



United Nations
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World Heritage Patrimoine mondial

37 COM

Distribution limited / limitée

Paris, 3 June / 3 juin 2013

Original: English

**UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION**

**ORGANISATION DES NATIONS UNIES
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE**

**CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE**

**CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL**

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

Thirty-seventh session / Trente-septième session

**Phnom Penh, Cambodia / Phnom Penh, Cambodge
16-27 June 2013 / 16-27 juin 2013**

Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

**Talamanca Range-La Amistad Reserves / La Amistad National Park (Costa Rica, Panama)
(205bis)**

**Réserves de la cordillère de Talamanca-La Amistad / Parc national La Amistad (Costa Rica,
Panama) (205bis)**

17 to 24 January 2013

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:

WHC-13/37.COM/ 7B

IUCN

**REPORT ON THE REACTIVE MONITORING MISSION TO TALAMANCA RANGE LA AMISTAD
RESERVES/LA AMISTAD NATIONAL PARK – COSTA RICA AND PANAMA FROM 17 TO 24 JANUARY
2013**

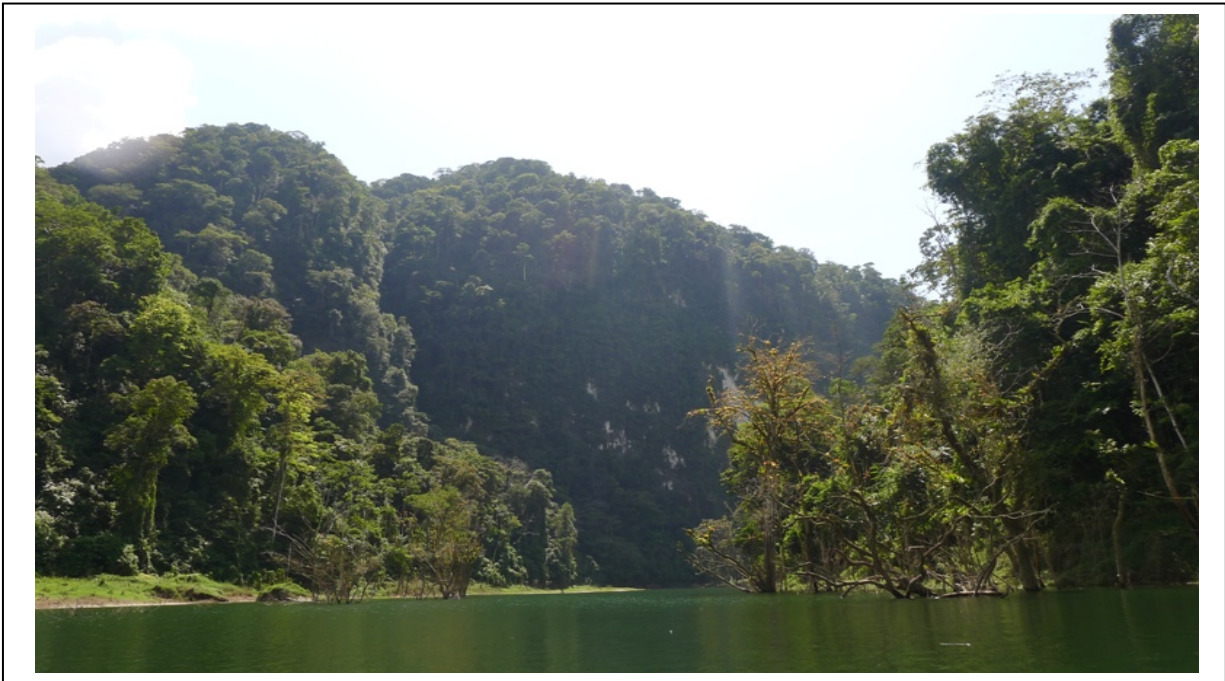


Photo © [Robert Hofstede]

**Robert Hofstede
Alan Monroy Ojeda
IUCN Representatives
February 2013**

ACKNOWLEDGEMENTS

The mission would like to thank the governments of Costa Rica and Panama and, in particular, the Ministry of the Environment and Energy (MINAE) and the National Environmental Authority (ANAM) respectively for all the support they provided during the mission.

Likewise, the mission would like to acknowledge all the persons that have provided valuable information and opinions. Interaction took place with various farmer and indigenous communities, government agencies, NGO's and private companies, in various settings. We are deeply indebted to all these people and hope that this report reflects their points of view as accurately as possible.

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EXECUTIVE SUMMARY

The reactive monitoring mission to the Talamanca Range La Amistad Reserves / La Amistad National Park, Costa Rica and Panama from 17 to 24 January 2013, assessed the threat posed by ongoing dam construction in Panama, by potential dam developments and mining in Costa Rica, and from the planned road traversing the property from Boquete to Bocas del Toro, in order to make a recommendation regarding the possible inscription of the property on the list of World Heritage in Danger. The mission spoke to representatives of governmental agencies of different relevant sectors, indigenous peoples' organizations, mestizo farmers, agencies/companies in charge of developing hydropower plants, academy and NGO's. This was done during field visits to areas within and surrounding the property and to both Capital cities.

Conclusions

The mission concludes that there are still serious threats to several of the elements of the Outstanding Universal Value (OUV) of the property, specifically originating from the ongoing development of hydroelectric power plants. Some localized irreversible damage has been done to, especially, fresh water biodiversity on the Panamanian side of the property. Nevertheless, given that there are still many intact river systems in the property and that for now, there are no other projects (hydropower, mining, roads) in concrete planning stages, the actual threats are not yet of such a magnitude that they justify the inclusion of the property on the List of World Heritage in Danger. Any concrete development of new economic projects (including new hydropower projects, any road crossing the property and mining within the property or in the buffer zone) would represent ascertained danger in accordance with paragraph 180 of the *Operational Guidelines* and imply that the property would then meet the conditions for inscription on the List of World Heritage in Danger.

The mission is deeply concerned by the social conflicts related to the hydroelectric dams in both countries. This not only puts cultural aspects of the property at risk but also puts the governance situation of the wider region under pressure and multiplies the direct threats originating from the economic development projects.

The mission recognizes good efforts from the state parties to mitigate the threats, which seem to have had some positive impact especially in terms of reducing agricultural land use within the property. However, the mission also notes a suboptimal overall response to the decisions made by the World Heritage Committee subsequent to the previous reactive monitoring missions. There is specific concern over the procedure of the requested Strategic Environmental Assessment (SEA) and the progress achieved in that respect, and the lack of halting hydropower development while the SEA is being conducted. Also, there is a lack of updated data on land use close to and within the property, especially regarding livestock ranching.

