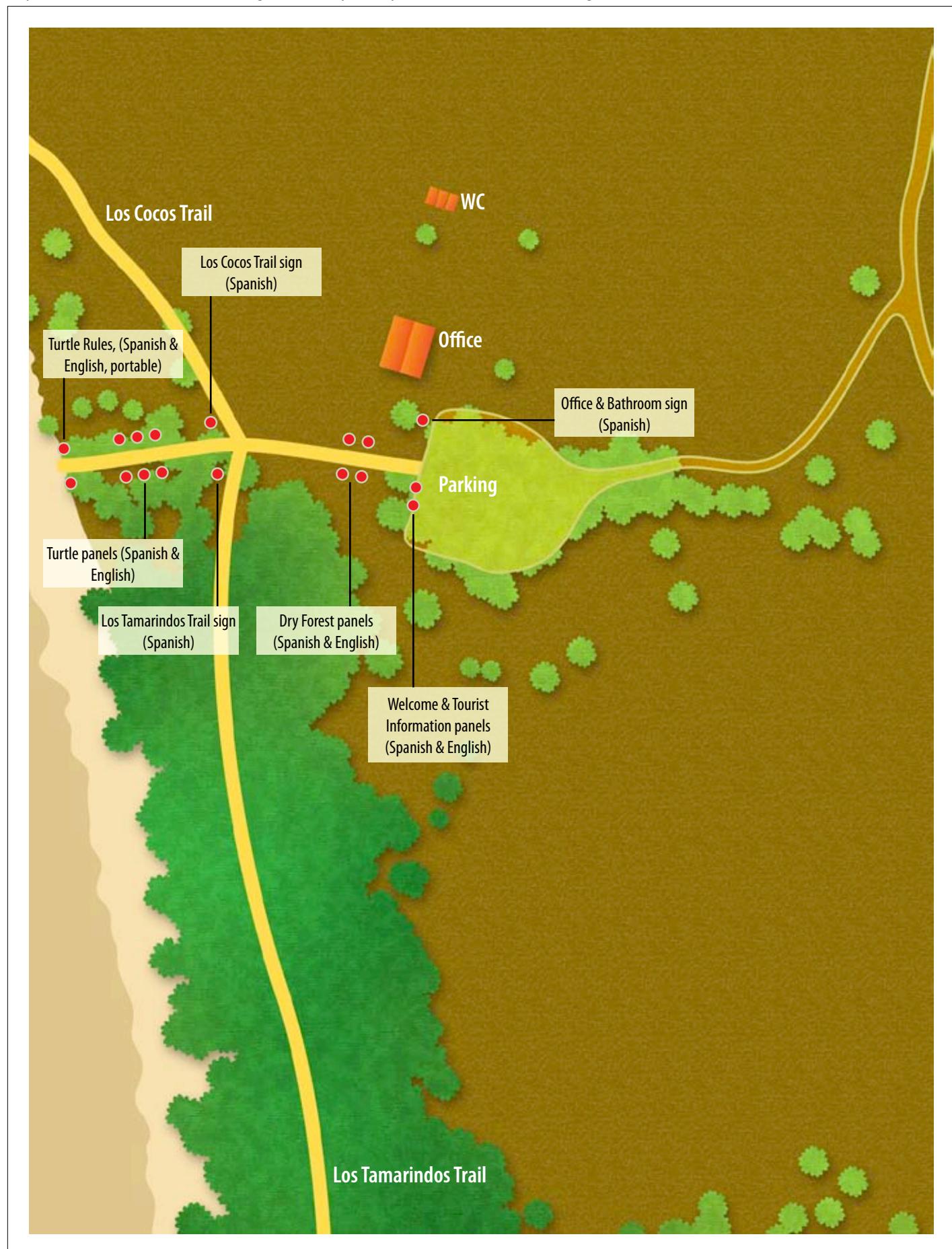
Table 3. Recommended visitor information and interpretive panels at La Flor Wildlife Refuge

