

Ecotourism and Recreation in the Panama Canal Watershed: Preliminary Assessment And Recommendations



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**ECOTOURISM AND RECREATION IN THE PANAMA
CANAL WATERSHED: PRELIMINARY ASSESSMENT
AND RECOMMENDATIONS**

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EXECUTIVE SUMMARY AND RECOMMENDATIONS

FINDING 1: Tourism is a growth industry and an important strategic issue for USAID/Panama.

Internationally, USAID environmental programs have increasingly involved tourism as a tool for conservation and economic development. Tourism is the third most important industry in Panama and at current rates of growth will soon be second only to the operation of the Canal in its economic contribution. This growth presents significant risks and opportunities.

Recommendations:

- USAID/Panama needs to develop a tourism strategy, information, and expertise to respond to this issue to maximize benefits and minimize the costs and impacts.
- It is important for USAID/Panama to identify partners and find its particular niche in the broad field of tourism so that it can focus its efforts.
- Be proactive and champion forest-based “ecotourism” as a strategy for delivering USAID’s natural resource agenda.
- Understand the recreation/tourism industry and become an active player.
- Establish close working relationships with IPAT and the tourism private sector.
- Support ecotourism technical assistance, training, and case studies.

FINDING 2: Outdoor recreation and international tourism in national parks, if done correctly, is one of the best ways to develop support for these protected areas and the resources they contain.

Fresh, clean water is the lifeblood of the Canal and essential to the well being of the citizens of Panama, and can only be guaranteed by a healthy watershed. National parks can ensure biodiversity, protect against erosion, provide freshwater supplies, and help meet the growing demand for recreation and tourism. But parks without strong public support will fail.

Recommendations:

- Help develop public appreciation and support of national parks and the Panama Canal Watershed through environmental education, interpretation, and outdoor recreation.
- Use recreation and tourism programs as management tools to achieve conservation and economic objectives.
- Coordinate with regional tourism and conservation programs such as the Mesoamerican Trails project.
- Support the development of environmentally sustainable accommodations within the Panama Canal Watershed by organizing a conference on eco-huts, lodges and resorts.
- Explore linkages between national parks and forest eco-lodges and hotels in Panama City.

FINDING 3 – The TCR Alliance of Tourism, Conservation and Research provides an excellent strategic framework for collaboration within the Panama Canal watershed.

The Panama Canal Watershed has an incredible diversity of natural and cultural attractions which are easily accessible and in excellent condition, as well as a long history of continuous scientific research. This combination - which probably cannot be duplicated anywhere in the world - provides a unique opportunity for establishing linkages between tourism, conservation and research.

Recommendations:

- Use the TCR Strategic alliance to help implement national park master plans.
- Emphasize projects that contribute to the development of a trans-isthmus heritage route as a priority project; for example, the Camino de Cruces trail, Pipeline Road, flatwater kayaking, and scenic byways.
- Consider a Heritage Area or Corridor approach for organizing the stakeholders, resources, and activities within a trans-isthmus heritage route.
- Determine priority projects in consultation with Panama's public agencies.

INTRODUCTION AND BACKGROUND

Introduction

This report summarizes fieldwork in Panama November 7-23, 1999 by Jerry Wylie and November 12-20 by Jim Bedwell, employees of the USDA Forest Service. The objectives were to assist USAID in planning interpretive trails activities in national parks within the Panama Canal Watershed, provide recommendations for recreation and tourism projects, and identify opportunities for future short term technical assistance from the USDA Forest Service and other federal agencies in the USA. This work was coordinated by Jerry Bauer, Environmental Officer for the USAID mission in Panama.

Our fieldwork concentrated on Soberania and Chagres national parks, with special attention to the Pipeline Road and Camino de Cruces Trail. As part of the tourism component of this project, we visited Gamboa Rainforest Resort and the Canopy Tower, with short trips to Fort San Lorenzo on the Caribbean coast and Culebra Island on the Pacific side. We also briefly examined the Rio Chagres from Gamboa to Madden Dam, spent a day boating Lago Gatun between Gamboa nearly to the Gatun Locks, and visited the charming Embera villages on the Rio Chagres above Lake Alajuela.

In addition, we attended part of the Mesoamerican Trails workshop organized by ANCON and the Wildlife Conservation Society. This proposed network of non-motorized routes is intended to link national parks and protected areas from Guatemala to Panama, in support of conservation and ecotourism. (A trans-isthmus land and water route across Panama could be an important element of this system and provide important regional linkages and visibility for Panama's national parks.)

USAID Programs in Panama

USAID programs in Panama contribute to US foreign policy objectives through successful implementation of the Panama Canal Treaties, focusing primarily on Panama Canal Watershed protection and supporting productive uses of reverted military and other US properties. Other non-environmental objectives include improvement in the criminal and commercial justice systems and democracy-building.

The watershed is critical to both the operation of the Canal and as a source of fresh water to the residents of Colon and Panama City. Over half the population of Panama lives in these cities, and each ship passing through the Canal uses 52 million gallons of fresh water to operate the locks. Freshwater supplies are increasingly vulnerable and can only be guaranteed by a healthy watershed, 60% of which has been deforested in the last 50 years. Without this critical tree cover, primarily provided by several national parks, erosion of river valley and lake shores will occur, resulting in siltation, reduction of water volume and quality, and loss of biodiversity.

MARENA Project

The USAID Panama Natural Resources Management Project (MARENA in Spanish) was initiated in 1991 to help public and private organizations manage Panama's renewable natural resources. Although scheduled to end in September 2000, environmental activities will continue through the operation of a \$25 million environmental trust fund. The primary Government of Panama (GOP) institution responsible for project implementation is the National Environmental Authority (Autoridad Nacional del Ambiente – ANAM). Technical assistance has been provided by the US National Park Service, the Bureau of Land Management, The Nature Conservancy and, most recently, the USDA Forest Service.

Primary goals of the MARENA project are to promote sustained economic and social development and improve management of Panama's natural resources, with emphasis on the Panama Canal Watershed. Specific program components include: management of the Panama Canal Watershed, management of national parks and wildlands, establishment and operation of the Ecological Trust Fund (FIDECO), and reforestation and agroforestry

Principal MARENA accomplishments include:

- Development of management plans for 5 national parks.
- Surveying and boundary marking for national parks.
- Infrastructure improvements in national parks, such as offices, residences, back country stations, boat ramps, and public services.
- Development of a strategic plan for the Panama Canal Watershed.
- Establishment of a comprehensive and long-term environmental monitoring system to track forest cover, reforestation, water quality, erosion, siltation, and biodiversity.
- Development of environmental laws relating to forest management, reforestation, and environmental protection.
- Establishment of a \$25 million environmental trust fund (FIDECO).
- Strengthening of local GOP agency and NGO capacity to manage natural resources.
- Improved communications and working relationships between public and private sector institutions.
- Interpretive guide training to promote ecologically-sensitive tourism.

Strategic planning beyond FY2000 will continue to support similar objectives and GOP institutions responsible for watershed protection, encourage the participation of the public and private sectors and local governments, and work with the GOP to implement co-management for national parks.

TOURISM AND RECREATION

Tourism and Recreation - What is it and why is it important to USAID?

Outdoor recreation and tourism is a growth industry and an important strategic issue for the USAID mission in Panama because it represents significant risks and opportunities.

As the world's largest industry, it cannot be ignored. More and more international visitors are coming to Panama and more Panamanians are discovering their national parks every day. **Outdoor recreation and international tourism in national parks, if done correctly, is one of the best ways to develop support for these protected areas and the resources they contain.** Healthy national parks will ensure biodiversity, protect against erosion, provide freshwater supplies, and help meet the growing demand for quality recreation and tourism opportunities. However, **parks without strong public support will fail.**

In order to achieve its natural resource goals in Panama, USAID must understand this industry and begin to play a more active role in managing and shaping it. With proper planning, recreation and tourism programs can be an effective tool to achieve USAID goals.

Key Definitions and Concepts

The Tourism Industry

The tourism “industry” is actually a complex set of inter-related industries such as transportation, food, lodging, tour agencies, etc. Its basic components include: visitors, attractions, services, host communities, information, and infrastructure. There is a “supply side” which includes attractions, such as national parks and their management - sometimes referred to as “inputs.” On the “demand side” there are what visitors do and want and the experiences they have – or in other words “outcomes.”

Tourism is about moving people from place to place, providing them the services and experiences they desire and, hopefully, producing benefits for local residents, visitors, and the environment.

The distinction is sometimes made between “specialty” and “mass-tourism,” implying that the former is somehow more environmentally-friendly because it is based on natural and cultural resources rather than on the built environment - such as high-rise hotels and golf courses. However, this may be a misleading dichotomy. Some tourism specialists argue that there is no such thing as “specialty travel” because if you look close enough, each trip is different on some level and when you put them all together the various specialty trips add up to mass travel.

