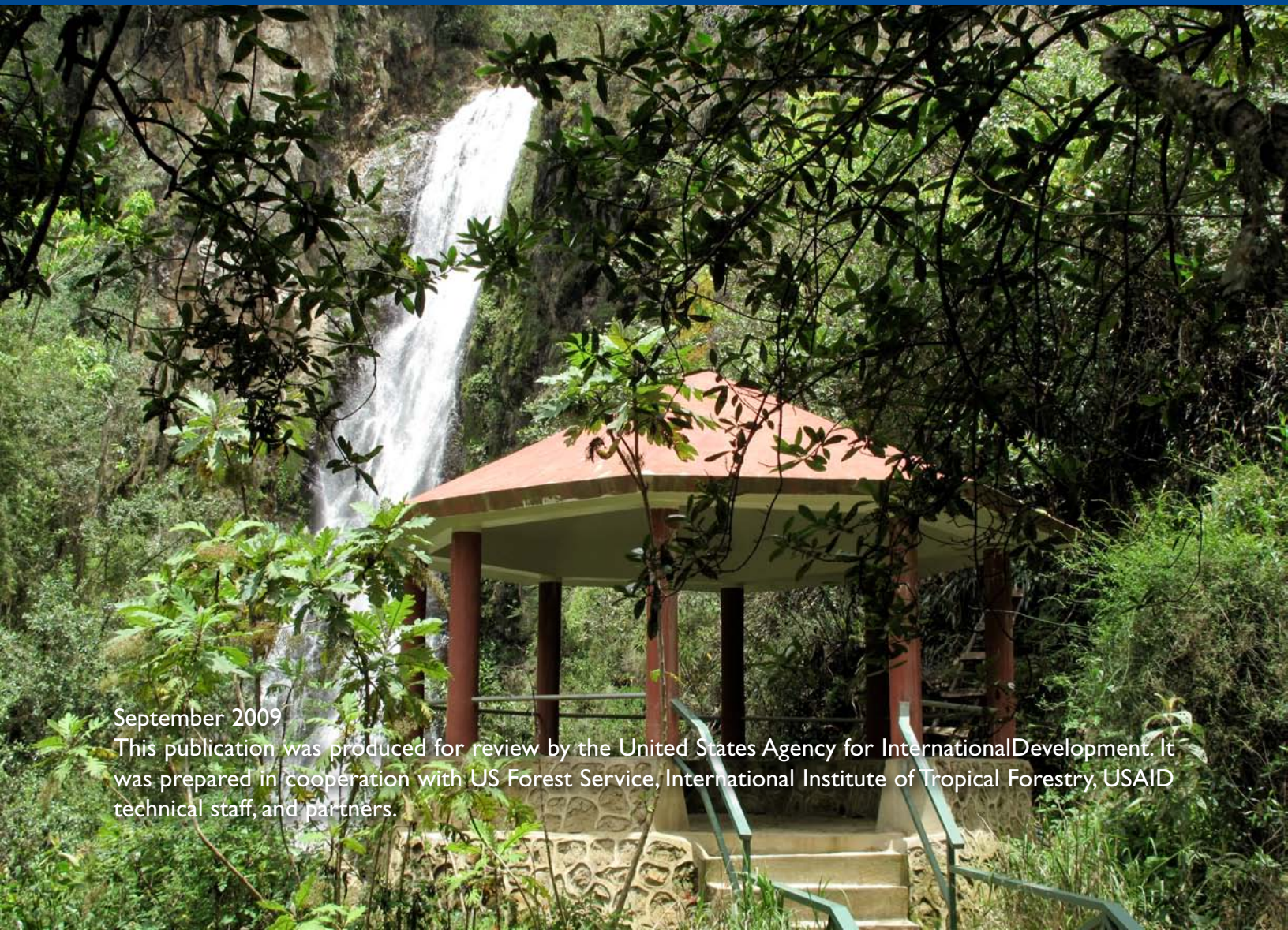




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# INTEGRATING CONSERVATION AND SUSTAINABLE TOURISM IN THE DOMINICAN REPUBLIC: RAPID ASSESSMENT OF BIODIVERSITY THREATS AND A CONSERVATION STRATEGY FOR AGUAS BLANCAS WATERFALL



September 2009

This publication was produced for review by the United States Agency for International Development. It was prepared in cooperation with US Forest Service, International Institute of Tropical Forestry, USAID technical staff, and partners.



TECHNICAL REPORT

INTEGRATING CONSERVATION AND SUSTAINABLE TOURISM  
IN THE DOMINICAN REPUBLIC: RAPID ASSESSMENT OF  
BIODIVERSITY THREATS AND A CONSERVATION STRATEGY  
FOR AGUAS BLANCAS WATERFALL