TYPE	LOCATION	MATERIAL	TITLE	LANGUAGE
Welcome	Parking area	Vinyl	Welcome to La Flor Wildlife Refuge	Bilingual
Visitor Orientation	Parking area	Vinyl	Informacion Turistica	Bilingual
Forest Interpretation	Trail near parking area	Vinyl	This is a Threatened Tropical Forest	Spanish & English versions
Forest Interpretation	Trail near parking area	Vinyl	This Forest is Part of the Mesoamerican Biological Corridor	Spanish & English versions
Turtle Interpretation	Trail near beach	Vinyl	This is an Important Turtle Nesting Beach	Spanish & English versions
Turtle Interpretation	Trail near beach	Vinyl	When Do They Come?	Spanish & English versions
Turtle Interpretation	Trail near beach	Vinyl	When Do the Eggs Hatch?	Spanish & English versions
Turtle Viewing Rules	At beach	Vinyl	Turtle Viewing Rules	Spanish & English versions



Bird-watching at “Los Cocos” trail at La Flor Wildlife Refuge.

Map 2. Recommended informational signs and interpretive panels at La Flor Wildlife Refuge.



Map 3. Visitor Opportunity Map for the San Juan del Sur to El Ostional Roadway.



6.0 ASSISTING THE AREA'S TOURISM AND BIODIVERSITY CONSERVATION PROGRAMS

6.1 VISITOR OPPORTUNITY MAP

The team found no available map showing existing tourism businesses and opportunities along the roadway from San Juan del Sur to El Ostional. Therefore, we developed a “Visitor Opportunity Map for the San Juan del Sur to El Ostional Roadway” (Map 3). But having done that, we realized that others might find it useful. We recommend that this map be made available through the internet, perhaps through the Paso Pacifico website. This would not only help visitors and promote local businesses, it could expose Paso Pacifico’s environmental message and programs to a wider audience.

6.2 OTHER PRODUCTS

Most of the interpretive panels designed for La Flor Wildlife Refuge can be adapted and reused in other locations along the coast to promote environmental awareness. They could be displayed, in various sizes and formats at “eco-friendly” businesses such as restaurants, hotels, resorts, dive shops and surf shops. In addition to full-size display panels, they could be reproduced in smaller sizes for use as wall or table decorations and even smaller and sold as souvenirs. Sale of these products could provide support for local environmental programs.



Female sea turtle returning to the sea after nesting.

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APPENDIX A

SPECIFICATIONS FOR ROADWAY SIGNS

**Dimensions**

Panel	width	length	thickness
Panel I	10"	48"	2"

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
3	Futura Demi	320 pts

ROADWAY SIGN B

MAIN INTERSECTION



Dimensions

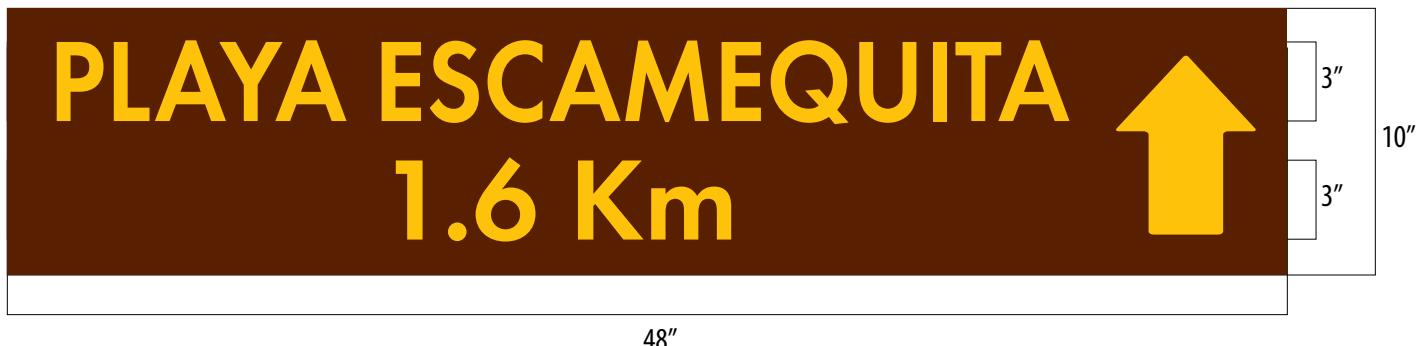
Panel	width	length	thickness
Panel 1	12"	72"	2"
Panel 2	12"	72"	2"
Panel 3	12"	72"	2"
Arrows	10"	8"	
Between panels	2"		