Recommendations

1. The Strategic Environmental Assessment, presented in its preliminary version, should urgently be intensified, including evidence and science based impact analyses, consideration of least damaging alternatives, broad stakeholder consultation and validation processes. The SEA process should be in line with national procedural standards and international best practice, in coordination with the relevant authorities;

2. No further development of hydro-energy projects, mining or road construction within or directly adjacent to the property in neighbouring protected areas and indigenous territories should be permitted;
3. Any further planned economic development projects that could potentially negatively affect the property, should be subject to independent environmental impact assessments that include a specific assessment of impacts on the OUV of the property and should count with all elements of Free and Prior Informed Consent (FPIC) by indigenous peoples that have (recognized or customary) territorial rights;
4. Guarantee the long term integrity of complete (from source to sea) unaffected watersheds, including at least Chirripó, Sixaola, Teribe, Pacuare, Estrella, and Bananito on the Caribbean side and Coto Brus and Térraba on the Pacific side;
5. The companies that build and operate the CHAN75 and Bonyic dams should be required to implement optimal compensation mechanisms for the affected freshwater biodiversity, including but not limited to cultivation of affected freshwater species, particularly endemics;
6. Harmonize the management plans of the protected areas within the property within the framework of one overarching management plan. Both the existing binational framework and the national coordination between the two sides (Caribbean and Pacific) should be taken into account; the management plans of adjacent protected areas can be aligned with the management plan of the property as required;
7. Compile field data on the present state of human activities, within and directly adjacent to the park, including number of hectares affected, number of families, heads of cattle and paths of communication. This is especially urgent in Panama for livestock and in Costa Rica for illicit crop cultivation. These data should provide accurate base lines and be monitored frequently;
8. The Bi-National Executing Technical Unit for the management of La Amistad International Park (UTEB-PILA) should be converted into the principal management planning and oversight body for the property. Indigenous groups and local NGO's should be included in the planning and conservation activities of the site, through participation in the UTEB;
9. Continue to increase the number of park staff. Training and inclusion of indigenous people and local farmers as park guards is recommended to ensure the integration of key stakeholders to the conservation agenda;
10. Invite a follow-up reactive monitoring mission within two years (2015) in order to assess progress achieved with the implementation of the present recommendations, including an assessment of progress achieved with the SEA, the implementation of updated and harmonized management plans, the compilation of updated field data, the status of eventual new economic development projects and the social basis for local environmental governance.

LIST OF ABBREVIATIONS

ACLA-C	La Amistad-Caribbean Conservation Area (Costa Rica)
ACLA-P	La Amistad-Pacific Conservation Area (Costa Rica).
ANAM	National Environmental Authority (Panama)
CCAD	Central American Commission for Environment and Development
CHAN140	Changuinola 140 metres above sea level (projected hydropower dam in Panama)
CHAN75	Changuinola 75 metres above sea level (existing hydropower dam in Panama)
FPIC	Free and Prior Informed Consent
ICE	Costa Rican governmental energy institute,
IUCN	International Union for the Conservation of Nature
MINAE	Ministry of the Environment and Energy (Costa Rica)
NGO	Non Governmental Organization
OUV	Outstanding Universal Value
PILA	Parque Internacional La Amistad (Costa Rica, Panama).
SEA	Strategic Environmental Assessment
SINAC	National System of Conservation Areas (MINAE, Costa Rica)
TNC	The Nature Conservancy
UNESCO	United Nations Educational, Scientific and Cultural Organization
UTEB-PILA	Bi-National Executing Technical Unit for the management of La Amistad International Park
WCPA	World Commission on Protected Areas (IUCN),
WH	World Heritage

1. BACKGROUND TO THE MISSION

Inscription history and concerns previously raised by the Committee

On 4 February 1982, the La Amistad National Park (Costa Rica) was created and in 1983, the Talamanca Range-La Amistad Reserves were designated a World Heritage Site during the 7th session of the World Heritage Committee (Florence, 1983). The property was extended in 1990 to include the La Amistad National Park of Panama. The property is inscribed under all four natural criteria, and covers a total of 570,045 ha (Annex V, Map 1)

In 2007 the Committee received a request from a concerned third party to inscribe the property on the List of World Heritage in Danger, on the basis of the possible risk from the construction of hydroelectric dams adjacent to and downstream of the property's boundaries, as well as poaching and encroachment by local farmers on both sides of the property's international boundary. The States Parties were requested to invite a World Heritage monitoring mission, which took place in February 2008. Subsequently, at its 32nd session (Quebec City, 2008) the Committee expressed concern about the longer term risk to the property posed by piecemeal development of hydroelectric dams, the absence of planned measures to mitigate the impact of these dams on freshwater biodiversity, associated migration of human populations to the property, significant incidence of cattle within the property, including the creation of illegal pastures within its boundaries, low presence of management authority, and the absence of an effective participatory management process.

The Committee requested the States Parties to:

- a) design, implement and monitor the effectiveness of mitigation measures in relation to the need to maintain the migratory corridors of the Changuinola and Bonyic rivers for the affected aquatic species; implement measures downstream to reduce mortality from pollution and illegal fishing (Panama);
- b) develop and implement a plan to control and manage cattle within the property; integrating private lands into the property by 2018 (Costa Rica, Panama), and cease or rigorously control and manage the movement of cattle through the property (Panama) to avoid any effects on the Outstanding Universal Value and the integrity of the property;
- c) ensure that the needs of all members of communities that may be displaced by the building of the hydro-electric dams are adequately met, ensuring that the property is not negatively affected (Panama);
- d) identify and implement appropriate increases in management authority presence to support the effective management of the property (Costa Rica, Panama);
- e) re-activate and support the bi-national Biosphere Reserve Committee for the property, incorporating government and non-government stakeholders, providing effective landscape level input into management planning issues, and use existing bi-national cooperation agreements, particularly those existing under the framework of the CCAD, to further enhance this work (Costa Rica, Panama);
- f) carry out an analysis of the cumulative effects of potential further dam construction outside of the property (Panama) and of other infrastructure development (Costa Rica, Panama) on the property's Outstanding Universal Value and integrity to better guide future decision-making and restoration/mitigation programmes;
- g) implement a systematic ecological monitoring system to improve understanding of the reduction in wildlife numbers reported to be taking place (Costa Rica, Panama);
- h) carry out a detailed assessment of observed encroachment taking place on the Caribbean side (Costa Rica), and implement an appropriate response to stop further

- encroachments and to ensure property boundaries are respected and their control enforced;
- i) assess the effectiveness of the follow-up on environmental crimes reporting, and implement corrective measures where necessary (Panama)

Furthermore, the Committee requested the States Parties to report on the progress made in regards to the identification and implementation of mitigation measures in relation to the need to maintain the migratory corridors of the Changuinola and Bonyic rivers for the affected aquatic species.

At its 34th session (Brasilia, 2010) the Committee expressed concern about the loss of species caused by the dam construction in Panama, and the lack of effectiveness of mitigation measures. It requests the States Parties to consider the cumulative impact of all proposed dams, including those under construction, on the OUV of the property through a transboundary strategic environmental assessment (SEA) and to halt all dam constructions until the SEA process is completed, in order to safeguard the property's values and integrity.

In 2011, a bi-national Executing Technical Unit for the management of La Amistad International Park (UTEB-PILA) was established and the requested transboundary SEA was commissioned. Nevertheless, the Committee expresses its concern that the State Party of Panama has not halted dam construction and has not abandoned its plans to build a road traversing the property, and that both States Parties have not removed cattle from the area. It requests both States Parties to jointly invite a joint WH Centre/IUCN reactive monitoring mission to the property prior to its 36th session (Decision **35 COM 7B.29**). However, an invitation from Panama for the mission was not received in time to organize the mission prior to the Committee's 36th session, and the Committee reiterated its request that a mission be invited jointly by both States Parties (Decision **36COM 7B.31**), on the basis of which the present mission was organized.