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Constanza Tourism Alliance

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*DISCLAIMER*

*The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.*

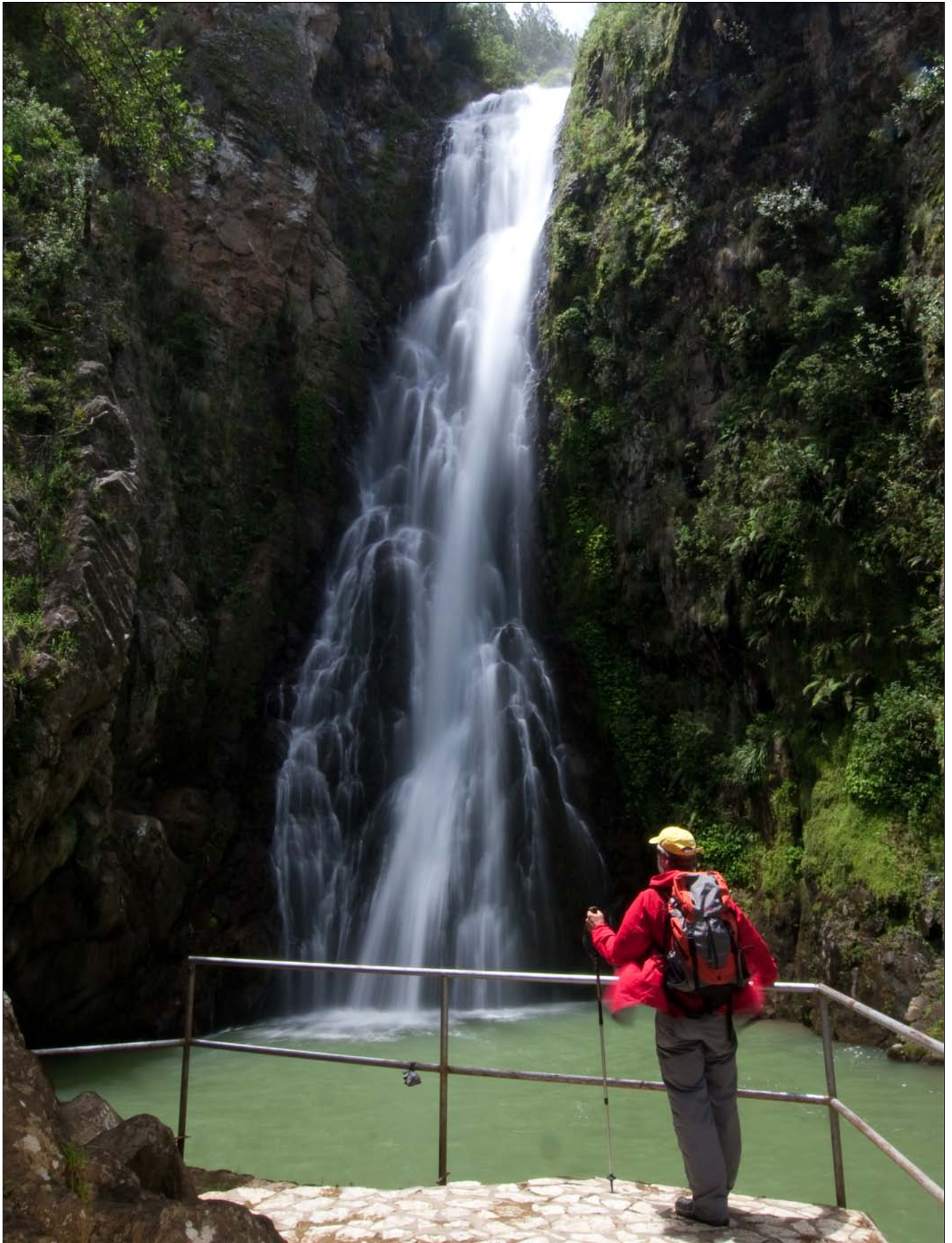


The twin cascades as viewed from the potential hiking trail.

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The lower cascade is visible from the observation platform.

# I INTRODUCTION

This assessment was conducted by a team from the US Forest Service, International Institute of Tropical Forestry as part of the USAID funded activities of the Dominican Sustainable Tourism Alliance (DSTA). The DSTA has selected the small community of El Convento to receive technical support and funding to develop an ecotourism-based business using the Aguas Blancas waterfall recreation site as the primary attraction.

The Nature Conservancy's Conservation Action Plan (CAP) process is the selected planning system for DSTA activities and TNC is currently conducting a CAP for the entire Aguas Blancas watershed. This assessment follows the 10-step CAP process as outlined in the Conservation by Design Gateway (TNC website) and directly supports the CAP (TNC, 2009).

## II PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

### Site Description and Location

The Aguas Blancas Waterfall is located in the north-central region of the Parque Nacional Juan Bautista Pérez Rancier (Valle Nuevo), just within the limits of the park. A low volume, poorly maintained rural access road leads directly to the site, which is 17 km from Constanza and about 2 km past the small settlement of El Convento (Map 1). A four-wheel drive vehicle is necessary to access the site.

The Aguas Blancas waterfall tourist complex is a highly developed recreation facility, less than 1/8 acre (500 square meters) in size, with a built infrastructure consisting of restroom facilities, 170 meters of paved trail, two observation platforms, and a small steel footbridge (Figure 1). The waterfall is 83 meters high, in two stages, located at about 1,620 meters above mean seal level.

This site is situated within a setting classified as "Rural" in the ROVAP system. This environment is a mix of natural areas, pasture lands, and rural settlements adjacent to and within protected areas (or buffer zones). Access is by rural roads or trails that connect private properties and small communities to larger settlements. There are opportunities to observe local cultures, architecture, customs and activities of local people and to see and learn about pastoral agriculture systems and experiment with local cuisine. The infrastructure is simple and rustic and the quality of the experience depends on local traditions (Wallace, et al., 2009).

### Existing Conditions

The Aguas Blancas waterfall recreation site is a man-made environment. The facilities at the waterfall recreation site were constructed within the last two years and are in good condition. Site problems include minor erosion of the concrete and stone platform nearest the waterfall and landscaping around the bathrooms. Vegetation immediately surrounding the site is natural and intact except for the area associated with the road corridor and construction of the parking lot. Water clarity and purity in the stream are affected by agricultural activities within the watershed and are described in greater detail below.



Map 1. Location of Aguas Blancas waterfall.