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
3.7	Futura Demi	380 pts

**Dimensions**

	width	length	thickness
Panel I	10"	48"	2"
Arrows	5"	7"	

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
3.0"	Futura Demi	320 pts

ROADWAY SIGN D

PLAYA EL YANKEE



Dimensions

	width	length	thickness
Panel I	10"	48"	2"
Arrows	5"	7"	

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
3.0"	Futura Demi	320 pts

ROADWAY SIGN E RESERVA PRIVADA ESCAMECA GRANDE



Dimensions

Panel	width	length	thickness
Panel I	10"	48"	2"

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
3	Futura Demi	320 pts

**Dimensions**

Panel	width	length	thickness
Panel 1	12"	72"	2"
Panel 2	18"	72"	2"
Panel 3	12"	72"	2"
Arrows	10"	8"	
Between panels	2"		

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
6.3	Futura Demi	650 pts
3.7	Futura Demi	380 pts



Dimensions

Panel	width	length	thickness
Panel 1	12"	72"	2"
Panel 2	12"	72"	2"
Between panels	2"		

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
6.3	Futura Demi	650 pts
3.7	Futura Demi	380 pts

**Dimensions**

	width	length	thickness
Panel			
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Between panels	2"		

Colors

Yellow letters on dark brown background

Textos

Size	Font	Points
6.3	Futura Demi	650 pts
3.7	Futura Demi	380 pts

APPENDIX B

INTERPRETIVE PANELS AT LA FLOR REFUGE

**Bienvenidos
Welcome**



Refugio de Vida Silvestre La Flor • La Flor Wildlife Refuge



Observación de Vida Silvestre • Senderismo • Paseos en Bote • Camping • Kayak
Wildlife Viewing • Hiking • Boating • Camping • Kayaking