Furthermore, even the most dedicated nature traveler becomes a “mass-tourist” at some stage of their trip, and many large hotels, airlines, and even golf courses have developed “green” programs to educate their customers and lessen their impact on the environment. The important distinction, therefore, is not scale or natural versus manmade, but rather the impacts and benefits of a particular tourism program. The point is to minimize impacts and costs and maximize benefits.

Ecotourism

There are many definitions of ecotourism and this can cause confusion, especially when it is lumped with “nature tourism.” Ecotourism can focus on nature, but all nature tourism is not ecotourism. The difficulty with ecotourism is that it can be viewed at different levels.

Defined narrowly, ecotourism is a specialized niche of nature travel that focuses on low-impact travel to pristine areas, promoted primarily by environmental organizations as a tool for conservation in Third-world countries. Education and cultural attractions are also important defining elements for some. A broader perspective views ecotourism as a *philosophy* of travel that respects the land, people and culture, a *strategy* of using sustainable tourism as a tool for both conservation and economic development, and a set of *goals and principles* which can apply to all forms of travel, even “mass tourism” (see Attachment A for details).

Keep in mind that there is no such thing as a 100% ecotourist. Even hard-core ecotourists may also be interested in cultural and historic attractions, visit large cities, fly in wide-body jets and stay in fancy hotels during some part of their trip. It is more appropriate to think of tourism as an integrated system that includes both large scale “mass tourism” and small scale “ecotourism” or other specialty niches. Travelers flow through this system, spending more or less time in large and small scale situations.

Recreation versus Tourism

Although closely related and frequently used interchangeably, recreation and tourism are not synonymous. They are more like two ends of a continuum. There is some overlap, but generally things belong more in camp than the other. Tourism is the “business of recreation” and is commonly considered to involve travel away from home and an overnight stay, whereas recreation is a wide range of outdoor activities. And although the activities they engage in may be identical, local residents are usually thought of as recreationists rather than tourists.

Niche Markets

Tourism markets can be segregated based on geography (North America, Europe...), recreational activities (scuba diving, fishing...), demographics and lifestyle (seniors, gay, family...), business/convention, visiting friends and relatives, group/package tour, independent travelers, etc. The possibilities are nearly endless.

A simple model for resource-based travel includes four overlapping categories based on psychographics (motivations), demographics, and associated activities: **Recreation**, **Wilderness**, **Adventure**, and **Educational**. These four niches can be viewed as primary types; they can stand alone or be combined to form different mixes and each can have “hard” or “soft” forms. Various combinations will provide the package of experiences and personal benefits desired. A single trip may involve elements from all four at different times and places or by different people at the same time (see Appendix B for details).

Tourism in Panama

Panama is considered by many to be an undiscovered tourism destination and the “next best place.” Panama’s National Tourism Bureau (IPAT) has identified 1,300 tourism attractions, mostly natural resources (72%), including 2,000 kilometers of beach along both coasts, more than 1,000 islands and 25 national parks. There were a total of 548,000 visitors in 1998, an increase of 8.7% over 1997. But compared to other similar destinations in Central America and the Caribbean, this is very low. Eighty per cent were business travelers, and only 16% were leisure. IPAT’s target for the year 2000 is 600,000 visitors.

Detailed and up-to-date tourism statistics for Panama are not easy to obtain. Our primary source is a 1993 summary of the Tourism Development Master Plan for Panama which covers the period 1993-2002. Although dated, this is probably a good indicator of the general composition of Panama’s tourism industry today.

The primary markets for international visitors at that time included the USA (16%), Costa Rica (14%), Colombia (13%), Dominican Republic (10%), Ecuador (7%), Europe (7%), Venezuela (6%), and Nicaragua (6%). Almost half of the visitors from the USA came to Panama on leisure trips, most visited Panama City, and relatively few traveled to locations in the country’s interior. Most tourists came to Panama to purchase imported goods which they re-exported to their own countries. On the other hand, Panama’s domestic tourism market in the early 1990s was nearly twice that of its inbound tourism. Further, most of the trips to the interior were made by domestic travelers (GOP 1993:21).

In 1993, the contribution of tourism to Panama’s economy was estimated to range from 5% to 11% GDP, based on two methods of calculation. Each foreign tourist contributed between US\$ 1,000-2,000. The approximately US\$ 200,000,000 in revenue they generated in 1991 represented about 2-3% of total foreign exchange from exports. In 1992, tourist activities generated 12,510 direct jobs and 31,275 indirect jobs, for a total of 43,785. This was about 3% (direct) and 7% (indirect) of the country’s total jobs (GOP 1993:27-29).

Over the past decade, annual growth has averaged 12%. Tourism is currently the third most important industry behind operation of the canal and the Colon free-trade zone. At this rate it will soon become the second largest contributor to Panama’s economy.

The Strategic Plan acknowledged that Panama had a serious image problem in markets such as the USA. This situation is largely unchanged. Any knowledge that US citizens have about Panama is superficial and the country is virtually unknown in the Canadian market (GOP 1993:30).

TCR Strategic Alliance - Tourism, Conservation, and Research

The TCR (or TCI for “Information”) Strategic alliance is an ambitious and sometimes perplexing proposal to restructure Panama’s tourism industry and place it in the forefront of international tourism development. A core concept is the environmentally-sensitive “eco-resort” and signature projects include the Gamboa Rainforest Resort and the Canopy Tower.

Debuted at a major conference and symposium in Panama City December 1998, TCR hopes to develop “sustainable heritage tourism” products which link the tourism industry with conservation of cultural and natural heritage and scientific research. As defined by its chief architect, Dr. Hana Ayala, this new type of experiential and resource-focused tourism would be based on natural and cultural attractions and information.

The quality of a destination’s natural and cultural attractions and the quality of the experience of these attractions are now the key factors that motivate international leisure travel and define the competitive strength of the tourism product. This megatrend supplies powerful business reasons for the international tourism and hotel industry to become a strong proponent of conservation worldwide...” (Ayala TCR 1999:V)

The goal is to link key attractions via themed routes and link tourism, primarily resort hotels, and resource conservation with the information provided through scientific research.

The relationship is envisioned to be a new type of symbiotic partnership. **Research** provides the information for the “value-add” interpretive experience, **tourism** provides the funding and consumers for information and customers for protected areas, **conservation** protects the resources which attract the visitors, and **local residents** benefit from tourism and make conservation of sites sustainable.

The environmental benefits are expected to be significant. These include reduced encroachment and poaching, less visitor impact, improved environmental education, protection and upgrading of new conservation areas, donations, and entrance fees (see list of possible projects below).

The package of attractions provided by the heritage route network of sites, quality interpretation/education experiences, and protected areas is a highly marketable and sustainable concept. In this national TCR partnership, key natural and cultural resources would be endowed with conservation guarantees, interpreted through access to research information, and linked via eighteen themes or routes.

The most relevant of these for the Panama Canal Watershed is the “**Route of the Treasures of the Americas**.” This consists of the two principal trans-isthmus historic routes: a) The royal road between Panama and Nombre de Dios/Portabelo and b) the Chagres route comprising the Camino de Cruces and the Rio Chagres to Fort San Lorenzo. Later this corridor included the Panamanian railroad and, of course, the Panama Canal. “Undoubtedly, this route preserves the greatest variety of attractions in the Panamanian Isthmus, both historic and current attractions, as well as natural attractions such as the rain and dry forests on both sides of the Panama Canal” (Cooke and Suarez TCR 1999:43).

TCR Recommendations and Proposals

Selected TCR proposals and recommendations relevant to the Panama Canal Watershed are listed below. (Specific projects with high potential for Forest Service technical assistance through cooperative agreement with USAID are indicated by a check mark.)

Panama Canal and Watershed

- Emphasize the Panama Canal Watershed
- Embrace the Canal as a tourism facility
- Conduct research on private funding of conservation of the Panama Canal Watershed
- ✓ Use the Trans-isthmus route as the priority pilot project
- Improve and develop decentralized accommodations along the Canal

Protected Areas

- Create a tourist fee-based trust for the conservation of protected areas
- Develop co-management of protected areas with resorts and local communities

Hotel and Eco-Resort Partnerships

- Use eco-resorts to fund conservation and research
- Have Panama City hotels sponsor national parks and interpretive centers
- Have Panama City hotels sponsor international and local student projects

Professional Development

- Establish a national ecotourism association
- ✓ Upgrade Panama’s archeological sciences and historic preservation
- ✓ Provide professional guide training and certification

Tourism Planning and Monitoring

- ✓ Provide technical assistance in ecotourism for Indian communities
- ✓ Use the Limits of Acceptable Change approach to dealing with negative impacts
- Obtain baseline data before tourism begins and establish control sites to be monitored
- Involve local communities early in project planning and identification of potential impacts
- ✓ Quantify the economic and environmental impact of existing and projected tourism activities

Interpretation and Education

- ✓ Research and publish “best practices” for interpretation of themed routes
- ✓ Develop participatory and educational tourism experiences
- ✓ Develop or strengthen environmental education activities

Recognition of the importance of the Panama Canal Watershed is especially gratifying. The TCR Symposium working group addressing natural and cultural resource management clearly felt that the current attention on the Canal’s history was a unique opportunity and that “a lot of effort must be put into the preservation of this resource, in particular **the canal watershed and the management of its biodiversity systems.**” They went on to recommend that watershed management “requires looking at the whole picture, rather than just narrowing the focus to saving the trees or saving the soil. **Watershed management is critical for the economic well being of Panama as a whole**, and not just for the tourism industry”(TCR 1999:117, emphasis added).