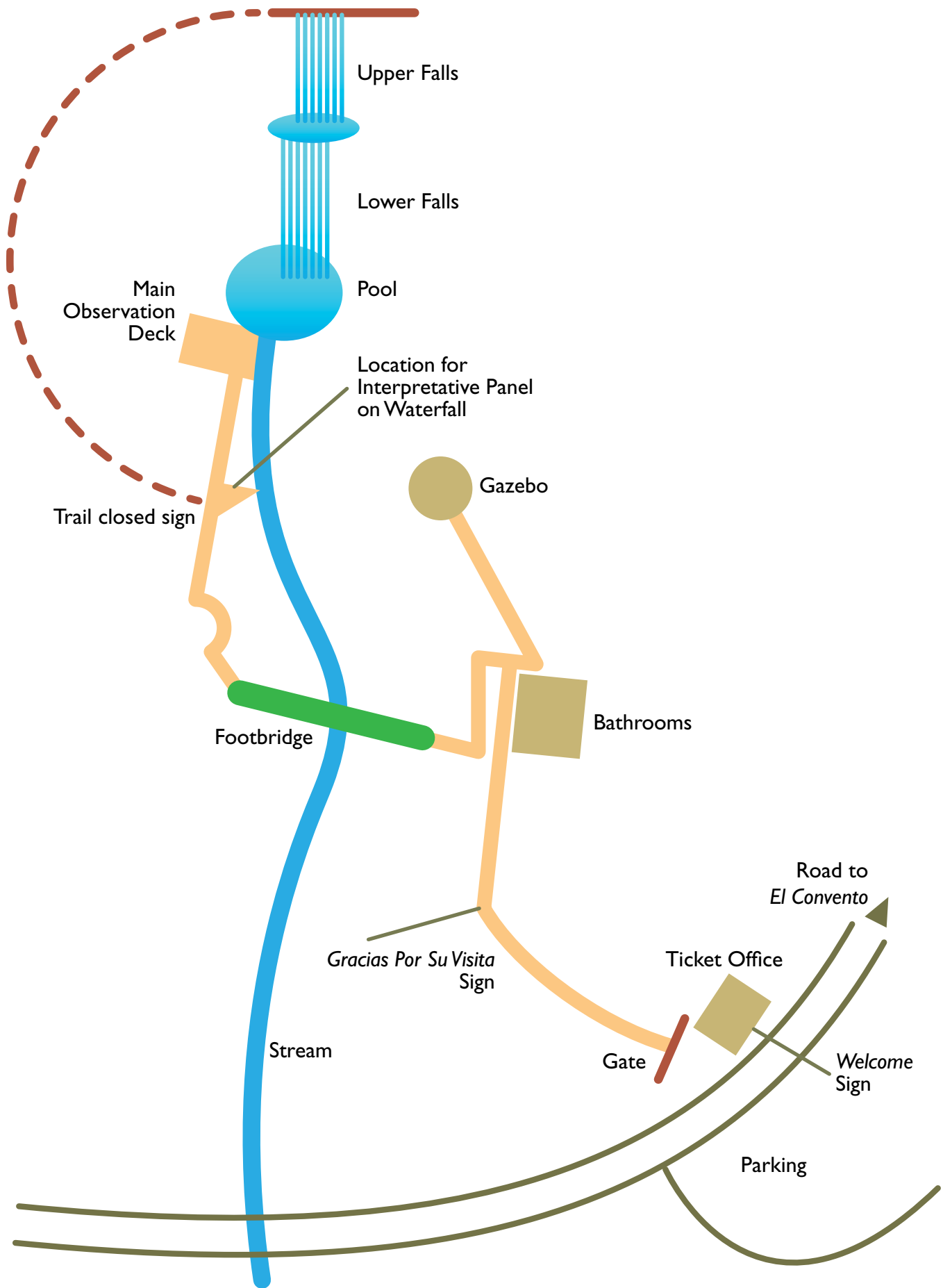


Figure 1. Schematic map of the Aguas Blancas recreation site.

### III FIELDWORK

Two site visits were made to collect data for this assessment. The first trip to El Convento and the waterfall site on May 28-29, 2009 was to conduct an initial assessment and prepare a draft report for review by USAID and DSTA staff. This visit was limited to the waterfall site and a (harrowing) climb to the upper falls.

The second trip, on August 28-29, 2009 was made to collect more detailed information and to field check possible mountain bike, horse, and foot trails. We were accompanied on this trip by Lucia Prinz (Solimar International) and Liliana Lopez (USFS). We drove from Constanza to El Convento and then on a very poorly maintained rural road loop from El Convento to the waterfall and back to El Convento. We also scouted for locations of possible foot trails and hiked a short route to a potential lookout point for the falls that was scouted by Prinz on an earlier trip. This visit also allowed us to observe the type of recreational use the site receives on a weekend (Saturday afternoon).

This quick assessment to define priorities may be followed by a more detailed assessment based on monitoring.

### IV GOALS

The general goals of sustainable tourism are to maximize the positive benefits of tourism to biodiversity, ecosystems, and economic and social development, while minimizing negative social and environmental impacts from tourism (TNC, 2009; Secretariat of the Convention on Biological Diversity, 2004).

In addition, the agreement between the USAID/DR and USDA Forest Service to assist the DSTA lists these specific goals:

- Promote sustainable tourism, with an emphasis on biodiversity conservation.
- Support economic development of local communities in conjunction with the Constanza regional tourism cluster.
- Integrate tourism, interpretation and public education, and conservation.
- Strengthen the Dominican Republic Protected Area Management System.
- Develop partnerships in the community.
- Strengthen the relationship of the clusters to other tourism activities in the region.
- Increase financial sustainability of regional clusters through income generation and promotion of an enabling operating environment.

## V A BENEFITS-BASED APPROACH

Conservation must be integrated with development activities. However, the ultimate goal of integrating sustainable tourism and biodiversity conservation is not just to reduce threats or avoid impacts, it is the creation of sustainable **benefits** to the **environment** and the **local community** (Global Sustainable Tourism Criteria, 2009; USAID/ARD 2005a:28) and **visitors**, which are frequently overlooked.

To achieve this integration and meet the project objectives listed above requires a benefits-based model of sustainability that provides linkages and synergies between all three elements. Since they are directly linked, actions in one affect the other two (Figure 2). Details of this model are presented in Appendix A (Wylie and Bauer, 2009).

This model is not only a theoretical concept, it is a practical “compass” for providing direction at each stage of project planning, implementation and monitoring. For example, it can help:

- Define and expand the project vision and goals
- Focus the threats and opportunity assessments
- Develop integrated conservation/tourism targets
- Analyze positive “value-chain” linkages affecting tourism opportunities
- Create a conceptual model describing linkages among causal factors
- Develop specific actions with monitoring measures
- Select and prioritize activities with synergistic linkages



Figure 2. Sustainable Tourism Model.