Inscription criteria and World Heritage values

The property was inscribed under all four natural criteria: (vii), (viii), (ix), and (x). The justification for each criterion is shortly presented below, based on the draft Statement of Outstanding Universal Value, which will be presented for adoption by the Committee at its 37th session (Phnom Penh, 2013).

vii. To contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;

The Property holds exceptionally beautiful landscapes, in a vast area of natural tropical forests of great landscape diversity. Quaternary glacial activity has generated majestic relief forms such Cirques and U-shaped valley in which high altitude bogs and lakes occur. Many creeks, rivers and impressive waterfalls highlight the natural beauty of these mountains. It has a singular scenic and spiritual value.

viii. To be outstanding examples representing major stages of the Earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;

The Talamanca Range is a very particular sample of the recent geological history of the Central American Isthmus, which in its time became a bridge between North and South America, separating the Pacific and Atlantic Oceans. The Property shows indelible marks that the Quaternary glacial activity which cannot be found elsewhere in the Central American region.

ix. To be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;

The property constitutes a unique, mostly intact part of a geologically young land bridge, which is a meeting point of flora and fauna coming from North and South America. This biogeographic process, combined with the complex relief and huge altitudinal range and heterogeneity of many other environmental conditions, has resulted in a complex mosaic of ecosystems and habitats of global importance for conservation and science. The mosaic includes oak forests, different types of tropical rainforest, cloud forest and the rare high altitude bogs and grasslands, all with extraordinary levels of endemism across numerous taxonomic groups.

x. To contain the most important and significant habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The Site has a high biological diversity, especially considering the amount of species per unit area. There is a high presence of endemism in groups such as fish, amphibians, reptiles, birds, plants and arthropods. There is a unique ecosystem: the “isthmus páramo” shared by Costa Rica and Panama which is the habitat for a meaningful quantity of species exclusive to this area. Being located in a complex of protected areas along a wide altitudinal gradient, the Property offers a valuable opportunity for the protection of species that require special conditions in order to perform daily, seasonal or altitudinal migrations. In addition, it is extensive enough and appropriate to ensure the survival of viable populations of several rare, vulnerable and endangered species of flora and fauna.

Justification of the mission

The IUCN/UNESCO reactive monitoring mission for the Talamanca Range-La Amistad Reserves/La Amistad National Park binational site derives from the World Heritage Committee’s decision **35COM 7B.29** (See Annex I). The mission was requested to assess the threat posed by ongoing dam construction in Panama, by potential dam developments and mining in Costa Rica, and from the planned road traversing the property from Boquete to Bocas del Toro, and make a recommendation on the possible inscription of the property on the List of World Heritage in Danger (Terms of reference for the UNESCO/IUCN mission – Annex II)

Mission activities

The mission team was composed of Robert Hofstede of IUCN’s World Commission on Protected Areas (IUCN WCPA), and Alan Monroy Ojeda. The mission was accompanied by staff from SINAC (MINAE) in Costa Rica and ANAM in Panama. The mission met the top environmental authorities, technical experts from the relevant governmental agencies, local authorities from both countries and members of a large number of international, national and local non-governmental organizations and indigenous organizations (both formal traditional authorities as well as informally organized groups). Annex III presents the detailed mission agenda and Annex IV presents the names of all people who assisted the different meetings and workshops.

2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

Legislation, institutional framework and management structure of protected areas in Costa Rica and Panama

The case of Costa Rica

The body of Costa Rica's environmental legislation pertinent to the World Heritage Site includes the following instruments: L -7554: Ley Orgánica del Ambiente [Environmental Organic Law]; L -7317: Ley de Conservación de Vida Silvestre [Wildlife Conservation Law]; L -6084: Creación del Servicio de Parques Nacionales [National Park Service Creation Law]; L -7575: Ley Forestal [Forestry Law]; and L-7788: Ley de Biodiversidad [Biodiversity Law].

As far as the administration is concerned, the Biodiversity Law created the Costa Rican National System of Conservation Areas (SINAC) "as a decentralized and participative institutional management system, which integrates the competences in forestry, wildlife and protected areas issues, and the Ministry of the Environment and Energy (MINAE), in order to enact policies, and plan and execute processes aimed at achieving sustainability in the handling of natural resources in Costa Rica". With this scheme, the country is divided geographically into 11 Conservation Areas and the World Heritage Site is located in two of them: the La Amistad-Caribbean Conservation Area (ACLA-C) and the La Amistad-Pacific Conservation Area (ACLA-P). Thus, these two Conservation Areas are those responsible for coordinating efforts to protect and manage the World Heritage Site. The Costa Rican part of the property covers an area of 199,147 ha, distributed in the following manner: ACLA-C 88% and ACLAP 12%. It consists of seven protected areas, with a total of 39 park rangers. This amount is higher than in 2008, but stabilized after 2009 when the Costa Rican government decided to not fill vacant positions in government agencies.

The case of Panama

The management of natural resources in Panama, and the World Heritage Site in particular, is based on the following legislation: L-41: Ley General del Ambiente (General Environmental Law); L-1: Ley Forestal (Forestry Law); and L-24: Ley de Vida Silvestre (Wildlife Law).

The governing body for natural resources is the National Environmental Authority (ANAM), which both administers and regulates the National Protected Areas and Wildlife System (SINAP). Within the administrative structure of the ANAM, protected areas and wildlife issues are dealt with by the National Heritage Management Authority, whilst the territorial administration of the protected areas is the responsibility of the Regional Administrations. The property in Panama comprises the Parque Internacional La Amistad (PILA). This park borders on Volcán Barú National Park (Chiriquí) and Palo Seco Forest Reserve (Bocas del Toro). PILA corresponds to the Regional Environmental Administrations of the Provinces of Bocas del Toro and Chiriquí, hence there is a separate administration for the Chiriquí (Pacific) side and the Bocas del Toro (Caribbean) side. In total, the Site has 12 civil servants, including the headquarters for the Pacific and the Caribbean areas and four field staff. This amount has remained stable during the last decade. In addition, a total of 12 rangers are provided by the companies that own the two hydropower dams, which are formally appointed to the Palo Seco Forest Reserve adjacent to the property.

The Transboundary Agreement and the Binational Commission

Bilateral relations between Costa Rica and Panama are directed by the Agreement between the Government of the Republic of Costa Rica and the Government of the Republic of Panama on Cooperation for Cross-border Development and its Annex, ratified by Costa Rica by Law No. 7518 published in the Official Gazette no. 140 of 24 July 1995, and by Panama by Law No. 16 of 10 August 1994, published in the Official Gazette No. 22.602 of 17 August 1994. The administrative structure of the Agreement proposes a Permanent Binational Commission presided over by the respective Planning Ministers, as well as a series of thematic Technical Commissions including the Environmental Issues Technical Commission in which the ANAM and the MINAE participate. The Environmental Issues Working Group met within the framework of the 1st Meeting of the Political Consultation Mechanism, held in David City, Chiriquí, Republic of Panama, on 26 and 27 July 2007. The Group made a series of recommendations to the Ministries of Foreign affairs related to the management of the PILA, including the request that the bi-national PILA Commission (made up of the ANAM and the MINAE) be recognised as a Permanent Cross-sector Technical Committee under the Bi-national Agreement. The latter took effect in 2009, and UTEB-PILA is now formalized, counts with regulations and two coordinating meetings per year have been taking place every year.

3. IDENTIFICATION AND ASSESSMENT OF ISSUES/THREATS **Assessment of overall management effectiveness**

Overall management

Costa Rica is in the process of updating the management plans of all seven protected areas that constitute the property. The plan of the Parque Internacional La Amistad is already approved, while the plans for Chirripó and Tapantí-Macizo de la Muerte are ready but awaiting formal approval. The others are still a work in progress. Costa Rica applies annually (in principle, not always complied) a monitoring tool for monitoring the management effectiveness of protected areas¹. In the World Heritage Site, effectiveness is monitored per individual protected area, but reported in two clusters (ACLA-P and ACLA-C). In general, the monitoring of the management effectiveness of the areas resulted in high scores for planning, participation and administration and lower scores on operative activities, staff numbers and general financial situation. In general, based on the scores the overall management effectiveness can be considered as acceptable. The reports mention difficulties specifically related to survey, control of wild fires, illegal invasions and environmental education activities, all resulting from a lack of staff and budget.