Many TCR conference participants also agreed on the importance of developing two or three initial heritage routes to serve as demonstration projects. “The route that currently offers the greatest variety of tourist potential is the Trans-Isthmus Route, including Panama La Vieja, Portobelo, Camino de Cruces, and many famous historical sites along the Canal” (TCR 1999:121).

Global Trends in Tourism

There are several tourism trends that may affect Panama:

1. Global industrialization, pollution, deforestation and species extinction will increase the desire to escape to simpler, untrammelled places, stimulate nature-based travel and demands on protected areas and increase the desire to experience “last frontiers” and species before they are gone (Nickerson and Uysal 1995).
2. Urbanization and growth of the middle class in developing countries will increase the desire and ability to travel, stimulate a search for authentic local culture, promote interest for cultural roots and connections in other countries, and spur a desire to escape work stress (Nickerson and Uysal 1995).
3. In the United States, travelers want more life-enriching vacations, Americans are getting older, more people are traveling with children, travelers have less time and are more stressed, driving people to look for stress relief, convenience, and shorter vacations closer to home (Jane Mass 1995).
4. The Internet revolution is dramatically changing the way travelers obtain information on a destination, plan their travel, and purchase products.
5. Multi-activity vacations combining several sports - such as kayaking and mountain biking - are becoming more popular.

6. Sun and beach tourism will continue to comprise most of the tourism in the Americas, but as part of a more complex and participatory package that includes environmental and cultural elements (TCR 1999:132).

The Value of Forest-based Recreation and Tourism

Rainforests contribute to all forms of tourism, primarily through their ecological role in the ecosystem, but also for visual quality and wildlife habitat. They do much more than merely serve as a pretty backdrop. They are frequently the primary setting for accommodations, general sightseeing, and specialized recreational experiences.

A major challenge is quantifying a forest's economic value when a product such as tourism is associated with the forest but cannot be as easily measured as a traditional product like lumber. A common example is a resort that is adjacent to or surrounded by forest, where this setting is a key attraction and is prominently used in marketing the resort. An illustration of this is the Gamboa Rainforest Resort, where the forest setting is an integral part of the experience. If the forest is altered, tourists would not come or they would certainly not pay the same price.

We can distinguish between tourism in which forests and their associated wildlife values are the primary reason for coming, and tourism or recreation for which forests are a secondary attraction. There are very few forests which serve as primary attractions, containing special features which could overcome the cost and effort of international travel. (The Canopy Tower and Gamboa Rainforest Resort may prove to be primary attractions, but these are exceptional cases.) Therefore, it is important to explore forests' potential as a secondary attraction, using them to provide add-on experiences to enhance and extend a visitor's stay, and to provide recreational opportunities for local residents.

Benefits of Recreation and Tourism

With proper planning, sustainable tourism can produce benefits for visitors, local residents, businesses, managing agencies, and the resource base upon which tourism depends. These include:

- Psychological health and physical fitness
- Rural economic development and diversification
- Jobs, profits, taxes, and balance of foreign payments (foreign revenue)
- Environmental education
- Resource conservation and environmental protection
- Community pride and opportunity for locals to share their culture
- Learning about other people and places (two-way)
- Entertainment and fun
- Generating revenues and public support for protected areas
- Raising local awareness about the value of natural and cultural resources

You might ask – “How can tourism be used as management tool for resource conservation and environmental protection?” One example is the Gamboa Rainforest Resort’s assisting villages upstream in upgrading their sewage treatment facilities, to avoid future problems for their customers who wish to engage in watersports. The end result is improved water quality in the Chagres River and Lago Gatun, benefiting wildlife and all users of the waterway.

Using eco-volunteers to assist with scientific research or monitoring, or with stabilizing a historic building is another option. Many educational and scientific organizations specialize in this type of travel (see Appendix C). The USDA Forest Service “Passport in Time” (PIT) program, focusing on archeological and historic sites, is an example of a volunteer program organized by a public land-managing agency that could easily be applied to Panama’s national parks.

Marketing and educational programs can also be effective in generating benefits. Interpretive programs can help reduce the costs of vandalism, resource damage, and litter. Effective advertising can de-market over-used areas and distribute economic benefits to needy rural communities. Marketing programs can also be developed to attract certain types of desirable customers; for example, those interested in cultural heritage or birdwatchers, who tend to stay longer and spend more than other tourists.

USAID’s Role in Tourism

The Agency’s involvement with nature-based tourism is relatively recent, beginning in the mid-1980s, and the results are just now emerging. Agency experience with these projects suggests that “ecotourism can be a constructive component to promote...both environmental protection and development of private enterprise” (USAID 1996). Some call this “the double bottom line,” referring to profits and protection.

A review of tourism in USAID programs is currently underway and a database of tourism projects is being developed in the Washington Office (Mark Phillips, personal communication). Initial results show that between 1997 and 1999, 32 projects in 24 countries included a major or minor tourism component, and four regional programs had a tourism component, including the Latin American and Caribbean (LAC) region. Eighty percent of these projects received their allocation under the Environmental budget category. This included a “Parks in Peril” project to improve management of 20 parks in the LAC region.

Tourism Focus Areas for USAID-funded Projects

Coastal/Marine Areas	Community participation	Attractions privatization
Forest/Watershed Areas	Design of facilities	Market development
Wildlife	Infrastructure improvements	Training personnel
Cultural/Antiquities	Environmental protection	Revenue collection
Alternative income generation	Share of protected area revenues	

Source: Mark Phillips, USAID 1999

Several key issues and potential roles for USAID in tourism have been identified (USAID 1996). These include:

1. **Funding** – Identify and mobilize funding for potential private nature tourism investments.
2. **Policy** – Formulate policies to promote environmental tourism and to maximize its potential environmental and economic benefits, as well as community involvement in providing services and products such as guides, lodging, transport, and crafts.
3. **Assistance** – Provide information and training about nature tourism opportunities and operations.
4. **Green Tourism** – Support, monitor, and certify emerging international efforts to promote environmentally responsible tourism operations that conserve energy, recycle waste, and instruct staff and tourists on proper behavior in parks.
5. **Research** – Fund research on tourism’s positive and negative impacts so that decision-makers can understand both the economic contributions and environmental impacts.

It is important to keep these five issues in mind as USAID/Panama considers ways to become involved with forest-based recreation and tourism in the Panama Canal Watershed.

STRATEGIC ISSUES

Although the TCI Strategic Alliance effort has done an admirable job of addressing tourism strategy for Panama, there are a few additional issues that we think are important and should be considered, or given more emphasis, in long term planning.

Risks and Opportunities

The growth of recreation and tourism in Panama presents significant risks and opportunities. These must be understood and a long term response developed to maximize benefits and minimize the costs and impacts. Typically, natural resource management agencies resist dealing with such issues until they become a crisis. Rarely do they see sustainable tourism as a management tool. We recommend that USAID be proactive and champion forest-based eco-tourism as a strategic issue for its natural resource program.

Benefits-Based Management

Recreation and tourism planning needs to be benefits-driven and based on people and communities as much as infrastructure. Most resource management agencies will focus on *things*, such as visitor centers and trails, rather than *people* and *experiences* because that is where their expertise lies. We are also suggesting that the emphasis be put on outcomes -- specific desired benefits -- and that these be defined first as part of the strategic planning effort.

Mesoamerican Trails Program

In today's world everything is becoming connected. Therefore, we must learn to think beyond the boundaries of Panama or Central America and to tie local actions to larger frameworks to leverage efforts and maximize benefits. The Mesoamerican Trails project is one example. It would connect national parks and support eco-tourism throughout the region through a regional "biodiversity" theme and serve as a powerful tool for marketing and environmental education. Pilot projects in the Panama Canal Watershed could demonstrate the benefits of such trails and move Panama to center stage in international ecotourism. In particular, "water trails" in lakes and rivers is one area where Panama could take the lead.

Tourism Partnerships

There is never enough money to do everything necessary for the management and protection of parks and protected areas. Therefore, partnerships must be developed with recreation and tourism service providers in the private sector. They become a major part of the delivery system for the park's tourism, recreation and interpretive products and services, as well as public access and control points. Their customers are the park's customers. For example, rather than building an expensive and hard-to-maintain visitor

center, the Gamboa Rainforest Resort might be willing to provide public facilities on their property. They would probably also be interested in assisting with the development of a short loop trail to interpret the Camino de Cruces Trail for their guests as well as the general public.