## VI EXISTING CONDITIONS IN PARQUE NACIONAL JUAN BAUTISTA PÉREZ RANCIER (VALLE NUEVO)

The Parque Nacional Juan Bautista Pérez Rancier (Valle Nuevo) is located in the Central Mountain Corridor and forms part of the most important mountainous region in Hispaniola where 70-80% of all flora and fauna species inhabiting Dominican Republic are found. The park lies in the provenances of Monseñor Nourel, La Vega Azua and San José de Ocoa at north latitude 18°36'10" and 18°57'52" and west longitude 70°26'56" and 70°51'44". Total size of the park is about 900 Km<sup>2</sup> as defined in Decree 233/96.

Elevation ranges from about 600 m up to about 2,500 m in the park. The temperature in the park and its buffer zone is moderate. Average yearly temperature at three weather stations ranging from 18.2-25.8°C and rainfall from 1,026.4 – 2,139 mm/yr.

Due to the park's topographical setting, elevation ranges and geological makeup, it provides a high biodiversity of plants and animals. Scientific studies have identified about 531 plant species, which includes 138 species endemic to Hispaniola. More than 145 wildlife species have been identified within the park boundaries, comprised of 66 bird species (18% which are endemic to the Dominican Republic), 17 amphibian species (85% of the represented amphibians in the Central Mountains and 26% of those found in Hispaniola), 29 reptile species (all of which are endemic to Dominican Republic), 33 species of butterflies, and unreported number of freshwater aquatic species and land snails.

For more detail information on the parks biological and physical setting refer to SEMARENA 2002, 2005, and 2006 in the bibliography.

### **Looking Beyond Threats to Biodiversity**

Threats-based analysis is a proactive approach and is not limited to environmental impacts. It should consider past influences while anticipating and planning for future threats and opportunities (USAID/ARD, 2005a). Also, considering only quantitative biological information is insufficient; we must recognize the human dimension of ecosystem management, using social sciences to monitor social, economic, political, and cultural threats and opportunities where feasible and useful (Stem et al., 2005).

### **Direct Threats**

The current management plans for the park includes a thorough analysis of the area's biodiversity and provides the overall environmental context for this project (SEMARENA 2006). Most importantly, it identifies the two primary threats to biodiversity conservation: the loss of forest habitat (and related species) and degraded water quality.

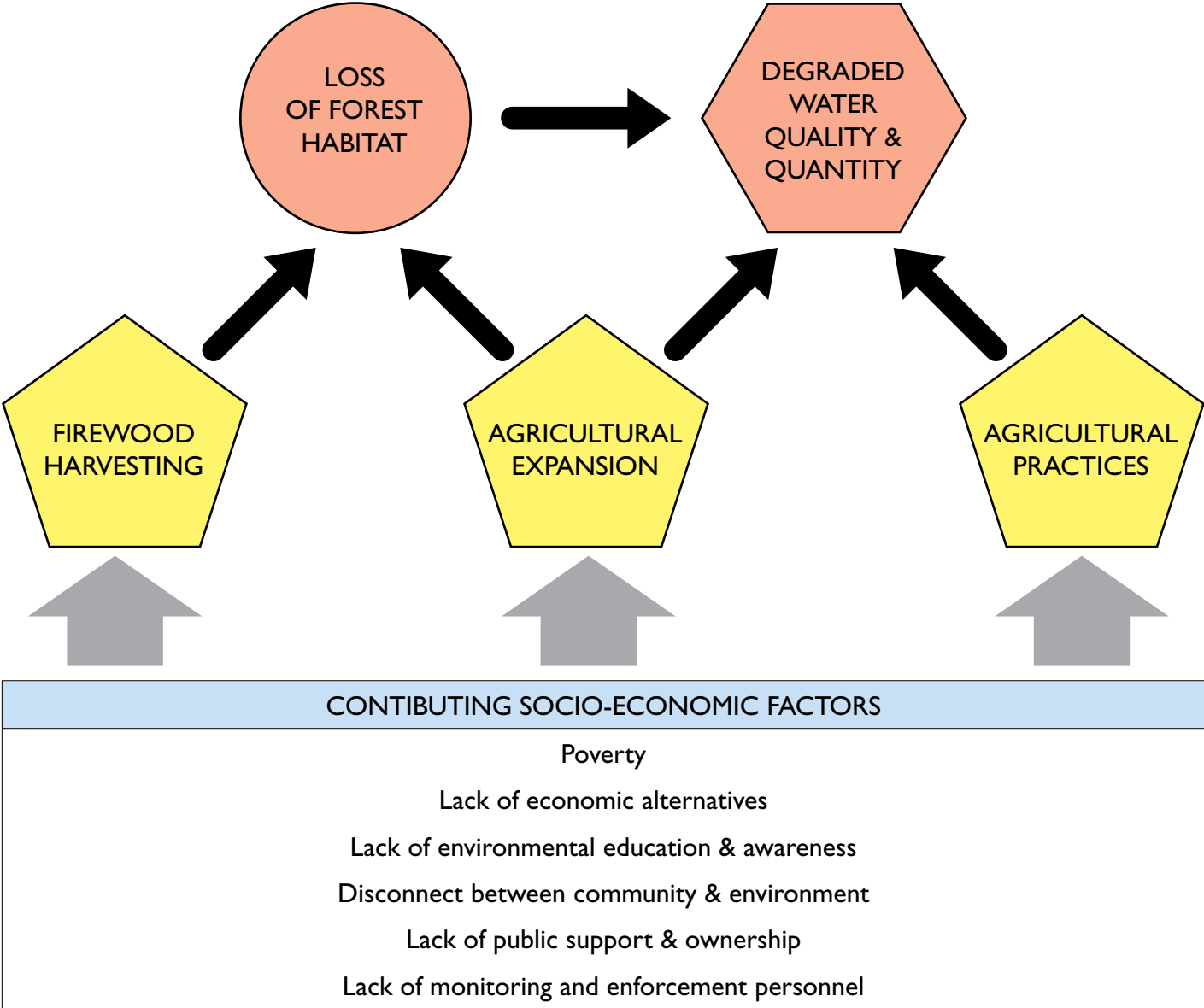
We do not anticipate any threats to biodiversity conservation from public use of the waterfall recreation site. It has a very small footprint, its visitor facilities are already in place and present a "hardened" durable surface, and there is no risk of erosion due to foot traffic.