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UNIDOS DE AMÉRICA



PASO PACÍFICO
Making connections for conservation

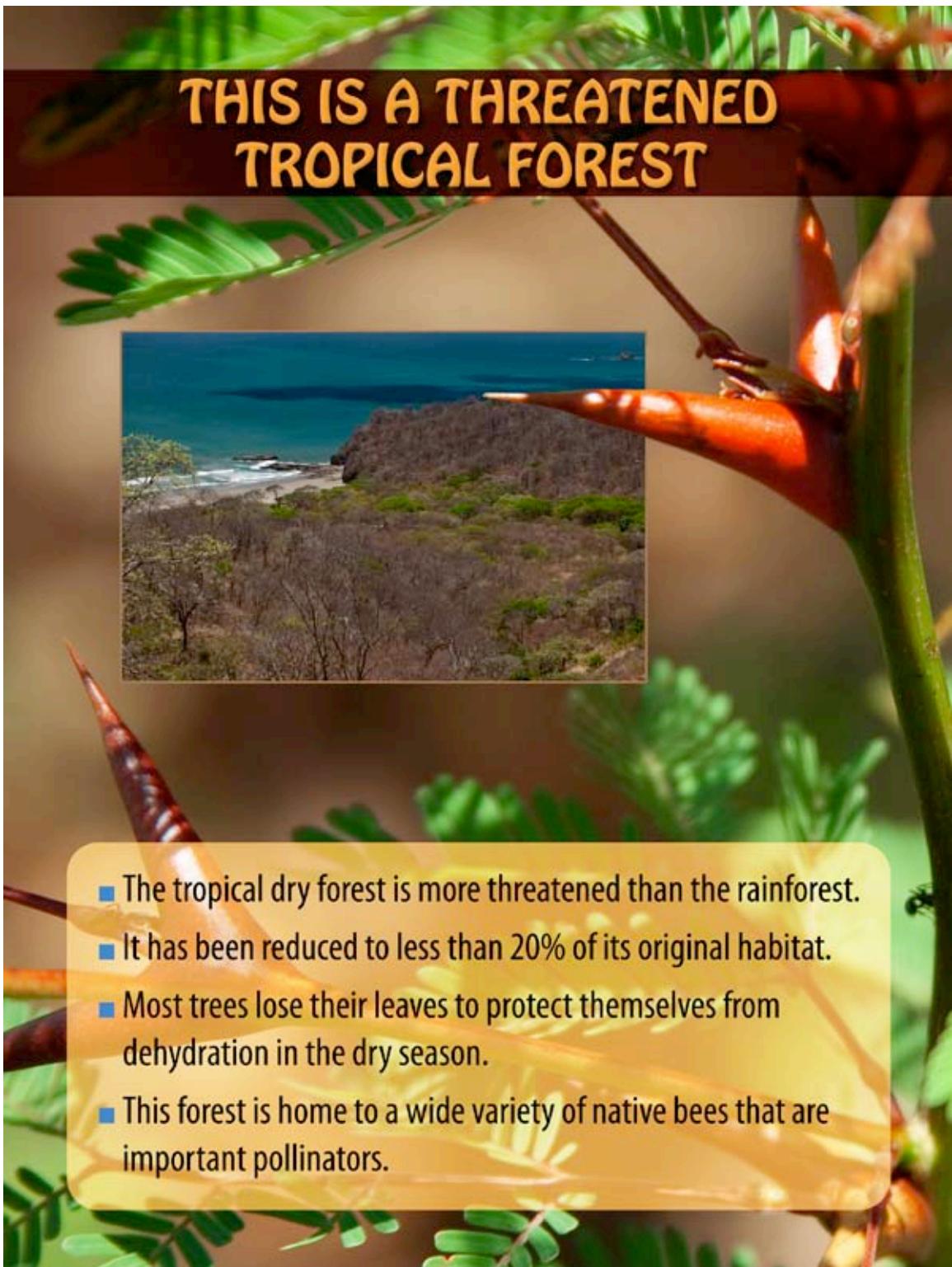


MARENA
Ministerio del Ambiente
y los Recursos Naturales

Dimensions: 30" x 40". Printed on vinyl.



Dimensions: 30" x 40". Printed on vinyl.



Dimensions: 30" x 40". Printed on vinyl.



Dimensions: 30" x 40". Printed on vinyl.

THIS FOREST IS PART OF THE MESOAMERICAN BIOLOGICAL CORRIDOR



- The 12-mile wide isthmus between Lake Nicaragua and the Pacific Ocean is a critical passageway for wildlife.
- It contains some of the richest biodiversity in Nicaragua, from the wetlands and humid forests along Lake Nicaragua, to the tropical dry forests along the Pacific coast.
- Programs to protect and replant these forests will help threatened wildlife species to survive.

Dimensions: 30" x 40". Printed on vinyl.