Distribution of Benefits

Because most of the country's tourism and business infrastructure is concentrated in Panama City and Colon, very little economic benefit is distributed to smaller communities within the Panama Canal Watershed. This is an important issue worldwide because it is frequently rural residents who have some of the greatest impact on natural resources. Without their share of the growing tourism industry, they will continue to be forced to find other ways to make a living – such as farming, logging, and hunting – which can threaten the future of the national parks. So serious effort must be made to include rural communities as stakeholders in future tourism activities.

The Importance of Cultural Heritage

When dealing with world-class natural resources, it is sometimes easy to overlook equally important cultural heritage values – such as prehistoric sites, Spanish forts and historic roads, cultural landscapes, and traditional Indian cultures. What is ordinary to locals is frequently extraordinary to international visitors and even simple things like a farmer's market or an Indian canoe can be a tourism attraction.

The public's demand for life-enhancing travel and interpretive programs is exploding, and visiting cultural sites is becoming as popular as traditional outdoor recreational activities. One of the hottest trends in tourism today is travel that combines cultural attractions with the outdoors and learning. Therefore, it is important to include cultural sites and activities in future tourism and recreation programs.

Cruise Ship Tourism and Interpretation

Despite marketing efforts to show tourists that Panama is “more than just a Canal,” canal cruises remain a major focus for international visitors. This is an important set of customers which should not be overlooked. Cruise ship tourists would be interested in the natural and cultural history of the Panama Canal Watershed in general and national parks in particular - with the right interpretive program.

A very similar situation exists with cruise ships on the Inside Passage in Alaska. There, Forest Service interpretive specialists provide on-board interpretive talks and materials on a regular basis as part of their official duties. The cruise line covers their expenses and the agency provides their salaries. It is a very effective partnership. The cruise line is able to provide an enhanced experience for their customers, tourists receive the best information available and a chance to interact with an expert, and the agency is able to effectively reach a wider audience with its conservation message.

This is a very important “captive” audience that the Panama Canal Watershed parks should take advantage of. Not only could interesting lectures be developed for on-board presentation, this could be an opportunity to introduce cruise tourists to other attractions and encourage them stay longer or return for a different experience in the future. Donations to worthy environmental programs could also be another benefit of an interpretive program.

Panama City as an Urban “Base Camp”

Panama is unique in having a largely intact rainforest, with spectacular wildlife and outdoor recreational opportunities, all within minutes of a major metropolitan area. (It was the first time in our experience that we were able to stay in a major hotel and commute to work in the parks daily!) The city provides the “base camp” for visitors and the parks provide the outdoor attractions.

This could create some very interesting strategic partnerships between businesses in the city and the national parks. Joint marketing, shared interpretive materials, businesses “adopting” a park or a project, or development of collaborative “soft adventure” tour packages are all possible. A symbiotic linkage between hotels and the environment might even stimulate interest in various “green hotel” programs promoting recycling and conservation of water and energy resources. (Such programs can save hotels money by reducing their energy and water costs.)

Panama City as a Gateway

Panama is a convenient and attractive destination for travelers from the United States. With its modern infrastructure and its extremely accessible natural and cultural attractions, Panama City could establish itself as the gateway not only to Panama, but also to the rest of Central America. First time visitors to a country or region frequently “test the waters” by staying in a conventional hotel and then venturing into less familiar areas as they become more confident with the environment and culture. Panama City’s amenities would make this process quick and easy.

Different packages could be developed to provide visitors with increasingly more challenging activities as they develop their confidence and experience. The national parks within the Panama Canal Watershed need to evaluate their ability to provide a wide range of outdoor opportunities, from “soft” to “hard” recreation, adventure, education, and wilderness experiences.

Educational Travel

To meet the growing demand for vacations that combine travel with learning, organizations ranging from universities and museums to zoos and environmental organizations have developed a wide range of educational travel programs for their members, frequently with their own scientific experts (see Appendix C). The advantage of collaborating with such institutions is that they, and their outbound tour operators, can

handle all the advertising and logistical issues, deliver the customers to you, and help develop and provide the educational experience.

Non-profit educational travel organizations and the tour operators who specialize in this type of tourism have an annual convention in the Washington, DC area. Panama is ideally situated for educational travel programs featuring natural and cultural heritage, and this conference would be an excellent way to find potential partners.

POTENTIAL PILOT PROJECTS

The following projects are offered as a “menu” of ideas to stimulate further discussion for USAID’s on-going strategic planning effort. Most are preliminary ideas and some are described in more detail than others. They generally fall into two major categories: support to existing master plans for the national parks, and general assistance to the National Environmental Authority (Autoridad Nacional del Ambiente – ANAM).

Many of these projects are inter-related and several are encompassed within the broad framework of the Ocean-to-Ocean Heritage Area/Corridor concept. These relationships can be roughly illustrated by the following listing, which also shows the order in which these projects are described below:

Table 1 – Possible USAID Projects Supporting Recreation and Tourism in the Panama Canal Watershed

Projects in Support of National Park Master Plans
<ul style="list-style-type: none"> • Ocean-to-Ocean Heritage Area/Corridor <ul style="list-style-type: none"> ○ Camino de Cruces Trail projects ○ Pipeline Road ○ Scenic Byways ○ Flatwater Kayaking ○ Gamboa Marina
<ul style="list-style-type: none"> • Eco-Lodge Workshop • Embera Villages Ecotourism Assistance • Ecotourism Case Studies
General Assistance to ANAM
<ul style="list-style-type: none"> • USA Study Tour • Implementation of the TCR Strategic Alliance • Capacity Building and Working Tools [various topics]

Ocean-to-Ocean Heritage Area/Corridor

Heritage areas are specially designated rural and urban zones, rivers, corridors and tour routes that celebrate the history, culture and natural heritage of a region and promote

community and economic development and resource protection. In North America, such areas have been successful in harnessing a wide range of community assets and interests, including: historic preservation, outdoor recreation, tourism, museums, performing arts, folklife and crafts, and scenic and working landscapes, “creating a sum that is greater than its parts” (National Center for Heritage Development, USA). Heritage areas:

- Often involve multiple jurisdictions
- Have a distinctive history and geography
- Combine public and private sector leadership
- Are effective tools for fostering regional cooperation
- Have local or national significance

A heritage area is a place with a distinctive history and geography where residents seek to develop their natural and cultural heritage to enhance the region’s well being (Mastran n.d.)

In the United States, there are more than a hundred locally-designated heritage areas and another 16 or so federally recognized by Congress as National Heritage Corridors, National Heritage Areas, or National Heritage Tour Routes. Of these national designations, by far the vast majority feature the sites and cultural landscape of the Industrial Revolution. Although Nineteenth Century canals, factories, railroads, and mines are frequently the focal point of these designations, they also include related natural heritage values as part of the cultural landscape.

There are similar programs in Canada, where the “Heritage Region” approach to rural development balances both natural and cultural landscapes and emphasizes four essential elements or goals:

- Acceptable social conditions
- Economic opportunities
- Secure identity
- Sustainable environment

The Heritage Area concept has tremendous potential for the Panama Canal area. Not only could it help define a geographic region, it could provide an important framework and process for planning, development, tourism and conservation. “The process involves building partnerships that will work to educate residents and visitors about the region, protect the best of its natural and cultural heritage, and enhance the area’s economy through business investment, job expansion, and tourism” (Mastran n.d.).

The idea is to develop a Heritage Area (or Corridor) focusing on the centuries old trans-isthmus passage between the Atlantic and Pacific Oceans. This would include the natural, cultural, and scenic resources within, and associated with, the zone that was used

for transportation by various means – by river, trail, paved road, railroad, and the present day canal – from Isla Culebra and Panama City on one side to Fort San Lorenzo and perhaps Portobelo on the other. The most significant of these resources would be conserved and utilized for purposes of recreation, tourism, education, research, and economic development.

The following studies would be needed to identify these significant resources, to match them with potential beneficial uses, and to plan their development in a coordinated manner:

- Cultural resource overview
- Landscape/scenic character study
- Tourism market analysis
- Recreation planning (including visitor information needs)
- Interpretive planning

Some of this information may already be available for individual parks within the proposed Heritage Area, and this would be a good way to integrate these data. The interpretive planning and cultural resource overview recommended for the Camino de Cruces Trail would cover these topics. It is likely that new fieldwork will be required for both the landscape/scenic character and recreation planning.

Heritage Area Action Items:

1. Assess the potential for Heritage Area designation using an expert team
2. Evaluate the status of existing information
3. Include the results of interpretive planning and cultural resource overviews conducted for the Camino de Cruces Trail project
4. Determine the level of interest and support of government agencies, NGOs, and private sector partners
5. Determine the fit between the Heritage Area concept and the TCR Strategic Alliance proposed routes
6. Conduct new fieldwork to fill in missing information

Linkages with other projects. With the possible exception of the Embera Villages Ecotourism Assistance, Ecotourism Case Studies and Eco-Lodge Workshop, all the projects described below are directly related to the Ocean-to-Ocean Heritage Area/Corridor concept.