### **Indirect Threats and Contributing Factors**

To fully understand these direct threats, the "causal chain" of root causes (indirect threats) must be understood. "Often, the most effective—and sometimes the only—way to reduce a direct threat to biodiversity is to carry out actions that address its root causes" (USAID/ARD 2005a:27; USAID/ARD 2005b:29). These contributing factors may be economic, political, institutional, social, or cultural.

Indirect threats in the project area include firewood harvesting, expansion of illegal gardens, use of agricultural chemicals that pollute streams and aquifers, and de-watering of streams for irrigation (Figure 3). In addition, the loss of forest cover increases erosion and stream siltation, further degrading water quality. These threats affect the community of El Convento and the public use of the waterfall and are considered in the conservation action plan by addressing the underlying socio-economic factors.

Figure 3. Direct and indirect threats and contributing factors.



## VII RAPID ASSESSMENT OF EL CONVENTO AND THE AGUAS BLANCAS WATERFALL

A rapid assessment of conditions at El Convento and the waterfall was conducted and is summarized in Table I. These include positive and negatives for the environment, the community and for visitors now and in the future. This quick assessment to define priorities can be updated by a more detailed assessment depending on the results of initial monitoring.

### **Future Threats**

The most serious potential threats are water diversion, agrochemicals and silt from farms and communities upstream, public health risks due to poor sanitation, and the potential for accidents due to unsafe conditions in and around the waterfalls. Safety hazards include the steep trail to the upper falls, slippery rocks, and cold water in the plunge pool. Accidents or food-related illnesses could also seriously affect the site's potential as a tourism attraction. Promoting the falls as the "tallest" in the Caribbean is very misleading and could adversely affect visitor satisfaction once they arrive to the falls. Also, moving the community into tourism businesses too quickly could threaten their long-term success.

### **Current Weaknesses**

The most serious problems for tourists arriving in the village of El Convento are its poor appearance, poverty, limited foreign language skills, litter and the lack of a central focal point. Buildings are randomly scattered along the single dusty roadways and there is very limited space for parking vehicles, staging horse rides, or operating a restaurant.

Poor conditions for swimming or wading, no signage and a lack of environmental interpretation are the major weaknesses at the waterfall recreation site.

### **Current Strengths**

The primary strength of the waterfall recreation site as a tourism attraction is the existing infrastructure. This includes the parking area, concrete trails, bathroom, footbridge, and viewing platforms. Since they are about two years old, for the most part, these facilities are in very good condition.

### **Future Opportunities**

Future opportunities for expanding and enhancing tourism include development of a short loop trail near the waterfall, environmental interpretation through signs and tour guide presentations, and use of the gazebo to sell snacks and drinks. There is also the possibility of developing a new restaurant in or near the village. Currently, there is a private restaurant under construction along the road leading to the waterfall.

The most important opportunity is environmental interpretation. If done correctly, it can educate local residents and visitors about direct threats to biodiversity and serve as a starting point for conservation actions for all of Valle Nuevo Park.

Table 1. Rapid assessment summary for Aguas Blancas waterfall.

	<b>ENVIRONMENT</b>	<b>EL CONVENTO COMMUNITY</b>	<b>VISITOR EXPERIENCE</b>
<b>Threats</b>	<ul style="list-style-type: none"> <li>Pollution and silt from upstream</li> <li>De-watering of the stream</li> <li>Loss of forest habitat</li> </ul>	<ul style="list-style-type: none"> <li>Tourism impacts</li> <li>Community conflicts</li> <li>Over extension (trying to move community too fast into business)</li> </ul>	<ul style="list-style-type: none"> <li>Safety at waterfall</li> <li>Safety on upper trail</li> <li>Misinformation about falls</li> <li>Road hazards</li> <li>Public health</li> <li>Crowding</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>Small size</li> <li>Limited environmental diversity</li> <li>Poor water quality</li> <li>Cold water</li> <li>Trash</li> <li>Not a single cascade</li> <li>Uncertain land ownership</li> </ul>	<ul style="list-style-type: none"> <li>Poor appearance/trash</li> <li>Language skills</li> <li>No advertising</li> <li>No signage</li> <li>No visitor facilities</li> <li>Uncertain land ownership</li> <li>Limited space for parking</li> </ul>	<ul style="list-style-type: none"> <li>Can't see entire falls at falls</li> <li>Limited recreational opportunities</li> <li>Poor swimming/wading conditions</li> <li>Polluted water</li> <li>No interpretation</li> <li>Limited signage</li> <li>Poor road condition</li> <li>Not handicap accessible</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>New lookout</li> <li>Short loop trail</li> <li>Picnic area</li> </ul>	<ul style="list-style-type: none"> <li>Other agri-tourism</li> <li>Gateway to the waterfall site</li> <li>Other visitor services &amp; tours</li> </ul>	<ul style="list-style-type: none"> <li>Interpretation of the site</li> <li>Better view of falls</li> <li>Horseback trips</li> <li>Drinks and snacks</li> <li>New restaurant</li> </ul>
<b>Strengths</b>	<ul style="list-style-type: none"> <li>Good infrastructure</li> <li>Attractive waterfall</li> <li>National Park</li> <li>4x4 road access to site</li> </ul>	<ul style="list-style-type: none"> <li>Close to falls</li> <li>Good access to park</li> </ul>	<ul style="list-style-type: none"> <li>Good access from Constanza</li> <li>Compact size</li> <li>Good infrastructure at falls</li> <li>Popular recreational site</li> </ul>

# VIII BIODIVERSITY CONSERVATION STRATEGIES AND ACTIONS

The objective in integrating biodiversity conservation and sustainable tourism is to provide a set of actions that address the major threats and opportunities identified above. These actions are designed to produce benefits to the environment, the local community, and meet the needs of visitors.