ESTE BOSQUE ES PARTE DEL CORREDOR BIOLÓGICO MESOAMERICANO

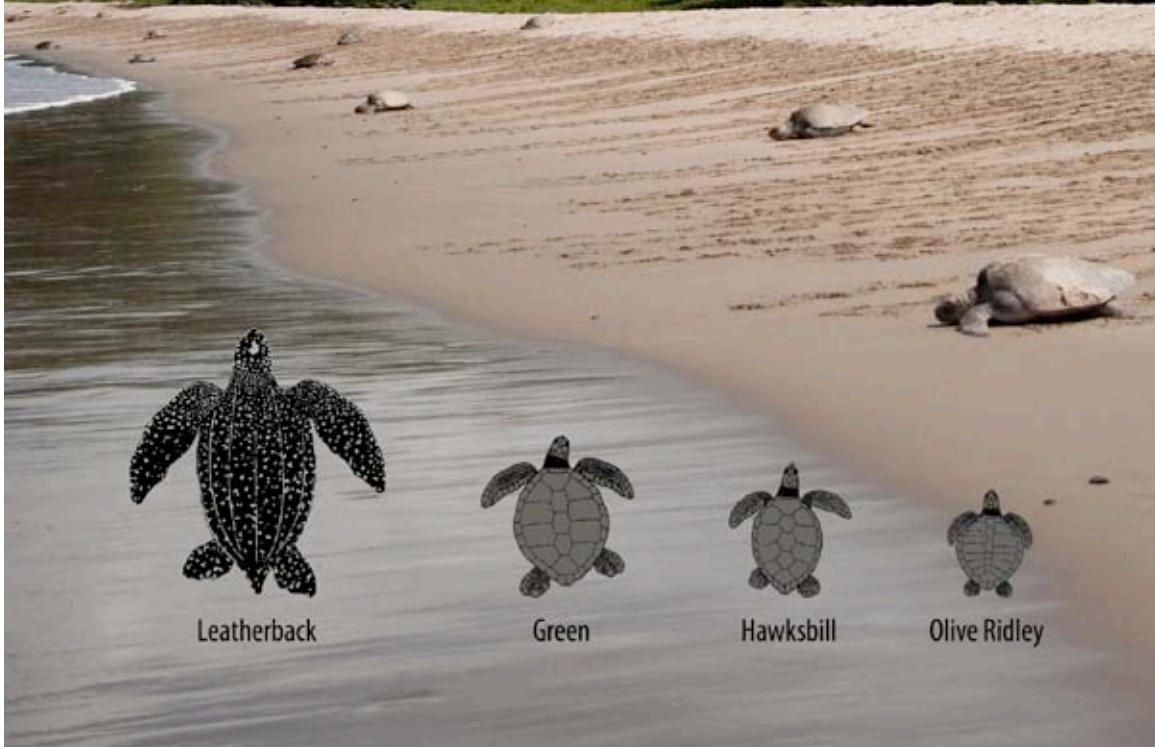


- El istmo de 12 millas entre el Lago de Nicaragua y el Océano Pacífico es un pasadizo crítico para la vida silvestre.
- Contiene una de las más ricas biodiversidades en Nicaragua, desde humedales y bosques húmedos a lo largo del Lago de Nicaragua, hasta bosques secos tropicales a lo largo del Océano Pacífico.
- Programas para proteger y reforestar estos bosques ayudarán a las especies de vida silvestre a sobrevivir.

Dimensions: 30" x 40". Printed on vinyl.

THIS IS AN IMPORTANT TURTLE NESTING BEACH

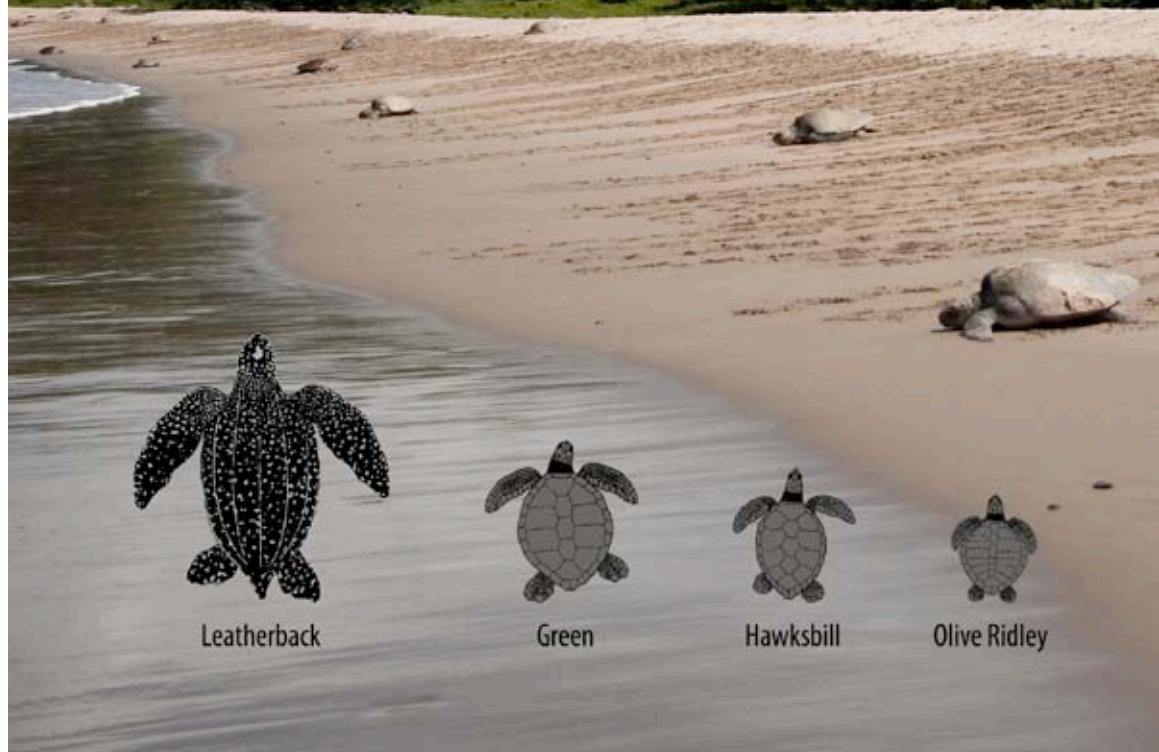
- *Arribadas*, or mass arrivals of Olive Ridley turtles, are one of the most dramatic displays of nesting in the world.
- La Flor is one of only seven beaches in Central America where these arribadas occur.
- More than 100,000 Olive Ridley turtles nest here each year (see exact counts at the office).
- Three other sea turtle species nest in this refuge.