Camino de Cruces Trail (various projects, from small to large scale)

This truly remarkable historic trail, which still contains traces of the original 480-year old cobblestone paving, was part of one of Panama's original trans-isthmus routes. The Camino provided the overland connection from Panama City through the low hills forming the continental divide to the town of Venta de Cruces on the banks of the

Chagres River. From there, travelers -- from Spanish conquistadors, pirates, '49ers on their way to the California gold rush -- made their way by water to and from Fort San Lorenzo at the river's mouth on the Caribbean side. Today, Lago Gatun has inundated the river at the site of Venta de Cruces, but its route can still be re-traced by boat. Although challenging, especially in rainy weather, and in some places highly eroded and blocked by fallen trees, the Camino can be hiked. But except for the roadside picnic site along the Madden Road, there is no on-site interpretation or easy access.

Hiking the historic and beautiful Camino de Cruces could be combined with mountain biking on primitive roads and paddling across portions of Lago Gatun, to make this the premier ocean-to-ocean route of the proposed Mesoamerican Trails program. This series of non-motorized routes is envisioned connecting national parks and other protected areas from Guatemala to Panama to promote biodiversity and ecotourism.

Planning and assessment work is urgently needed to identify cultural resource values, recreational opportunities, and interpretive themes for the Camino de Cruces. This could be a very simple project involving one or more short loop trails adjacent to the historic Camino, the entire overland route, or a trans-isthmus multi-modal route involving hiking, biking and paddling, or it could involve all of these, in phases.

For anything beyond a few simple loop trails, planning should be comprehensive and carefully done to avoid jeopardizing significant resources and foreclosing future options. This should consider the entire historic Camino, not just an isolated segment, as well as the route's role in the history, recreational needs, and tourism potential of the trans-isthmus area. This should also consider the need for a wide spectrum of recreation opportunities, from highly accessible and developed visitor facilities to primitive and challenging. For example, the section from Madden Road to Venta de Cruces near Gamboa may be the best example of a primitive recreational experience and a chance to see original traces of the Camino in its natural setting without any restoration, trail markers, or on-site interpretation -- in other words, a "self-discovery" wilderness experience.

The development of short loop trails at key access points along or adjacent to the Camino de Cruces could compliment or be an alternative to realigning difficult sections of the original Camino. Likely sites for these would be at Venta de Cruces, which could be accessed by boat from the Gamboa Resort, at the Canopy Tower, and at the Madden Road picnic area. Gamboa Resort and Canopy Tower appear to be willing to assist with trail monitoring, maintenance and interpretation. Limiting new trail construction and on-site interpretation to these areas would simplify the planning and environmental assessment work required.

The possible sequence of work is as follows:

1. Conduct a cultural resource overview of all existing archival information on the entire Camino de Cruces and Chagres River route from Panama City to Fort San Lorenzo. This information is essential for future work at any scale and will

- provide the foundation for assessing cultural significance and project impacts and developing an interpretive program. Make a summary available on a website.
2. Conduct an archeological survey of the entire historic Camino, including all major branches and associated historic sites and features. Map all sites and routes on the best topographic map scale available. This may or may not require GPS mapping. (Note: this might be an excellent opportunity for involving local and international volunteers.)
 3. Assess the historic and archeological significance of all cultural features identified, as well as their potential for interpretation.
 4. Develop an interpretive plan using the information obtained in step #1.
 5. Assess trail conditions and the recreational opportunities along the entire historic Camino using the Recreational Opportunity Spectrum (ROS) system.
 6. Design and map possible trail re-alignments and/or new loop trails.
 7. Develop planning alternatives using input from the public and stakeholders and assess their potential impacts and benefits. Benefits could include historic preservation, scientific research, public interpretation, enhanced recreational experiences, improved public access, environmental education and protection, and economic diversification through tourism.
 8. Select an alternative and implement decisions for cultural heritage management, recreation development, interpretation, and tourism, etc.

Note: A simple project involving 1 to 3 new loop trails may only require items #1, 4, and 6 and could perhaps be accomplished in a year. More elaborate undertakings potentially affecting the historic Camino would take much longer because of the need to evaluate extensive historic values and conduct comprehensive planning and environmental impact assessments, including public involvement.

Camino de Cruces Trail Priority Action Items:

1. Cultural resource overview
2. Interpretive plan
3. Determine which sections are suitable for restoration and interpretation

Linkages with other projects. Together with the Pipeline Road, the Camino de Cruces Trail would form the core of an Ocean-to-Ocean Heritage/Corridor and/or Tour Route. It also be supplemented by a kayak “water route” through Lago Gatun. At its intersection with the Madden Road, the Camino de Cruces would be an important interpretive stop along this potential Scenic Byway.

Oleoducto (Pipeline) Road

Constructed during WWII to service the oil pipeline across the isthmus, the “Pipeline Road” has become a world-famous site for serious bird-watchers. Until the bridges became unsafe, it provided the primary road access into the western end of Soberania National Park. The road also provides important access for on-going scientific research in the area.

A preliminary inspection in November 1999 revealed significant problems and estimated a cost of \$500,000 to \$1,000,000 to repair both the road and the 11 bridges (Keller 1999). The road surface up to the last passable bridge is very rutted and impassible in wet weather. Beyond that point, the third bridge at Rio Frijoles, the road surface is in much better condition.

The question now is how to manage this important roadway to protect the environment and continue to provide access for public use, management, and research. Planning is needed to develop and evaluate alternatives for the Pipeline Road. An initial assessment of the situation suggests the following key issues need to be addressed:

- Controlled access (gate and manned entrance station)
- Visitor information (maps, brochure, signage)
- Existing use information
- Potential demand (niche markets)
- Fees (public entrance, commercial tours, scientific research, concessions)
- Detail estimates of bridge reconstruction and road maintenance
- Potential recreation opportunities available
- Impacts and benefits
- Linkages to other trails and parks
- Public safety (from wildlife or unexploded ordinance)
- Existing regulatory restrictions on development of overnight facilities

A key question in the planning process involves the range of recreational opportunities potentially available, from hiking on primitive trails with no on-site visitor facilities or interpretation, to bus tours on well-maintained roads and bridges, to modern facilities including overnight lodging. Ideally, the selected alternative would maximize the benefits and minimize costs and impacts. For example, a small-scale eco-lodge would probably be much more appropriate and cost-effective than a conventional hotel.

The linear nature of the Pipeline Road also provides excellent opportunities for a range of recreational experiences. The beginning of the road might be paved and have parking and turn-around space for vans and buses, as well as a staffed office, small visitor center and public bathroom. The next zone might have restrictions on types of motorized vehicles, to allow for a more natural experience and avoid the high cost of road maintenance and bridge reconstruction. Each successive zone could step down the Recreation Opportunity Spectrum until there is only foot traffic in relatively undeveloped settings.

Concessions for commercial uses should also be considered. In fact, this may be the only practical way to pay for public facilities, bridge repair, and on-going road maintenance. In the USA, the agency responsible for managing National Forests faced a similar decision with winter recreation in the 1950's. It could have invested limited public funds in developing ski lifts and public facilities, or it could encourage the private sector to do so. The Forest Service decided, wisely, not to get into the ski area business directly. Instead, it acts as landlord and manages both the commercial use and public access through special use permits.

With oversight from Soberania National Park, a permittee could not only develop an ecolodge at some acceptable location along the Pipeline Road, it could be required to maintain the bridges and roadway for public access. Similar permits could be developed for commercial operators who use the Pipeline Road for interpretive tours.

This would be a “win-win-win” situation. The Park receives rental income and avoids the cost of bridge repair and road maintenance, permittees have exclusive rights within the authority of their permits, and the public enjoys improved access and professional services and products, such as interpretive guides and overnight lodging.

Pipeline Road Action Items:

1. Obtain a detailed cost estimate for bridge reconstruction and road maintenance
2. Conduct an assessment of the Recreational Opportunity Spectrum
3. Develop a plan and evaluate possible alternatives
4. Develop a prospectus to locate potential investors

Linkages with other projects. The Pipeline Road would be an integral part of a trans-isthmus route within an Ocean-to-Ocean Heritage/Corridor and/or Tour Route. The Flatwater Kayak Assessment will explore connections between the Pipeline Road and the Caribbean Ocean via a “water route” across Lago Gatun. Recreational and tourism opportunities along the road could also be enhanced by an ecolodge, perhaps stimulated and supported by the Eco-Lodge Conference.

Scenic Byways

The paved roadways of the various national parks within the Panama Canal Watershed pass through areas of high scenic and historic value and provide enjoyment for both residents and tourists alike. Efforts should be made to include protective measures to ensure retention of the cultural and natural landscape characteristics important to tourism, as well as serve as a vehicle for interpretation and economic development.