Actions currently underway include extensive training and development of a business plan for the community of El Convento. These are based on five conservation strategies developed by Solimar International (2009). They include:

1. Development of a conservation fund to support local projects
2. Income diversification through jobs based on resource conservation
3. Trained guides providing monitoring and enforcement for the park
4. Constituency-building through enterprises directly linked to conservation
5. Co-management of the waterfall recreation site

New actions recommended are summarized in Table 2 below and are described in detail in Appendix B (US Forest Service will assist DSTA in implementing these recommendations over a two-year period). Because they emphasize visitor experiences enhanced through information and environmental interpretation, they provide an additional approach that complements and supports the previous five strategies:

6. Environmental awareness and stewardship through interpretation of cultural and natural resources and biodiversity conservation

These new activities are based on the sustainable tourism model described above (and in Appendix A) and follow the steps in the Visitor Experience Model (VEM) summarized in Appendix C. The VEM classifies the travel experience into different phases, each with its own key questions for visitors, objectives for managers, and suggests ways to achieve these objectives.

Although these actions are primarily focused on connecting and communicating with visitors, they will also benefit the community and the park. As an example, Figure 4 illustrates how advertising and environmental interpretation can promote community and economic development and biodiversity conservation. Promotional materials will increase the number of visitors to El Convento. Increases in visitation in turn will provide more income and profits for community members, funds for community projects, and improvements in infrastructure, which will benefit both visitors and residents.

When they arrive at the waterfall site, interpretive signs and tours provided by trained guides will significantly enhance the *quality* of the visitor experience, leading to positive word-of-mouth advertising for El Convento and the waterfall, as well as increase public awareness of critical threats to the park. This in turn will lead to public support for the park and environmental protection in general and provide opportunities for visitors to provide direct financial support through donations to the community conservation fund.

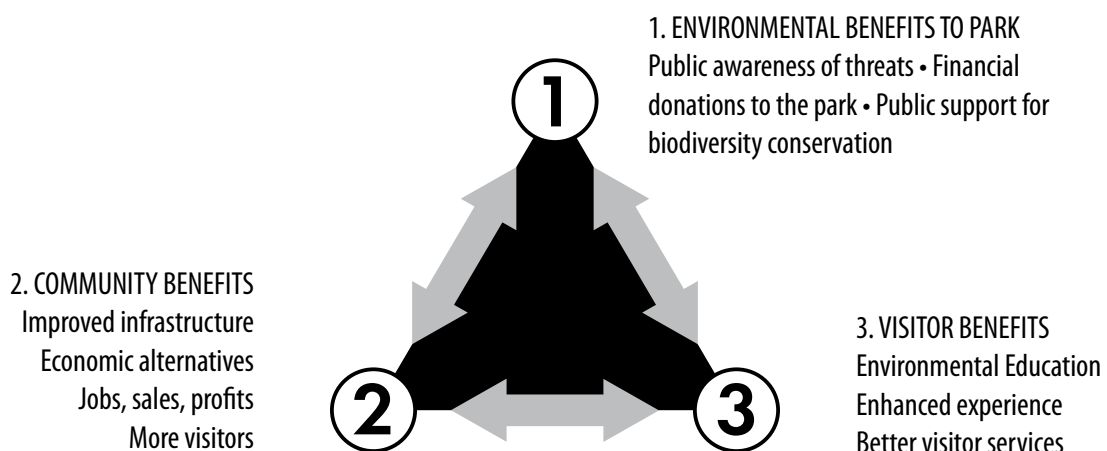


Table 2. Summary of action items to promote biodiversity conservation and sustainable tourism.

Action Item	Phase*
Close trail to upper falls	I
Sign/Interpretive planning	I
Develop tour packages	I
Graphic designs for logo, signs, maps & brochures	I
Emergency Plan, First aid training & supplies	I & II
Electronic advertising on the Internet	I & II
Still photography and videotaping	I & II
Design marketing materials	I & II
Guide training	I & II
Develop webpage for El Convento and waterfall	II
Update published guide books	II
Donations box and visitor comment book	II
Gather water monitoring information	II & III
Install signs and interpretive materials	II & III
Design new trails (hiking and horse)	II & III
Design interpretive kiosk for parking lot	III
Develop souvenirs	III
Evaluate monitoring data and make adjustments as needed	III
Final documentation	III

\*Phase I – 1 to 6 months, Phase II – 6 to 12 months, Phase III – 1 to 2 years

Figure 4. Summary of benefits resulting from promotional materials and interpretative programs.



## IX MONITORING AND EVALUATION

The following socio-economic indicators are proposed to measure the success of the community's tourism program and to serve as indirect indicators for mitigation of conservation threats. They are easy to collect and closely linked to biodiversity conservation, community and economic development, and quality visitor experiences. Data for each of these indicators should be gathered by the community and used to measure how goals for being met and to help refine conservation activities.

### **Biodiversity Conservation Indicators**

- Money collected for the community conservation fund
- Number of community volunteers for conservation projects
- Number of conservation projects completed
- Less firewood collected (qualitative)

### **Community and Economic Development Indicators**

- Money donated by visitors
- Money earned from souvenirs and sales
- Number of people with new tourism jobs
- Money collected from waterfall entrance fees
- Number of sales points for local products
- Number of new private tourism businesses in the village
- New or improved infrastructure in village for locals and visitors

### **Visitor Demand and Satisfaction Indicators**

- Number of total customers
- Number of website hits
- Number of visitor complaints
- Number of visitor compliments

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# APPENDIX A

## SUSTAINABLE TOURISM AND BIODIVERSITY CONSERVATION MODEL

This is a model of sustainable tourism development that provides linkages and synergies between visitors, communities, and the environment so that benefits in one area create benefits in the other two.