The mission observed a relatively good effectiveness of Management in the Costa Rican side of the property. Although the number of staff did not increase after 2008, it did not decrease either although since 2010 there is a government-wide halt on contracting new staff, even for positions that remain vacant due to personnel leaving. Most protected areas have good installations and frequent patrolling activities by park rangers. There is some evidence of illegal activities within the property (fires in paramo, uncontrolled tourism, slash-and-burn

¹ Methodology: Mena, Y. & Atravia, G. (2006): Hacia la administración eficiente de las áreas protegidas. Políticas e indicadores para su monitoreo. PROARCA, MINAE, SINAC, TNC. Indicators are scored on a scale from 1-5, in which 0-1 is defined as "unacceptable"; 1-2 as "slightly acceptable"; 2-3 as "regular"; 3-4 as "acceptable" and 4-5 as "satisfactory". Underlying concepts are similar as the methodology applied in Panamá.

agricultural activities and marihuana cultivation; see below) but these are reported as being localized and not affecting the park's integrity on a major scale.

In Panama, the existing management plan for the national park included in the property (Parque Internacional La Amistad, PILA) dates from 2004 and will, according to planning, be updated in 2014. Since 2001, ANAM applies an annual analysis of data on management effectiveness and reports on detailed monitoring (including stakeholder workshops) every 4-5 years in one report presenting results on all Protected Areas nationally². Since the Pacific and Caribbean side of PILA are separate administrations, the effectiveness is measured separately as well. The last report (analysing data from 2011) considered that effectiveness of both parts are "acceptable", although the Caribbean side had a higher score than the Pacific side (724 vs. 672). The Pacific side scored "satisfactory" on natural resources indicators, "acceptable" on political, legal and administrative indicators and "regular" on social and financial indicators. The Caribbean side scores "acceptable" on all indicator groups.

In Panama, the mission observed a somewhat lower effectiveness than in Costa Rica, because of a serious lack of field staff (8 for the entire park) and the easier access to the property (especially on the Pacific side where the agricultural frontier borders on the Park, and on the Caribbean side, in part triggered by hydroelectric dam infrastructure). Although there are no reports of further encroachments of agriculture towards the property on the Pacific side, the imminent threat requires permanent and widely available presence of park staff which is not available. The recent decision of the Government of Panama to enhance the national parks system personnel with 150 park rangers at national level should increase the number of PILA staff. Also, the arrangement with the companies that construct the CHAN75 and Bonyic dams include a total of 12 new park rangers for the Caribbean side. Although these are formally designated for the Palo Seco forest reserve (buffer area of PILA), ANAM is designing a coordination mechanism so this new staff will be working for PILA as well.

In both countries the property is surrounded by several areas of different protection status (Quetzal National Park, San San Pond Sak wetland, Volcan Barú National Park, Palo Seco Forest Reserve, Los Santos Forest Reserve) as well as approximately a dozen formally recognized indigenous territories. This setting provides the site with an adequate buffer zone whose management, at least theoretically, is assured by the state and indigenous peoples. The entire setting forms part of the Talamanca range Biosphere Reserves in both countries that should guarantee the integrated management of the wider setting of the World Heritage property which is considered the intangible portion of the Biosphere reserve. However, there is relatively little activity taking place under the Biosphere denomination, with only few attempts to establish biosphere committees.

Assessment of threats

Hydroelectric dam construction

No actual dam construction takes place within the boundaries of the property, but several dams have been built or are under construction outside the property on rivers that originate within the property (Annex V, map 2 and 3). Many more potential dam projects have been identified and a few of these are currently under study (particularly Diquís, on the Pacific side

² Methodology: ANAM. (2007). Guía Básica: Programa de Monitoreo de la Efectividad de Manejo de las Áreas Protegidas del SINAP. Scores from 0-200 are defined as "unacceptable"; 200-400 as "slightly acceptable"; 400-600 as "regular"; 600-800 as "acceptable" and 800-1000 as "satisfactory". Underlying concepts are similar as the methodology applied in Panamá.

in Costa Rica, now in the feasibility study stage and CHAN140, already in prefeasibility study stage, but awaiting a restart of the process after a change in concession holder). Dam construction has a considerable negative direct effect on the rivers' integrity by course deviation, sedimentation and pollution of downstream areas. It affects forests by flooding and direct deforestation for construction. However, none of these direct effects impact on the property, which is situated upstream from the building sites and reservoirs.

The dams are likely to have a negative impact on fresh water biodiversity. Once the dams are constructed, and no adequate mitigation measures are included, the constructions form a barrier for migratory fish and crustacean species. Since most of the Talamanca range fish species and many macroinvertebrates are migratory and depend on intact river systems from the brackish coast to cooler waters upstream, such a barrier would cause the disappearance of many species within the affected rivers that have their upstream area within the site. Studies have shown that migratory species are found up to 1000 - 1200 meters above sea level which means that the unique freshwater biodiversity (one of the justifications of criterion x of the OUV) is seriously threatened in the rivers that are dammed and where the boundaries of the property are located lower than the mentioned altitudes. The latter is generally the case on the Caribbean side (where the lower boundary of the property is located between 90 and 250 m) but less relevant on the Pacific side where the lower boundary is located at 1500 m (See Annex V, map 4).

Apart from the Reventazón river (dammed before the property was declared protected area), the rivers Changuinola (dammed in 2011 by the CHAN75 project) and Bonyic (construction 60% completed, to be dammed in 2013) will certainly experience the mentioned negative effect on freshwater biodiversity. In both projects, physical mitigation measures for biodiversity impact (e.g. fish stairs) have not been implemented. According to consulted freshwater biodiversity experts as well as biologists from the dam construction company, these measures are unlikely to have a major positive impact in this type of (high) dams. The companies plan compensation measures to restore one or several native fish species, especially the socially and commercially important Bocachica (*Joturus pichardi*) through the installation of fish breeding stations. This might be important for this particular species and for the people fishing them, but it will not compensate the full range of biodiversity. Also, Bocachica is a relatively widespread species in the neotropics while other (more restricted) species do not benefit from this compensation. Other compensation measures (restoration, reforestation) are implemented for forest loss and degradation due to dam construction, but both the damage as well as the remediation measures are outside the property.

There are currently no other dam projects under construction on the Caribbean side, but several have been projected; the one most likely to have significant impacts being the Talamanca dam (Río Telire, upper part of the Sixaola watershed, Costa Rica). According to the Costa Rican governmental energy institute (ICE), it will be practically impossible that any of these will become a reality before 2025, including the Talamanca dam, because none of them are in the prefeasibility study stage. In Panama, although none of the identified other dams are now in the feasibility study stage, there is a clear movement towards a second dam on the Changuinola river (CHAN140), evidenced by a recent change in concession ownership from AES (the private company building CHAN75) to the state (aiming at building the dam). This second dam is upstream from the existing dam, but still outside of the limits of the property.

Existing dams on the Pacific side (Chico, Chiriquí Viejo and Chiriquí rivers), at lower altitudes than the property boundary, will certainly have affected these river ecosystems. However, given the high altitude of the boundary of the property, the impact on fish biodiversity in the property will be limited. The same holds for the General river (in Costa Rica, Pacific side) where

a large hydroelectric project (Diquís) is in the feasibility study stage. Studies in the potentially affected watersheds did not show any fish or crustacean species up to the altitude of the lower boundaries of the property (see annex V).