Scenic Byway Action Items:

1. Evaluate all major roadways' suitability for scenic highway designation
2. Identify opportunities for interpretive and scenic pull-outs

Linkages with other projects. Scenic Byways would protect and enhance the driving experience through an Ocean-to-Ocean Heritage Area and provide important interpretation for the Camino de Cruces Trail, as well as other scenic and historic sites along the route.

Flatwater Kayaking Water Routes

The Panama Canal Watershed has remarkable opportunities for enjoying forested waterways in cruising or "sea" kayaks. These easy-to-use boats require no special skill and can be used for short trips or extended expeditions in coastal areas and on lakes and slow-moving rivers. A novice can easily paddle 5 miles and an expert up to 20 miles a day. Safe and versatile, they can be used by nearly age level for a wide range of activities, including exercise, bird-watching, fishing, sightseeing, photography, sailing, and extended camping. Sea kayaking is a fast-growing sport with the potential to open up little-used areas which are inaccessible to more conventional watercraft.

Presently there is only one commercial sea kayak tour offered in Panama, in the San Blas Islands, and a second may begin operating in the Bocas del Toro region in the spring of 2000. No tours are offered in the Panama Canal Watershed, although rentals are available at the Gamboa Rainforest Resort.

The two areas which appear to be best suited for sea kayaking are the myriad islands and indented shoreline of Lago Gatun and the equally attractive Lago Alajuela. The relatively flat sections of Rio Chagres above and below Lago Alajuela may also be suitable. Depending on the amount of water being released, the section of the Rio Chagres below Gatun Dam to its mouth may or may not be safe for sea kayaking.

If a "water trail" using sea kayaks could be developed between Gamboa and Gatun Dam, it would retrace the historic route along the Chagres River and connect with the Camino de Cruces Trail to provide a sea-to-sea route from Panama City to the Caribbean. Sea kayaks could also be used to explore the extensive shoreline of Lago Alajuela and perhaps up the Chagres River to one or both of the Embera villages. Villagers could potentially benefit through camping fees or by providing guiding, lodging, meals, food supplies/water, transportation, souvenirs, and cultural performances. The abandoned village on the lake might make an excellent overnight camping facility, rented out and maintained by the previous occupants.

Flatwater Kayaking Action Items:

1. Conduct an assessment of Lago Gatun, Lago Alajuela, and Rio Chagres
2. Consider eco-lodges along the lake shore or on an island, accessible only by boat
3. Provide training and information to those interested in developing kayak tours
4. Organize a familiarization (FAM) tour for local and outbound tour operators
5. Organize a sea kayaking event or workshop

Linkages with other projects. A flatwater kayaking route through Lago Gatun would connect with the Gamboa Marina and the Pipeline Road, and provide the “water trail” portion of a trans-isthmus route. It would also be a pilot project for the proposed Mesoamerican Trails system. Kayak tours could also support eco-lodges along the shore of Lago Gatun, as well as the ecotourism programs of the Embera Villages above Lago Alajuela. In addition, a 3-year, 5,000 mile sea kayak expedition from California to Panama is scheduled to pass through the Panama Canal sometime in second half of 2001 (CASKE 2000). This would be an excellent opportunity to organize a special kayak event or workshop featuring these intrepid explorers and the knowledge gained during their journey.

Gamboa Marina

The boat ramp at Gamboa is the principal public facility for Panama City residents to launch boats and hire fishing guides on Lago Gatun. However, it is small, poorly designed and lacks basic public facilities such as restrooms. Although the marina at the Gamboa Rainforest Resort on the opposite shore is brand-new, it is much more expensive and will not eliminate the need for a public boat ramp and associated marina services. The Resort serves an entirely different market.

It would take a Forest Service 2-person survey crew 2-3 days to survey the site and develop a base map, and a professional landscape architect another 2-3 days to develop alternative plans. Upon selection of the preferred alternative, completion of the working drawings and specifications would require 1-2 weeks by the landscape architect, depending on the number and variety of facilities/site furnishings and the level of detail desired. This could be accomplished back in the USA, if time is available.

A Forest Service professional engineer might also be needed, again depending on the type of facilities and level of detail desired in the drawings and specifications. The landscape architect and engineer could perform as the survey crew as well, requiring a total of 5-7 days in Panama, with the balance of the work occurring in the USA.

Gamboa Marina Action Items:

1. Survey the site and prepare a map
2. Develop alternatives
3. Complete working drawings and specifications

Linkages with other projects. The Gamboa Marina could potentially be a stopping point along a Scenic Byway, providing restroom facilities, interpretation, refreshments, and a scenic viewpoint. It might also be a place to rent kayaks to explore this arm of Lago Gatun, including the site of Venta de Cruces and a future loop trail on the Camino de Cruces. Downstream kayak trips on the Rio Chagres originating from Madden Dam could take out here as well.

Eco-Lodge Conference

Interest in environmentally-sensitive “eco-lodge” development is growing in Panama. The Gamboa Rainforest Resort, scheduled to open in the spring of 2000, will be perhaps the world’s first 5-star eco-resort. And the Canopy Tower, although less than a year old, is already attracting acclaim from serious birdwatchers around the world. In addition, there are other small-scale, community-based nature lodges, some no more than single huts in Indian villages. Certainly these pilot projects will be closely watched and others will soon be jumping on the “green resort” bandwagon.

In Panama there is a variety of ecological accommodations ranging from the rustic ***hut*** and the simple ***lodge*** to the 5-star ***resort***. However, they all share some things in common. They are locally-owned, respect the local culture and environment, and connect the visitor to the land and to people through environmental education and interpretation. However, because they are somewhat unconventional, they may also experience difficulty finding conventional loans from banks.

Eco-lodge workshops presented by organizations such as The Ecotourism Society (USA) and the US National Park Service have been very useful in stimulating development of mid-level eco-lodges world-wide. But nowhere has there been a program addressing the range of eco-facilities from huts to major resorts, perhaps because no one area has had examples of all three, until now.

Panama is uniquely qualified to host such a conference. IPAT is interested and the Gamboa Rainforest Resort could serve as the main venue and provide the case study for a major eco-resort. Canopy Tower could be the case study for mid-level eco-lodges, and a discussion of simple eco-huts could be handled through presentations and perhaps a visit to the nearby Embera village. In addition, Conservation International, which has a well developed ecotourism program, is very interested in participating.

Eco-lodge Conference Action Items:

1. Prepare a proposal and workshop outline
2. Discuss the concept with ANAM, IPAT, Gamboa Resort, Canopy Tower, etc.
3. Identify potential presenters and organizers

Linkages with other projects. Ecotourism Case Studies prepared on the Embera Villages' ecotourism programs, Canopy Tower, and Gamboa Rainforest Resort could be presented at the conference. The Pipeline Road's tremendous potential for an ecolodge could also be discussed. The Flatwater Kayak Water Routes assessments may identify opportunities for water-based eco-huts or lodges along Lago Gatun and Lago Alajuela.

Something that has not been previously considered in eco-lodge development is strategic planning and partnerships between separate facilities, such as lodge-to-lodge paddling or hiking along a major trans-isthmus route, or collaboration between the private and public sector and NGOs within a larger Ocean-to-Ocean Heritage Area. Some of this type of synergy has already begun to take shape between Gamboa Rainforest Resort and Canopy Tower, which are connected by the Camino de Cruces and who jointly utilize the Pipeline Road. Other connections might be made between these resorts and the Smithsonian's research station on Isla Barro Colorado through the development of kayak "water trails" on Lago Gatun.

Embera Villages Ecotourism Assistance

We briefly visited two Embera villages located on the banks of the Chagres River immediately upstream from Lago Alajuela. Relatively traditional in their architecture and dress, both are interested in developing ecotourism. The lower community, Parara Puru, has recently moved upstream from a site on the shore of the reservoir. In fact, they were still in the process of constructing new homes when we visited in November, 1999. In addition to their large motorized dugout canoe for transporting guests, they have a short interpretive trail nearby. Their recently abandoned lake-side village might also serve as a base-camp for kayakers.

The upper village, Embera Drua, about 3 miles upstream from the reservoir, is more established and is also actively involved in tourism. In addition to an interpretive trail, the village has recently constructed a simple hut for visitors, sells souvenirs – primarily tagua nut carvings and baskets. They also perform dances regularly for visitors brought to the village by tour operators, as well as for cruise ship audiences in the Canal.

It appears that both villages are eager to develop their tourism potential without destroying their traditional lifestyle and losing control to outsiders, but need some assistance. Their attractive villages and traditional forest and riverine lifestyle makes them especially well suited for two specialty niche markets: educational (cultural) and kayak adventure travel. Special products for educational travel groups, such as museums

and universities, could easily be developed, as well as volunteer projects to assist with construction of trails and eco-huts.

The fact that the Embera are currently receiving assistance from Jared Elling, an energetic, young American business specialist working with IPAT, accounts for the extensive list of possible actions items presented below.