**Conservation** relates to the overall health of the environment, as measured by biodiversity and preservation of historic sites. It also ensures high-quality settings for residents and visitors and the product base for tour providers. Indicators include:

- Acres/hectares protected or restored
- Historic and cultural sites protected or restored
- Scenic vistas enhanced
- Number and types of species observed
- Reduction of depreciative behavior (litter, looting, wildfires, graffiti, etc.)
- Political support for conservation agencies and programs
- Hours and money donated
- Entrance fees collected

**Community and Economic Development** enhances the quality of life for residents and creates business opportunities. Successful tourism businesses and communities provide infrastructure and services, financial and volunteer support for conservation projects, and political support for conservation projects and agencies. Benefits include increases in:

- Numbers of jobs related to conservation
- Economic diversification and % of jobs conservation-related
- Income
- Profits
- Taxes
- Infrastructure for locals and visitors

**Quality Visitor Experiences** are the foundation for successful tourism. They depend upon properly managed, resources, settings and attractions (including scenery), professional tourism services and infrastructure, and adequate visitor information and interpretation. Without a quality visitor experience there will be no sustainable tourism and no public or financial support for parks and conservation. Potential benefits include:

- Increased customer satisfaction and loyalty
- Longer stays and willingness to pay
- Repeat visits
- Word-of-mouth advertising
- Positive psychological, social, and physiological changes for the individual
- Education and appreciation
- Changes in visitor attitudes and behavior

# APPENDIX B

## CONSERVATION STRATEGY & ACTION ITEMS

### BASED ON THE VISITOR EXPERIENCE MODEL (VEM)

#### **Decision-making and Pre-trip Preparation Phase**

This is the initial point of contact, which could be at home before traveling or during a trip to or through Constanza. The objective is to help prospective clients make the decision to visit and create proper expectations. This is done by introducing and “selling” the attraction, providing realistic information about what activities and services are available, and in general making a positive connection between the client and the site. Recommended actions include:

- **Logo** - Creating a logo or icon that can be used in all graphic designs that gives the site a unique and attractive marketing identity.
- **Printed advertising** - Design a rack card to advertise the waterfall at hotels and other businesses in Constanza and other markets.
- **Guidebooks** – Update existing descriptions of the waterfall in published guidebooks.
- **Internet advertising** - Upload a selection of high-quality photographs to suitable internet photo sharing websites such as Google’s “Panoramio.”
- **Webpage** – Add a webpage to the Constanza website to promote the village of El Convento and the waterfall.
- **Tour packages** – Develop potential itineraries for outbound and inbound tour operators to visit the falls and other local attractions. This should include times, activities, and prices.

#### **Travel Phase**

This phase covers travel from Constanza to the waterfall and should provide whatever information and reassurance is necessary to help the traveler find the site and answer questions along the way. The guidebooks and rack card recommended in the decision-making phase will be helpful here. In addition, we recommend the following:

- **Visitor information** – Provide visitor information at the Cluster Visitor Information Center in Constanza to orient visitors and direct them to the waterfall and other local attractions.
- **Install roadway signs** – Install signs to the falls along the road at appropriate intersections.

#### **Entrance Phase**

This phase should welcome the visitor, provide basic orientation, explain what there is to do and see, and convey a positive sense of place.

- **Welcome sign**- Create a welcome at the entrance to the falls, and adding a friendly “Welcome to Aguas Blancas” to let visitors know they are at the right place. Also include entrance fees and other appropriate information.

#### **Connections and Interpretation Phase**

This is when the visitor experiences what the site has to offer and receives interpretive information provided by signs or tour guides. It is important to provide accurate information and explain that it is not possible to see the entire waterfall from the observation platform. Recommended actions include:

- **Interpretive planning** – The first priority should be to interpret the waterfall site. This should be done as part of the initial sign plan. At a later date when more information and maps are available, thematic interpretive planning should be done to develop a central message and sub-themes that address the critical threats of loss of forest habitat and degradation of streams and water quality.
- **Interpretive signs** – Initially, design an interpretive panel that explains the waterfall. This should be located at the small observation point 20 meters from the main viewing platform. After the development of the thematic interpretive plan, install a small kiosk at the parking lot to explain the critical threats to the park and the watershed and the important role of the community in co-management.
- **Interpretive presentation** – Develop an interpretive presentation to be delivered by tour guides. The interpretive objective is to help visitors understand and appreciate the role of the park in protecting the watershed, the critical threats to the forest and the streams, and how this community-based sustainable tourism programs is working to provide a quality visitor experience, while at the same time protecting the site from negative impacts.
- **Maps** – Develop maps of the site and the Valle Nuevo Park for orienting visitors.
- **Photography** – Identify key locations for “Kodak Moments” where visitors can get the best photographs of the falls. Also train guides so that they can take photographs of tourists with the visitors’ own cameras.
- **Upper trail** – Block the entrance to the trail to the upper falls. This trail is unsafe and represents a serious hazard.
- **First Aid** – Develop an emergency plan and provide first aid training and supplies for dealing with minor cuts and scrapes.

### **Exit and Commitment Phases**

This is where visitors have finished and are leaving the site. Important objectives include saying “Thank You” and providing ways for them to contribute financially to the community’s tourism program by purchasing souvenirs and making additional donations. Recommendations for this phase include:

- **“Gracias” sign** – Install a sign thanking visitors for coming and contributing to the community conservation fund.
- **Souvenirs** – Develop appropriate souvenirs for sale, such as post cards or handcrafts with images of the waterfall. If these materials include the name or logo, they will also serve as advertising for the site.
- **Donations** – Prepare a box for additional donations to the village conservation fund. Include a description of specific projects this money will be funding.

### **Other Possible Tours and Tourism Products**

In addition to the recommended actions above, the community should also consider developing loop trails for horses, hikers and mountain bikers, and agritours featuring local farms. These can expand the range of visitor opportunities and increase the tourism products offered by the community. Some of these can start and end at El Convento and can connect to --or provide vistas of-- the waterfall.