Although the current dam developments certainly affected fresh water fish and crustacean species in the Changuinola river and will do so soon in the Bonyic river, this will not yet lead to disappearance of the species in the property as such. There are no reports of migratory species endemic to these two watersheds and the species will survive elsewhere. However, the assemblage of species, possibly unique in each individual watershed, will be irreversibly affected.

Besides the (still relatively localized) direct impact on the biodiversity of the site itself, the construction of the hydroelectric dams have seriously affected the local social and political setting. All upper watershed area that is affected by actual and potential dams on the Caribbean side is ancestral territory of indigenous groups: Bribri and Cabecar in Costa Rica, and Ngobe-Boglé, Naso and Bribri in Panama (Annex V, map 5). On the Pacific side, in Costa Rica several indigenous groups (Teribe, Cabecar, Boruca) would be affected by eventual dam construction in the General river (Diquís). The people in the upper watersheds of the dam projects on the Pacific side in Panama are mainly mestizo farmers. The Bribri and Cabecar (in Costa Rica) and Ngobe-Boglé (in Panama) have officially recognized territorial rights (indigenous reserves in Costa Rica and *comarca* in Panama). In general, the formal territory is not within the property but it borders on the property on all sides (there is some overlap with indigenous territories and the property in Costa Rica). However, besides the officially recognized territory, indigenous groups claim that their ancestral land covers most of the Talamanca range, including the protected areas within the property. Especially on the Caribbean side in Panama, several claims have been made by Ngobe-Boglé to increase their *comarca* with associated sites and by Naso to establish their own *comarca* (Naso is the only indigenous group in Panama without a formally designated territory).

The indigenous groups consider themselves natural guardians of the biodiversity and natural assets of the whole area, including the property. This claim has been confirmed by most of the stakeholders in both countries: the forests in indigenous territories are well conserved, provided that the management of the indigenous territories is extensive; there is good coordination between the indigenous groups and the governmental agency and there is no other use than irregular hunting and gathering and no permanent occupation of the forests and paramo at higher altitude.

At least during the last five years, the traditional leaders as well as many individual members of indigenous groups expressed on several occasions, and sustained by formal declarations, that the indigenous peoples oppose every dam development. According to interviewed representatives of the groups, the ongoing projects, where due consultation of the indigenous peoples was lacking, have seriously affected the relationship of the indigenous peoples' organizations with the government. This includes the relationship with the protected areas agencies. Particularly in Panama, the process of dam development and compensation structures has disintegrated the internal social structure of several indigenous groups, illustrated by statements and formal and informal declarations delivered during the mission. In spite of serious attempts of the companies that build CHAN75 and Bonyic and that study Diquís to involve as much as possible the affected indigenous peoples groups, there is rapidly increasing dissatisfaction of these groups with the way the companies act, and open criticism, protests and even lawsuits are made from both sides. This has slowed down the dam construction process (and considerably increased costs) and damaged trust and positive relationships between different stakeholder groups.

Dam construction in the present situation of conflicting indigenous internal governance, lack of collaboration, and distrust in the relationships between community and state, decreases governability and increases the threat of uncontrolled migration and ill use of resources in the forest. In fact, there are (unverified) reports of newly colonized areas in Palo Seco Forest Reserve and possibly in PILA in areas above the dam construction sites in Panama.

Cattle ranching and other agricultural activities

Scattered agricultural activities have been present in and around the area well before it was designated as protected areas. Most of this was low intensity and rotational, slash-and-burn like agriculture practiced by indigenous communities that apparently did not affect the OUV of the area. In the high parts, especially on the Panama side of the property, there are several medium size cattle farms that were established by individual colonizers in the 1960's and 70's. The landscape in these areas is transformed into grassland with considerable forest remnants. There are no roads to these farms; they can only be reached on foot, 7-12 hours over a (collectively maintained) path. Most cattle ranching takes place outside the national parks but within the Palo Seco Forest Reserve (Nueva Zelandia and Esgui). However, several farms are settled within the property, established before the park designation. According to a 2004 survey, there are approx. 7,000 hectares of grassland in the high country of which 2,000 hectares are within the property. The main access of the cattle ranching area of Nueva Zelandia is through a path that crosses the property through the Chiriquí province. According to the farmers, there is an average of one head of cattle per hectare. On the Costa Rica side, there has been some cattle grazing close to the property but according to the 2012 report from the State Party, these have been abandoned and the mission did not encounter further reports or alerts from third parties.

Although most of the farm owners pertain to the families that colonized the area 30 - 40 years ago, none of them have property deeds and now most do not live permanently at the farm; they hire farm managers (mostly Bribri people) and make frequent supervision visits. According to the farmers, there has not been any expansion of grassland ever since the protected areas were established. This is confirmed by ANAM (including in the 2012 State Party report) who assume a decrease of cattle ranching presence due to the low profitability, but questioned by some NGO and indigenous groups. However, there are no objective data on the area occupied by cattle ranching since 2004.

Recently, the management of the PILA in Panama has established a working relationship with cattle farmers through which they feel sustained in their activities in the Forest Reserve and in compensation, alert ANAM about eventual new invasions. In 2009 one of such invasions (probably by land traffickers from Panama City) was recorded and joint action from the cattle farmers and ANAM managed to stop the threat. On the other hand, to the mission the farmers expressed their dissatisfaction with the protected areas status and the fact that they are not compensated for the limitation on expanding.

Slash-and-burn agriculture is relatively widespread in the property's buffer zone (Forest Reserves and indigenous territories). Also within the site, there are small areas of traditional agriculture on the Panama side and some localized new incursions on both the Costa Rica and Panama sides. Until now, these activities are of small intensity and they do not threaten the OUV. Only on the southernmost border (close to the Ngobe *comarca*) there are more numerous human settlements practicing traditional agriculture. Although these are not yet colonizing the property itself, there are reports of encroachment and conflict between Ngobe and Naso groups close to the property. Ngobe and Naso representatives mention that the

increased infrastructure of the hydroelectric projects (easier access to forests) and related social conflicts will increase the migration of Ngobe towards the property.

On the pacific side of Panama, there is relatively intensive agricultural production (vegetable and potato cultivation) close to the limits of the property. Although encroachment of agriculture is a permanent threat, according to the park director, direct incursions are still limited, among others thanks to a relatively good collaboration of farmers with the park management.

Road construction

Since several years, a road from Boquete (Chiriquí) to Almirante (Bocas del Toro) is included in Panama's Government Plans. The projected course of this road crosses the property from South to North on the highest side, crossing one of the most vulnerable parts in high mountain ecosystems (Annex V, map 3). This road is a high potential threat due to the direct impact of construction (deforestation, erosion) and use (contamination), but much more due to the indirect impact of the consequences of road construction (logging, hunting and colonization due to increased access, more economic development in general).

The road has been identified by the present government but both ANAM as well as the Ministry of Public Works have not received any plan or request for prefeasibility or impact studies. In that situation, it should be concluded that the road project until now is not an actual threat. On the other hand, the synergy between different economic development projects might, in future, increase the feasibility and threat of this particular project. The hydroelectric dam on the Changuinola river is associated with road construction and increased navigability. If the second Changuinola dam becomes reality, there will be a good (road) access close to the boundaries of property on the Caribbean side and from there, approx. 10 or 15 km road construction is enough to connect (through the park) to the Pacific side, making the road less expensive and more feasible.