Embera Villages Ecotourism Action Items:

1. Conduct a rapid assessment of the villages' tourism Strengths, Weaknesses, Opportunities, and Threats (SWOT)
2. Involve both villages with kayak assessment and training
3. Provide technical assistance for trail design and construction
4. Provide assistance with interpretation and visitor information (brochures)
5. Consider adding an elevated walkway or viewing platform to the Embera Drua interpretive trail
6. Find ways to assist with marketing, perhaps via the internet
7. Provide assistance with souvenirs based on sustainable use of forest products
8. Explore partnerships with educational travel and eco-volunteer organizations
9. Continue and expand guide training

Linkages with other projects. An ecotourism Case Study of the villages' ecotourism programs could be presented at an Eco-Lodge Conference. The Flatwater Kayak Assessment should seriously consider the potential role of the Embera as hosts and guides. Depending on how broad the boundaries are, the Embera Villages of Lago Alajuela may also become involved with an Ocean-to-Ocean Heritage Area program.

Ecotourism Case Studies

As interest in and experience with ecotourism increases in Panama, it will be important to have information on the range of environmentally responsible tourism operations in existence. This will be useful for training purposes, for monitoring performance, sharing lessons learned, and stimulating further development of "green" businesses. Case studies could also be used to support nominations for various international ecotourism awards, further raising the visibility of Panama and USAID environmental programs.

Likely candidates for case studies include Gamboa Rainforest Resort, Canopy Tower, and the Embera Villages on the upper Chagres River. All are located within the Canal Watershed and within or adjacent to national parks, and take advantage of the amenities offered by these protected areas. These case studies could be done independently by USAID or in cooperation with local and/or international NGOs (ANCON, Conservation International, etc).

Ecotourism Case Study Action Items:

1. Contact potential study candidates
2. Identify collaborators
3. Conduct interviews and gather information

Linkages with other projects. These case studies can be featured in the Eco-Lodge Conference.

USA Study Tour

The purpose of a study tour to the United States would be to provide park managers from Panama with the opportunity to see relevant programs and interact with their counterparts. A trip of 1-2 weeks for 12-18 persons would be fairly easy to coordinate. Possible topics include:

- Trail construction and maintenance
- Interpretation, environmental education, and watchable wildlife
- Visitor information services (maps, signage, brochures)
- Water recreation/marinas
- User fees, special use permits, and concessions
- Scenic Byways
- Volunteer programs
- Various forms of outdoor recreation (hiking, biking, paddling, swimming)
- Indian recreation/tourism programs
- Raised camping platforms for boaters
- Eco-lodges

Perhaps the best opportunity for experiencing this range of topics in a relatively short time is in Florida. It has the advantage of a common colonial history, including Spanish Forts as tourism attractions, and somewhat similar environmental conditions. It also has a wide range of tourism and recreation programs provided by state and federal agencies and the private sector.

It would be important to have the trip organized and hosted by an organization having knowledge of the area and the topics and the ability to provide Spanish translation.

USA Study Tour Action Items:

1. Identify priority topics based on local need
2. Identify specific sites to be visited
3. Contract with an organization to plan and host the trip

Linkages with other projects. Virtually all other projects could be study topics.

Implementation of the TCR Strategic Alliance

The proposals and recommendations generated by the TCR Strategic Alliance listed on pages 11-12 represent significant opportunities for collaboration between USAID/Panama and ANAM within the Panama Canal Watershed in general and the national parks in particular. For many of these, the USDA Forest Service and other federal agencies in the USA could provide technical support and input.

The list of possible recreation and tourism projects we independently identified and listed in Table 1 (page 20) all closely match or are easily assumed within the TCR topics. Plus, we are pleased to note that our recommended priority project, a trans-isthmus route involving the Camino de Cruces trail, is also the TCR priority. However, we suggest a slightly broader approach, involving a special Heritage Area or Corridor designation and methodology, which has been proven effective in similar areas elsewhere.

In addition, there are three other topics on the TCR list which we did not initially identify for implementation of national park plans, but which have considerable merit. They are also things which the USDA Forest Service has special expertise and interest. These include:

1. **Limits of Acceptable Change (LAC)**, a consensus process for identifying and monitoring recreation and tourism impacts. LAC was developed by Forest Service wilderness and recreation specialists and is used in various forms by many federal agencies in the USA.
2. **Upgrading Panama's archeological sciences and historic preservation.** The Forest Service and other US federal agencies have extensive experience with researching, interpreting, and protecting archeological and historic sites, artifacts, landscapes, historic, trails, and buildings.
3. **Developing participatory and educational tourism experiences.** The USDA Forest Service has 10 years experience with volunteer archeology projects. More than 10,000 people have worked with Forest Service archeologists and historians as part of the agency's award-winning "Passport in Time" (PIT) program.

TCR Alliance Action Items:

- Use the TCR Alliance to help implement national park master plans
- Explore ways of applying TCR recommendations to other projects, rather as stand-alone activities
- Determine priority projects in discussion with ANAM and IPAT

General Assistance to ANAM – Capacity Building and Working Tools

There are several topics which may be of special relevance to the National Environmental Authority (ANAM) related to increasing organizational capacity, but which are not yet fully defined. Before these can be proposed as specific projects, more discussion will be needed with their staff and with USAID personnel. They are listed here as “book marks” and starting points for future dialogue. The USDA Forest Service has expertise in each of these areas.

- ✓ **Environmental Education** – especially geared for school children
- ✓ **Improved Image and Visibility** - press kit, earned media, FAM tours, and special events
- ✓ **Visitor Information Services** – maps, brochures, signs, and publications
- ✓ **Interpretive Associations** – to help develop and deliver visitor information
- ✓ **Business Tools** – commercial permits, recreation fees, and concessions
- ✓ **Ecotourism** – training and toolkit (handbook tailored to local needs)

ANAM Assistance Action Items:

- Discuss project priorities with ANAM
- Identify USDA Forest Service technical assistance

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APPENDIX A

ECOTOURISM DEFINITIONS, PRINCIPLES & GUIDELINES

WHAT IS ECOTOURISM?

It is an ecological *perspective*...understanding the inter-relationships between tourism and the environment

A *philosophy*...respect for the land and people

A *strategy*...tourism as a tool for conservation and economic development

An *activity*...tours based on natural and cultural resources

ECOTOURISM GOALS

- Sustainability
- Resource conservation
- Environmental awareness
- Life-enhancement and personal growth
- Inter-cultural contact and understanding
- Economic development and diversification
- Maximum benefits and minimum costs/impacts
- Understand the linkages between the tourism industry and the ecosystem

ECOTOURISM PRINCIPLES

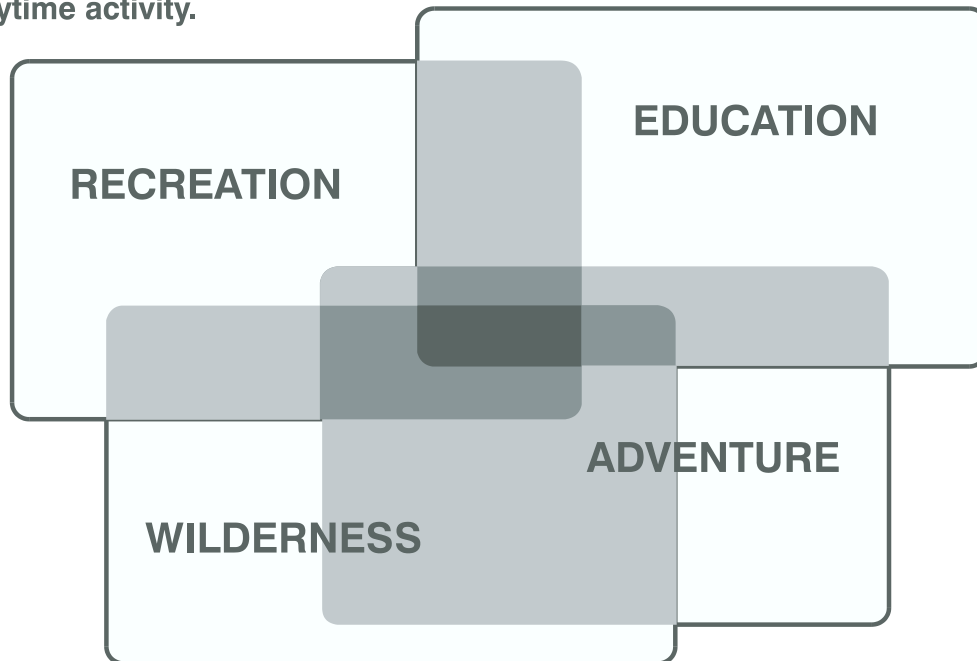
- Provide authentic, meaningful and intimate educational encounters
- Encourage low-impact behavior
- Get personally involved – volunteer and donate money
- Buy local products and services
- Conserve resources – limit consumptive uses
- Respect local ecological, cultural and economic needs
- Plan carefully and involve locals
- Provide visitors with proper information
- Protect the values that attract visitors

APPENDIX B

Resource-Based Tourism Niches

Outdoor recreation to enjoy nature, to relax and have fun, frequently with others. Low physical risk and challenge. Primarily a daytime activity.