Dimensions: 30" x 40". Printed on vinyl.

ESTA ES UNA PLAYA IMPORTANTE DE ANIDACIÓN DE TORTUGAS

- Las Arribadas –llegadas masivas de tortugas Paslama, son uno de los más espectaculares despliegues de anidación en el mundo.
- La Flor es una de sólo siete playas en Centro América donde ocurren estas arribadas.
- Más de 100,000 tortugas Paslama desovan aquí cada año (ver conteos exactos en la oficina).
- Otras tres especies de tortugas anidan en este refugio.



Dimensions: 30" x 40". Printed on vinyl.

WHEN DO THEY COME?



- La Flor has 5 to 7 major *arribadas* from July to January, with a peak in October and November. Each lasts several days.
- Minor arribadas also occur during the same period and solitary turtles may nest any time during the year.
- Turtles usually lay their eggs at night but sometimes also in the morning and afternoon.
- Olive Ridleys take less than an hour to lay about 100 eggs, and may return several times in the same season.

Dimensions: 30" x 40". Printed on vinyl.

¿CUÁNDO LLEGAN?



- La Flor tiene de 5 a 7 *arribadas* mayores de julio a enero, con un pico en octubre y noviembre. Cada una dura varios días.
- Arribadas menores también ocurren durante el mismo período y tortugas solitarias podrían anidar en cualquier momento del año.
- Las tortugas usualmente ponen sus huevos en la noche, pero algunas veces también en la mañana y tarde.
- Las tortugas Paslama ponen alrededor de 100 huevos en menos de una hora, y pueden volver varias veces en la misma temporada.

Dimensions: 30" x 40". Printed on vinyl.

WHEN DO THE EGGS HATCH?



- Turtle eggs hatch 50-60 days after laying.
- Baby turtles dig out of the nest all at once to increase their chances of survival by moving as a group.
- Hatchlings dash to the water at night to avoid predators and limit dehydration from exposure to the sun and hot sand.
- Olive ridley turtles born here may travel as far as Alaska and Chile before returning to mate and nest.