Mining

During the first decade of this century, there was concern about two mining concessions on the Costa Rican side of the property. These concessions were promoted by private stakeholders (directed by a Norwegian citizen) and situated directly outside the property. Initially, these concessions had consent by the Bribri people in who's territory the mining would take place but before actual explorations commenced, new Bribri authorities retreated their support to the concessions and declared themselves fully opposing mining development in the region. Since 2008, three new requests for exploration (of various minerals) have been presented to the Costa Rican Ministry of Geology and Mining. All requests seem to be promoted by the same person, using different company names, who might be the same person that promoted the initial mining initiatives. However, without consent of the Bribri these projects will be unfeasible (given the fact that the last 20 years, no mining exploration has been done in indigenous territories). Also, Costa Rica has declared a gold mining moratorium, valid until at least the end of the present government, and there is now a public request to the national authorities in order to forbid any further mining activity in the country. Therefore, it is unlikely that any formal mining activity will take place in or near the WH site in the near or middle future.

Illicit crops

A localized threat, but with possible broad environmental and social impact, is illicit crop cultivation. Especially the Costa Rican side of the Talamanca region has a decades-long history of small scale marijuana cultivation. Its remoteness, difficult access and good environmental conditions for cultivations have triggered small cultivations scattered in the mountain range³. Although SINAC does not manage formal data of marijuana cultivation within the park, several plots have been found in recent years and were destructed (in collaboration with national police). There seems to be an increasing trend which as such does not impact much in terms of hectares deforested, but it does in governability, security and social relations. There are reports of local people (including indigenous groups) being forced to cultivate or protect marihuana and of man-made forest and paramo fires, possibly as a reprisal for marijuana confiscation.

4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

Evaluation of threats

The mission recognised that the governments of Costa Rica and Panama, together with the different organisations involved, have made a great deal of effort to maintain the integrity of the property and its Outstanding Universal Value. Especially the more intense interaction with IUCN-UNESCO WH Centre, to follow-up on decisions of the WH Committee subsequent to the 2008 reactive mission and SOC reports, resulted in a series of measures from both countries aimed at reducing the threats to the integrity of the property and its OUV.

There are several positive developments in both countries. The binational coordination framework between Panama and Costa Rica is in place. The mission perceived a satisfactory coordination between staff at managerial level as well as at field level between the two countries. The coordination mechanisms are in place and peers are in regular contact. There are frequent trans-border inspection missions and park guards from one country frequently assist meetings, workshops and other activities in the other country. During the first year after the 2008 mission, there was an increase in the number of park staff in Costa Rica but this growth stopped. However, considering a formal halt of staff recruitment during the last years, maintaining the 2009 staff numbers in Costa Rica can be considered a relatively positive result. The Panamanian park management authority has managed to increase staff on the Caribbean side thanks to the employment of 12 park guards paid by the hydropower construction plants (these are designated for Palo Seco, but internal coordination results in direct benefit for PILA as well). In late 2012, a decree was emitted that increases total ANAM field staff with 150 persons, including an expected 24 additional PILA staff (more than double the current staff numbers).

Despite the positive developments mentioned above, there continue to be threats to the World Heritage Site. The magnitude of the threats and its concrete impacts on OUV might not currently justify the inclusion of the property on the List of World Heritage in Danger, however, the mission is seriously concerned about the conservation status of the property due to ongoing development plans (especially hydropower dams), increasing social conflict and incomplete follow-up by the States Parties to the recommendations made by the WH Committee.

Apart from hydropower dams established before the area was included in protected areas (Reventazón River, Costa Rica), no economic development infrastructure is included within the property. All hydropower dams in operation or in study are outside the property. Of these,

³ <http://news.co.cr/police-destroy-562767-marijuana-plants-in-talamanca-costa-rica/9025/>

particularly the two dams on the Caribbean side in Panama (CHAN75 and Bonyic) will have direct impacts on the biodiversity of the property (fish and crustacean diversity). Although the dams on the Pacific side might have serious impacts on the biodiversity and integrity on lower altitude biomes, the direct impact on the property is limited, due to the high altitude of the property's boundary on this slope (above 1500 m, where the presence of diadromous fish is highly unlikely). At present, there are no concrete additional projects (prefeasibility, feasibility or construction stage) on the Caribbean side in Costa Rica or Panama hence still most of the river basins continue to be without threat. However, the change in ownership (from private to public) of the concession for a second dam on the Changuinola river, whose reservoir will be very close to the property, indicates that the plans to develop this project somewhere in the future are serious.

Although the dams until now seem to have had relatively little direct impact on the biodiversity and the integrity of the property as such, it has triggered serious conflicts in the region around the property, which have negatively affected the overall governance situation. The rural inhabitants, and especially the indigenous peoples, are effective allies for conservation. The traditional cultural and social values are included as one of the unique aspects of the property and in many parts, continue to be a safeguard for the integrity of the forest.

Good governance requires a stable relationship among the different rural inhabitants and between these and the government agencies, and this relationship builds on trust and constructive collaboration. There is convincing evidence, delivered by different stakeholders to the mission, that the stable relationships among indigenous groups and between these and the government have been seriously harmed. There is generalized opposition to hydropower projects and a perception that the state is promoting the construction of the dams, in spite of social opposition and traditional territorial rights. This is particularly the case in Panama, where actual construction is taking place. This level of distrust decreases the willingness of indigenous groups to collaborate with protected area management, and increases uncontrolled immigration and resource use.

The threats from other economic development programmes to the property (road construction, mining development) are latent problems because there is no indication that there is any concrete development of these projects. According to the information provided, agricultural activities, which might form a threat of a certain degree outside the property, are localized and do not show an increasing trend within the property.

The States Parties have complied with several of the recommendations included in the decisions made by the World Heritage Committee since 2008. However, their response has been partial and in several cases unsatisfactory. One specific request from the WH Committee, directed to the State Party of Panama, included halting all dam constructions until a detailed transboundary strategic environmental assessment process is completed. Although the SEA was commissioned in 2011, dam construction continued. The mission analyzed the SEA and the perception of the different stakeholders that were included in this process. It was noted that the process until now is of very preliminary character, with a limited series of multistakeholder workshops and lacking academically sustained, quantitative information on impact. As reported in the SEA document's annexes, most stakeholders consider the process ill planned, superficial and not following formal procedures (both methodological and procedural).

Outstanding Universal Value

While analyzing the status of conservation of the property, the mission could find few concrete indications of ascertained danger to the OUV. Although there still is some agricultural activity and cattle ranching within the property, including associated infrastructure like housing and paths, and in spite of there being no recent quantitative assessments, it is unlikely that these activities will have large scale impacts on the landscape, the geological and evolutionary processes or the overall integrity of the area. Other threats related to actual development projects (hydropower dams) and potential projects (hydropower and mining) are outside of the property and landscape beauty and geological processes (criteria vii and viii) are not in danger as a result of these projects.

In terms of ecological processes (criterion ix) and the rich biodiversity (criterion x), there is considerable danger for freshwater biodiversity and ecological processes related to the discontinuity of river systems caused by dam construction. This will have affected dramatically the species and processes in the dammed rivers (particularly Changuinola river and, shortly, Bonyic river). On the other hand, there are no indications that this danger will lead to species extinctions as long as there are other similar intact river systems in the Talamanca range. However, the possibly unique species assemblage of the affected rivers will be destroyed, with unknown overall impact. Existing dams and dams under construction on the Pacific side of the property will likely have little impact on fresh water biodiversity of the higher watersheds where the property is situated.

The development of, specifically, the actual and potential hydroelectric dams has caused verifiable concrete negative impacts on the values of man's traditional interaction with the environment and the importance of the site for indigenous culture, which, as an issue of protection and management, is an integral part of OUV. Although the property has little permanent habitation by indigenous groups, large parts are considered part of the ancestral territory. The social conflicts related to the hydropower construction (and even before, in the feasibility stage) have changed many parts of the traditional lifestyle, damaged internal relationships and threatened the interaction of men with the environment (through displacement and new immigrations).