Learning & discovering nature through high quality information. Low challenge & risk. Small groups. Unusual & spectacular species.



Recreation within pristine environments. Solitude is important. Moderate challenge & risk. Primitive camping & very small groups.

Conquering nature through personal accomplishment. Sharing thrills and excitement with others in remote places. Moderate-high challenge & risk.

APPENDIX C – EDUCATIONAL TRAVEL

Museums, universities, non-governmental organizations, zoos, and other non-profit organizations in the USA develop and sponsor educational trips to international destinations, frequently with their own scientific experts. Educational tours based on the natural and cultural attractions within the Panama Canal Watershed could be developed in partnership with organizations such as those listed below (not an exhaustive list).

Non-Profits in Travel Conference (NPTC) [www.nptc2000.com]

An annual conference of “non-profits in travel” and the tour operators or “suppliers” who specialize in educational travel, is held in the Washington, DC area each February. This is an excellent opportunity for countries and destinations to increase their visibility by sponsoring luncheons, providing materials, and delivering presentations, and to develop potential linkages with organizations and travel suppliers.

World Wildlife Fund Travel [www.wwf.org/travel]

WWF offers their members trips to areas of the world rich in wildlife that highlight the organization’s goals. Led by specialists and WWF staff, these trips visit WWF-sponsored projects as well as other “Global 200” sites identified for priority protection as a natural area of globally outstanding importance.

Elderhostel International Programs [www.elderhostel.org/srch/int]

Elderhostel organizes study programs for persons over 55 years of age. Some programs have a “service” orientation, where participants assist with a work project.

Interhostel [www.learn.unh.edu/INTERHOSTEL]

The University of New Hampshire operates educational travel programs for adults over 50 years old.

Experiment in International Living [www.worldlearning.org]

This non-profit organization promotes intercultural learning through homestays, educational travel, study abroad and other cultural immersion programs.

Smithsonian Study Tours [www.si.edu/tsa/sst]

The Smithsonian Institution offers approximately 360 tours to 250 destinations worldwide. Their long-term scientific research programs in Panama make them an ideal partner for educational tours within the Panama Canal Watershed.

Educational Travel Publications and Directories

Publications such as *Transitions Abroad* [www.transitionsabroad.com] list university-based programs available for international students, as well as directories specifically geared for international education. This is primarily classroom training, but also includes field research opportunities. For a listing of international study directories, see the article on “Marketing on the Internet” by Heather O’Conner on the *Transitions Abroad* website.

Earthwatch Institute [www.earthwatch.org]

Earthwatch Institute “promotes sustainable conservation of our natural resources and cultural heritage by creating partnerships between scientists, educators, and the general public.” In addition to volunteering their labor, participants donate a portion of their fee to help pay project expenses.

Ecovolunteer Program [www.ecovolunteer.org]

This is an international network of national volunteer agencies and projects. For example, ecovolunteers might help build interpretive trails, which would then serve as tourism attractions.

PHOTOGRAPHS

Figure 1

Boundary signs for Soberania National Park were installed with USAID assistance as part of the MARENA Project.

Figure 2

The Pipeline Road has an international reputation among serious bird-watchers. However, unrestricted use and lack of maintenance has created problems in some areas, especially during the wet season.

Figure 3

Built during WWII to service the oil pipeline, the Pipeline Road needs immediate attention. A preliminary inspection estimated a cost of \$500,000 to \$1,000,000 for bridge and road repair.

Figure 4

The unoccupied guard station could be used to control access, collect fees, and provide visitor information for the Pipeline Road.



Photo 1



Photo 2



Photo 3



Photo 4

Figure 5

The newly constructed back-country guard station in the Chagres National Park near Gamboa.

Figure 6

This informal sign informing visitors about the Panama Canal Watershed was developed by the villagers of Mocambo Abajo.

Figure 7

With a little assistance, the cultural museum in the village of Mocambo Abajo could be a tourist attraction and source of visitor information for the Chagres National Park.

Figure 8

Currently, Mocambo Abajo's "Casa Cultural" displays artifacts, photographs and maps relating to Spanish Colonial history. It could also interpret the Camino de Cruces and associated ruins nearby.



Photo 5

Photo 6



Photo 7

Photo 8



Figure 9

Ruins of what appear to be a small chapel along the Camino de Cruces near the village of Mocambo Abajo. The villagers are interested in providing guided tours to this site.

Figure 10

Remains of the customs house at Venta de Cruces, the terminus of the Camino de Cruces. A short interpretive loop trail here would be accessible by boat from the Gamboa Rainforest Resort and from the public marina.

Figure 11

Some sections of the Camino de Cruces still retain their original cobble paving stones. This section is near the picnic site on the Madden Road.

Figure 12

Heavily eroded sections of the Camino de Cruces are deeply cut into the forest floor. During heavy rains these become small streams, adding to the challenge and adventure of the hiking experience.



Photo 9



Photo 10



Photo 11



Photo 12

Figure 13

The Spanish fort of San Lorenzo, at the mouth of the Chagres River, guarded the Caribbean terminus of the Camino de Cruces-Chagres River route. Although slightly outside the Panama Canal Watershed, it is an integral part of the region's history and an important site for tourism and visitor information.

Figure 14

The Gatun Dam and hydro power station are also important sites for interpreting the Canal and watershed.

Figure 15

Many of the islands contain monkeys. Some are bold enough to beg cookies from boaters, an experience that will delight local residents and foreign visitors alike.

Figure 16

The myriad islands and forested waterway of Gatun Lake offer unlimited opportunities for watersports and wildlife viewing.



Photo 13



Photo 14



Photo 15



Photo 16

Figure 17

Many of the smaller islands in Gatun Lake are leased for private recreation use. Arrangements might be made to allow public access to these sites for camping and picnicking by kayakers, similar to the Main Island Trail system in the USA.

Figure 18

The boat launch “marina” at Gamboa is small, poorly designed and lacks basic public facilities such as restrooms. The Gamboa Rainforest Resort restaurant and marina are visible on the opposite shore.

Figure 19

Scheduled to open in the spring of 2000, the Gamboa Rainforest Resort will be perhaps the first 5-star eco-resort in the world. The main facilities are located on the site of a old golf course and country club.

Figure 20

The Resort’s restored bungalows originally housed American families associated with the Panama Canal dredging facility at Gamboa. Now they serve as lodging for tourists and researchers from the Smithsonian Institution.



Photo 17



Photo 18



Photo 19



Photo 20

Figure 21

Built in an old radar facility within the Soberania National Park, the Canopy Tower eco-lodge specializes in bird-watching.

Figure 22

The main floor of the Canopy Tower offers 360 degree views of the rainforest.

Figure 23

The Chagres River upstream from Gamboa is broad and gentle, providing many opportunities for boating and wildlife viewing, much of it within Soberania National Park.

Figure 24

The Chagres River above Lago Alajuela provides access to two Embera villages and the Chagres National Park via motorized dugout.

Photo 21



Photo 22



Photo 23

Photo 24



Figure 25

The Embera Village of Parara Puru was recently moved from a site downstream on the banks of Lago Alajuela. Note the dugout canoe being hewn from a tree trunk. Such common items can be tourist attraction if interpreted properly.

Figure 26

The villagers at Parara Puru provide transportation for visitors in an extraordinarily large dugout canoe.

Figure 27

Their interpretive trail is quite sophisticated. Here there are log steps and pole handrails tied with bark.

Figure 28

This steep section of trail uses a notched log as a ladder to provide access to the canoes. Such logs are a traditional feature of Embera homes built on stilts, and could be interpreted.



Photo 25



Photo 26



Photo 27



Photo 28

Figure 29

Embera Drua village is further upstream and situated on a large bend in the Chagres River. The beach would make an excellent camping site for adventure tourists.

Figure 30

The village of Embera Drua is built around a large common area which also serves as the basketball court.

Figure 31

The newly constructed guest hut on the edge of the village rents for \$25 per night and includes meals

Figure 32

The guest hut has an enclosed sleeping area and a porch overlooking the river. If Jim Bedwell's reaction to the hammock is any indication, future guests will enjoy their stay here.



Photo 29



Photo 30



Photo 31



Photo 32

Figure 33

Jim Bedwell and Jared Elling enjoying a rest along the nature trail with our hosts from Embera Drua village. We discussed the need for a scenic overlook and trail improvements.

Figure 34

Purchasing souvenirs is an important part of the visitor experience. Typical Embera crafts include baskets, carved tagua nuts, and wooden items. Other traditional, forest-based products could be developed for sale to tourists.

Figure 35

This tree sloth carving is an example of the high quality of the crafts available at the Embera villages.

Figure 36

The numerous islands and indented shoreline of Lago Alajuela offer excellent opportunities for water-based recreation. We recommend an assessment of the recreation opportunities be conducted as soon as possible.



Photo 33



Photo 34



Photo 35



Photo 36