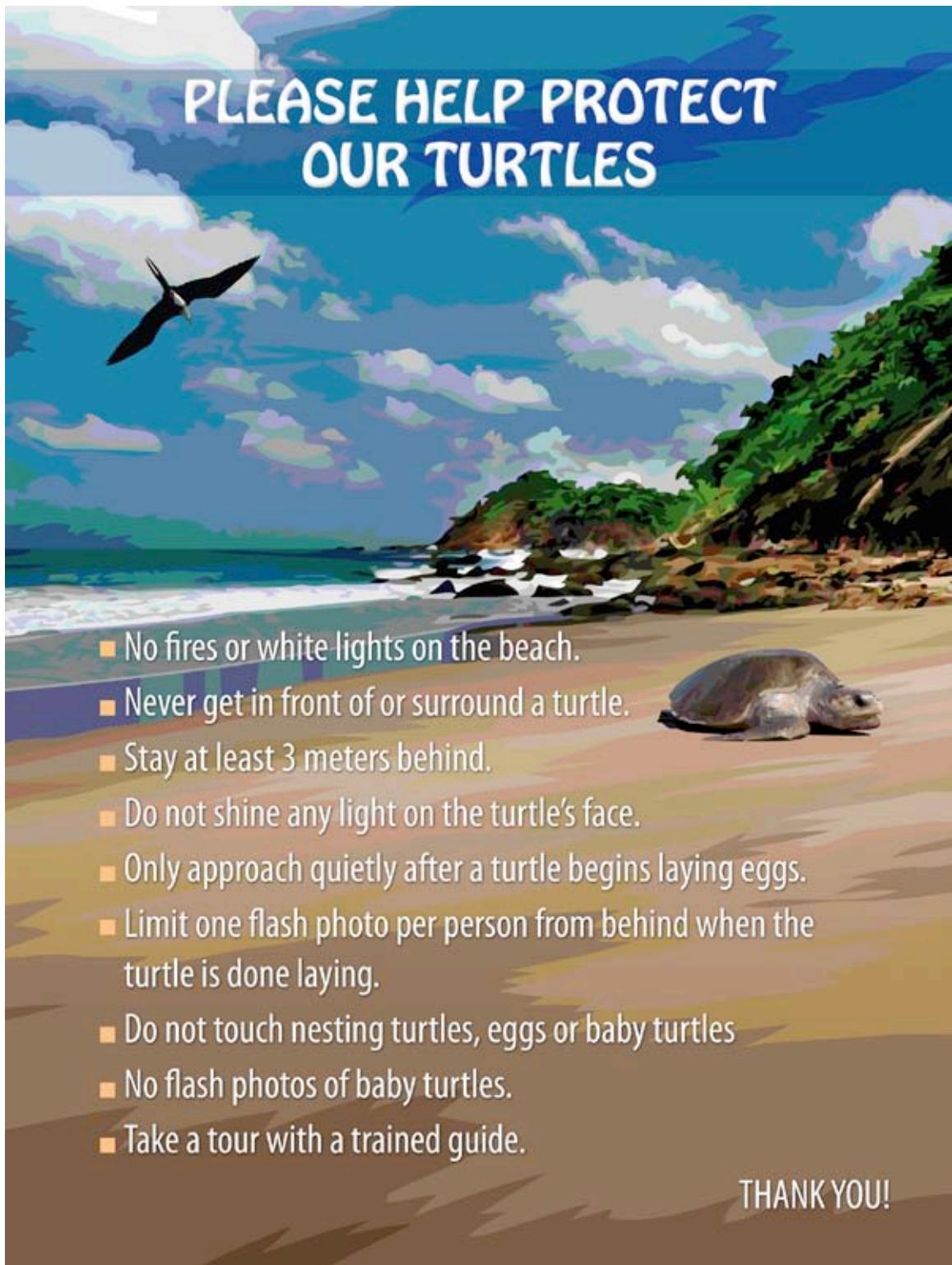
Dimensions: 30" x 40". Printed on vinyl.

¿CUÁNDΟ SALEN DEL HUEVO?