5. CONCLUSIONS AND RECOMMENDATIONS

The mission concludes that there are still serious threats to several of the elements of the OUV of the property, specifically originating from the ongoing development of hydroelectric power plants. Some localized irreversible damage has been done to, especially, fresh water biodiversity on the Panama side of the property. Nevertheless, given that there are still many intact river systems in the property and that for now, there are no other projects (hydropower, mining, roads) in concrete planning stages, the actual threats are not yet of a magnitude that they justify the inclusion of the property on the List of World Heritage in Danger. Any concrete development of new economic projects (including new hydropower projects, any road crossing the property and mining within the property or in the buffer zone) will represent ascertained danger and imply that the property would then meet the conditions for inscription on the List of World Heritage in Danger.

The mission is deeply concerned by the social conflicts related to the hydroelectric dams in both countries. This not only puts cultural aspects of the property in danger but especially stresses the governance situation of the wider region and multiplies the direct threats originating from the economic development projects.

The mission recognizes good efforts from the States Parties to mitigate the threats, which seems to have had some positive impact especially on agricultural land use within the property. However, the mission also notes a suboptimal overall response to the decisions made by World Heritage Committee subsequent to the previous reactive monitoring missions. There is specific concern over the procedure of the requested Strategic Environmental Assessment and the progress achieved in that respect, and the lack of halting hydropower development while the SEA is being conducted. Also, there is a lack of updated data on land use close to and within the property, especially regarding livestock ranching.

Recommendations

1. The Strategic Environmental Assessment, presented in its preliminary version, should urgently be intensified, including evidence and science based impact analyses, consideration of least damaging alternatives, broad stakeholder consultation and validation processes. The SEA process should be in line with national procedural standards and international best practice, in coordination with the relevant authorities;
2. No further development of hydro-energy projects, mining or road construction within or directly adjacent to the property in neighbouring protected areas and indigenous territories should be permitted;
3. Any further planned economic development projects that could potentially negatively affect the property, should be subject to independent environmental impact assessments that include a specific assessment of impacts on the OUV of the property and should count with all elements of Free and Prior Informed Consent (FPIC) indigenous peoples that have (recognized or customary) territorial rights;
4. Guarantee the long term integrity of complete (from source to sea) unaffected watersheds, including at least Chirripó, Sixaola, Teribe, Pacuare, Estrella, and Bananito on the Caribbean side and Coto Brus and Térraba on the Pacific side;
5. The companies that build and operate the CHAN75 and Bonyic dams should be required to implement optimal compensation mechanisms for the affected freshwater biodiversity, including but not limited to cultivation of affected freshwater species, particularly endemics;
6. Harmonize the management plans of the protected areas within the property within the framework of one overarching management plan. Both the existing binational framework and the national coordination between the two sides (Caribbean and Pacific) should be taken into account; the management plans of adjacent protected areas can be aligned with the management plan of the property as required;
7. Compile field data on the present state of human activities, within and directly adjacent to the park, including number of hectares affected, number of families, heads of cattle and paths of communication. This is especially urgent in Panama for livestock and in Costa Rica for illicit crop cultivation. These data should provide accurate base lines and be monitored frequently;
8. The Bi-National Executing Technical Unit for the management of La Amistad International Park (UTEB-PILA) should be converted into the principal management planning and oversight body for the property. Indigenous groups and local NGO's

should be included in the planning and conservation activities of the site, through participation in the UTEB;

9. Continue to increase the number of park staff. Training and inclusion of indigenous people and local farmers as park guards is recommended to ensure the integration of key stakeholders to the conservation agenda;
10. Invite a follow-up reactive monitoring mission within two years (2015) in order to assess progress achieved with the implementation of the present recommendations, including an assessment of progress achieved with the SEA, the implementation of updated and harmonized management plans, the compilation of updated field data, the status of eventual new economic development projects and the social basis for local environmental governance.

ANNEXES

Annex I – Decision 35COM 7B.29 . Talamanca Range-La Amistad Reserves / La Amistad National Park (Costa Rica / Panama) (N 205bis) The World Heritage Committee,

1. Having examined Document WH COMMITTEE-11/35.COM/7B.Add,
2. Recalling Decision **34 COM 7B.32**, adopted at its 34th session (Brasilia, 2010),
3. Regrets that the State Party of Panama did not submit a report on the state of conservation of the property, as requested by the World Heritage Committee at its 34th session;
4. Notes with appreciation the efforts of both the States Parties of Costa Rica and Panama to establish a Bi-national Executing Technical Unit for the management of La Amistad International Park (UTEB-PILA), and to commission a transboundary Strategic Environmental Assessment (SEA), as requested by the World Heritage Committee at its 34th session, and requests the States Parties to keep the World Heritage Centre informed on the effective operation of the UTEB-PILA, and submit a copy of the complete SEA report to the World Heritage Centre for examination, as soon as it becomes available;
5. Expresses its serious concern that the State Party of Panama has not halted dam construction on the Changuinola and Bonyic rivers until a detailed transboundary Strategic Environmental Assessment process is undertaken, and considers that ongoing discussions over the construction of new dams within the property in Costa Rica, if not immediately resolved, could lead to conditions whereby the integrity of the property would be considered threatened, in accordance with Paragraph 180 (a) (ii) of the Operational Guidelines;
6. Also expresses its concern that the State Party of Panama has not abandoned its plans to build a road traversing the property from Boquete to Bocas del Toro, and reiterates its request that it submit preliminary environmental impact assessments for this development to the World Heritage Centre as soon as these are available;
7. Also reiterates its request to both States Parties that measures be adopted to ensure the complete removal of cattle from the property;
8. Also requests both States Parties of Costa Rica and Panama to jointly invite a joint World Heritage Centre/IUCN reactive monitoring mission to the property prior to its 36th session, which should assess the threat posed by ongoing dam construction in Panama, by potential dam developments and mining in Costa Rica, and from the planned road traversing the property from Boquete to Bocas del Toro, and make a recommendation on the possible inscription of the property on the List of World Heritage in Danger;
9. Further requests both States Parties of Costa Rica and Panama to submit to the World Heritage Centre, by **1 February 2012**, a joint report on the state of conservation of the property, including progress on the transboundary dam Strategic Environmental Assessment, a report on progress achieved in resolving land tenure and land use issues (Costa Rica), as well as on the other points raised above, for examination by the World Heritage Committee at its 36th session in 2012.

Annex II – Terms of Reference

IUCN Reactive Monitoring Mission; Talamanca Range-La Amistad Reserves/La Amistad National Park (Costa Rica/Panama)

17 – 24 January 2013 (proposed date)

At its 36th session, the World Heritage Committee requested the States Parties of Costa Rica and Panama to jointly invite a reactive monitoring mission to Talamanca Range-La Amistad Reserves/La Amistad National Park World Heritage Site, to be conducted by IUCN (Decision **36 COM 7B.31**). The objective of the monitoring mission is to assess threats posed by ongoing dam construction in Panama, existing and further potential dam developments, mining in Costa Rica, the planned road project to traverse the property from Boquete to Bocas del Toro, and the effects of cattle in the property. The mission will be conducted by IUCN, represented by Robert Hofstede and Alan Monroy.