Other potential business opportunities linked to a visit to this site include the sale of drinks and snacks, home-cooked meals, souvenir and flower sales, and home stays with local families.

# APPENDIX C

## VISITOR EXPERIENCE MODEL (VEM)

Interpretive planning provides the entire “experience package” to answer key questions and influence visitor behavior at each travel phase and produce desired results (benefits).

<i>Key Visitor Questions</i>	<i>Management Objectives</i>	<i>How Achieved/Measured</i>
▼	▼	▼
	<b><u>DECISION &amp; PRE-TRIP PREPARATION PHASE</u></b>	
Why visit?	Create proper expectations	Brochures
What experiences possible?	Introduce central theme	Word of mouth
Cost in time/money?	Get commitment	Advertising
What’s proper behavior?	Sell the primary attraction	Travel guidebooks
Is it safe/healthy?	Connect with the visitor	Image/logos
	<b><u>TRAVEL PHASE</u></b>	
How do I get there?	Reassure visitor	Travel guidebooks
Am I on right track?	Sell secondary attractions	Hotel fliers
How long?	Enjoy the journey	Maps & signage
Am I safe?	See new things	Guides
	<b><u>ENTRY PHASE</u></b>	
Is this the right place?	Welcome the visitor	Signage
Where to park?	Handle basic human needs	Hosts
Where’s the bathroom?	Transition from Travel	Orientation
What’s to see and do?	Reinforce central theme	Positive visual cues
Hours/prices/regulations?	Convey sense of place	Local architecture
	<b><u>CONNECTIONS PHASE</u></b>	
What is this place?	Exposure to theme/sub themes	Interpretive programs
What is the story?	Participation in programs	Activities
What am I looking at?	Have a variety of experiences	Exhibits
Why is this important?	Visitor connects to place	Engage all 5 senses
Why is this relevant to me?		
	<b><u>EXIT PHASE</u></b>	
What did I experience/learn?	Decompress traveler	Gift shop/souvenirs
Is it over?	Digest messages	Donations box
What does it mean?	Consider deeper meanings	Visitor comment book
What can I take back?	Thank visitor for coming	“Thanks . . . Come Again!”
	<b><u>COMMITMENT (RESULTS )PHASE</u></b>	
How do I respond?	Provoke a response	Profits & Donations
How do I feel?	Achieve desired benefits	Referrals & Repeat visits
What do I do now?	Transform the visitor	Thank-you letters
	Change attitudes/behavior	Changed attitudes/behavior
		Public support for your program

# PHOTOGRAPHS OF AGUAS BLANCAS AND EL CONVENTO



A view of the Constaza valley along the road to El Convento.



View of El Convento Valley showing a flower production facility near the village. These massive greenhouses could be a complementary tourist attraction for the waterfall.



As visitors approach the village of El Convento, they can catch glimpses of the waterfall in the distance.



Farmer using oxen to harvest potatoes, a common site in the El Convento valley.



Harvesting potatoes near the village of El Convento.



Roadways in the El Convento Valley are narrow and full of trucks transporting workers and produce to and from Constanza.





Famer mixing pesticides for use in agriculture plots. The heavy use of chemicals threatens tourism potential in the area.



The hillsides surrounding the village of El Convento are dominated by agricultural plots.



The village of El Convento.

After passing through the village of El Convento, the 4x4 trail climbs to the Aguas Blancas waterfall.



Assessment team looking at waterfall from possible trail location.



The ticket office wall would be good location for a welcome sign and regulations.





The largest structure at the site is the bathrooms.



The metal footbridge and all metal railings have recently been repainted with blue paint.



Visitors swimming in the waterfall pool. Swimming is not recommended due to high level of water contamination.

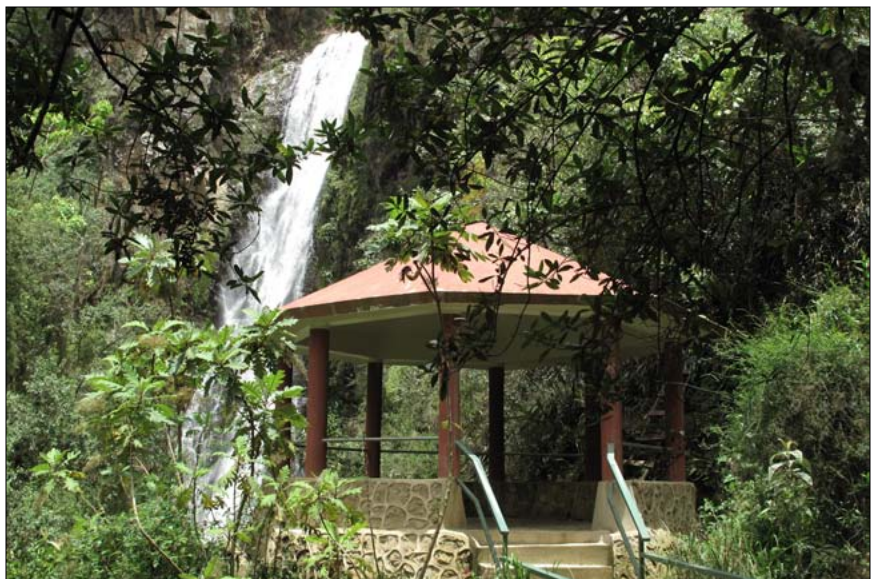
Playing in and around the waterfall pool is dangerous, especially for young children.



Under a co-management agreement, the community will be responsible for cleaning up trash.



The gazebo provides a protected overlook for the falls and is a potential location for selling refreshments.





The observation platform at the base of the falls can be very crowded on weekends.



The "trail" to the upper falls is very steep and dangerous and should be permanently closed.



View from the upper falls showing El Convento Valley and the access road. The hillside above the road is the location for a potential hiking trail featuring a view of the falls.