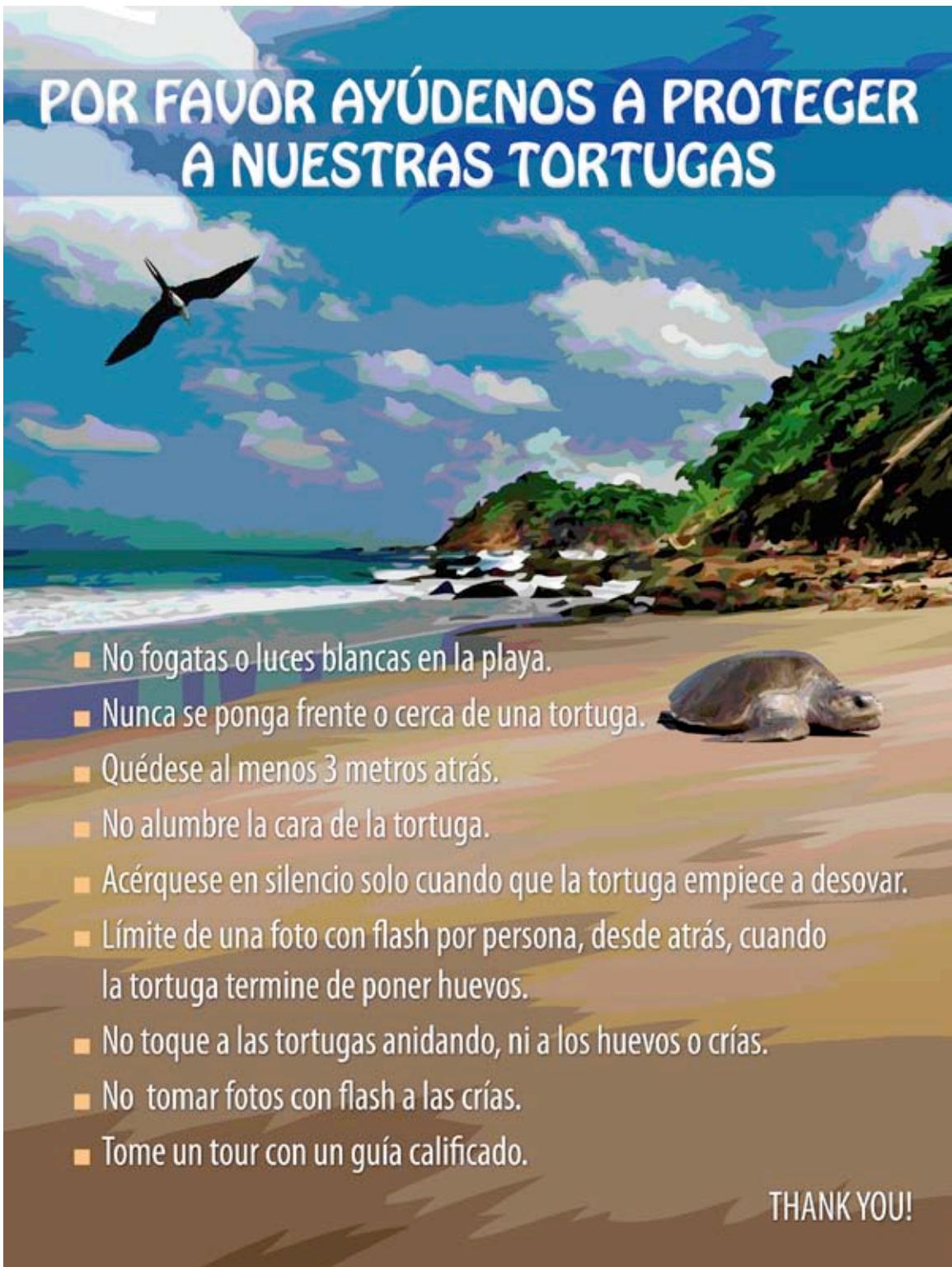


- Los huevos eclosionan después de 50-60 días de incubación.
- Todas las crías salen del nido al mismo tiempo para incrementar su probabilidad de sobrevivencia al moverse como grupo.
- De noche, las crías de prisa se dirigen al mar para reducir la deshidratación por el sol y la arena caliente y evitar depredadores.
- Las Paslama nacidas aquí podrían viajar tan lejos como Alaska y Chile antes de volver a reproducirse y anidar.

Dimensions: 30" x 40". Printed on vinyl.



Dimensions: 30" x 40". Printed on vinyl.



- No fogatas o luces blancas en la playa.
- Nunca se ponga frente o cerca de una tortuga.
- Quédese al menos 3 metros atrás.
- No alumbre la cara de la tortuga.
- Acérquese en silencio solo cuando que la tortuga empiece a desovar.
- Límite de una foto con flash por persona, desde atrás, cuando la tortuga termine de poner huevos.
- No toque a las tortugas anidando, ni a los huevos o crías.
- No tomar fotos con flash a las crías.
- Tome un tour con un guía calificado.

THANK YOU!

Dimensions: 30" x 40". Printed on vinyl.