In particular, the mission should address the following key issues:

1. Assess the status of dam construction on the Changuinola and Bonyic rivers, as well as potential dam and mining developments in Costa Rica, and their likely impacts on the property's Outstanding Universal Value, taking into consideration the ongoing transboundary Strategic Environmental Assessment process;
2. Assess the status of plans to build a road traversing the property from Boquete to Bocas del Toro through the Panamanian portion of the property, and the likely impacts of this proposal on the property's OUV, taking into consideration any preliminary Environmental Impact Assessments;
3. Review the status of cattle grazing and the progress made towards the complete removal of cattle from the property;
4. Review the management effectiveness of the different components of the property, in particular the existence and implementation of management plans, available staffing and budgets of the management authority and their capacity to effectively conserve the OUV of the property;
5. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management;
6. Based on the above assessments and reviews the mission will evaluate the potential cumulative impacts of dams, mines, roads, cattle grazing and other conservation issues on the property's OUV and **make a recommendation regarding the possible inscription of the property on the List of World Heritage in Danger.**

The State Party should facilitate necessary field visits to key locations, including the dam sites on the Changuinola and Bonyic rivers, key areas of the Boquete-Bocas del Toro road development particularly where it is projected to cross the property, sites where there is potential mining development, and areas with potential grazing impacts. In order to enable preparation for the mission, it would be appreciated if the following items could be provided to the World Heritage Centre (copied to IUCN) as soon as possible, and preferably no later than 30 days prior to the mission start date:

- a) A draft or progress report of the on-going transboundary Strategic Environmental Assessment, including its Terms of Reference;
- b) Any Environmental Impact Assessments conducted for the Boquete – Bocas del Toro road building project;
- c) The most recent versions of the management plans of all components of the property, including details of staff numbers and financial reports.

The mission should also hold consultations with the Costa Rican and Panamanian authorities at national and provincial levels, in particular the Talamanca Range-La Amistad Reserves / La Amistad National Park management authorities and representatives of relevant ministries of both States Parties. In addition, the mission should hold consultation with a range of relevant stakeholders, including i) researchers; ii) NGOs (including ANAI); iii) representatives of key local communities (including those affected by dam developments); and iv) representatives of the dam and mining sectors.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Governments of Costa Rica and Panama and the World Heritage Committee to conserve the Outstanding Universal Value of the property and improve its conservation and management. It should be noted that recommendations are made within the mission report (see below), and not while the mission is still on-going.

The mission will prepare a concise report on the findings and recommendations within 6 weeks following the site visit, following the World Heritage Centre reactive monitoring mission report format.

Annex III – Mission itinerary and program.

Date	Meetings & Other Activities	Institutions present (full list or persons see Annex XX)
Thu 17/01	Briefing with governmental authorities; MINAET and SINAC	MINAET, SINAC
Fri 18/01	Meeting with San Jose based Stakeholders at IUCN offices. Travel from San José to Buenos Aires, Puntarenas; WHS Pacific Slope in Costa Rica	ANAI, ICE, SETENA, IUCN, APPTA, ACCVC-SINAC, CONAI, DSE
Sat 19/01	Field visit to several sites at PILA and Parque Nacional Los Quetzales. Meeting with Hydroelectric Project RS and SINAC, Buenos Aires, Puntarenas Travel to Caribbean Slope of Talamanca Range Meeting with the Association for the Integral Development of the Bribri Indigenous Territory (ADITIBRI) in Suretka, Talamanca	SINAC-ACLAP P.H. Diquis (ICE), SINAC-ACLAP, SINAC-MINAET ADITIBRI, SINAC-MINAET, APPTA, Bekuo, Kaksoli, Awapa de Kashabri, R.I.B.C.A.,
Sun 20/01	Travel to Changuinola Panama Meeting with non-indigenous cattle ranchers (in Changuinola)	APAEP, COPROBO, ANAM-DAPVS
Mon 21/01	Meeting with AES personnel. Hydroelectric project CHAN75 Visit to CHAN75 dam Recognition boat trip through the dam reservoir. The boat trip reached the tail of the reservoir where the proposed CHAN 2 might be located.	AES, ANAM AES, ANAM-DAPVS
Tue 22/01	Meeting with Bonyic Hydroelectric Project personnel at their office; La Soledad. Visit to dam construction site, Bonyic River.	Proyecto Hidroeléctrico Bonyic (EPM), ANAM-DAPVS Proyecto Hidroeléctrico Bonyic (EPM), ANAM-DAPVS
Wed 23/01	Meeting with representatives of indigenous groups and NGO of Panamá PILA (in Changuinola).	Naso King, General Congress Ngöbe-Buglé, ANAI, ADATA-FUNDICCEP, ANAM, APROTENGB, OMUB, OPROSIEY, ODESEN Teribe, ASAMBIECH, CEDETeng, ASAELA, APROSIEY, ACD, OCDESAN, CODETIAGUAS, ACBiosfera, Siey-Kjin Teribe, Local Press,
Thu 24/01	Travel to Panama City De-briefing with Panamanian governmental authorities	ANAM-DAPVS, MIDA, BDA, MINEX, MOP

Annex IV– List of people attending the various meeting during mission

Location: MINAET Office

Date: 17-01-2013

San José, Costa Rica

Ana Lorena Guevara, Vice-minister MINAET
Gustavo Induni Alfaro, SINAC/MINAET- WH
focal point

Luis Sánchez A., SINAC/ACLAP

Jenny Asch, Protected Areas national Manager

Lesbia Sevilla, Cooperation and Projects Office

Coordinator - SINAC

Olga Duran, Environmental Education

Coordinator- Cordillera Volcanica Central

Conservation Area, and future WH focal

point

Ricardo Valerio, SINAC Director

Location: IUCN-Mesoamerica Office

Date: 17-01-2013

San José, Costa Rica

Alberto Salas, IUCN, Responsible of

Environmental policy and management

Luis G. Ureña, ICE- Generation Processes and

Technologies Director

Hugo Sánchez, Parataxonomist ANAI/ Naso

Indigenous group

Marcio Bonilla, Parataxonomist ANAI/ Naso

Indigenous group

Maribel Mafla, Co-Director NGO ANAI

William McLaren, Co-Director NGO ANAI

Juanita B., APPTA

Leonel Gómez B., APPTA

Vicente Watson C., consultor

Ana María Arias Moreno, ANAI

Olga Durán Monge, ACCVC/SINAC

José Ramón Moras, SETENA

José O. Céspedes, SETENA

Victor Hernández A., Indigenous Affairs

Commission CONAI

Francine Selene M., Energy Sector Direction

Location: P.H. Diquís

Date: 19-01-2013

Buenos Aires, Costa Rica

Walter Ortiz B., SINAC/ACLAP/ Sub. Buenos
Aires

Nelson Fallos C., SINAC/ACLAP

Gustavo Induni Alfaro, SINAC/MINAET- WH

focal point

Luis Sánchez A., SINAC/ACLAP

Jorge Picado B., ICE-P.H. Diquís

Pilar Corrales B., ICE-P.H. Diquís

Jennifer Ureá V., ICE-P.H. Diquís

Franklin Ávila P., ICE-P.H. Diquís

Gustavo Induni Alfaro, SINAC/MINAET

Luis Sánchez A., SINAC/ACLAP

Location: Suretka

Date: 19-01-2013

ADITIBRI (Association for the Integral
Development of the Bribri Indigenous
Territory) Office

Gustavo Induni Alfaro, SINAC/MINAET- WH
focal point

Mildred Blanco S. Amubri Coopetsiola

Leonel Torres B., Amubri APPTA

Noemí Blanco., Amubri Asoc. Alakopa

Irene Selles Ramírez, Acomuita

Faustina Torres Shiroles, Acomuita

Marvin Sánchez, Alto Lari

Gonzalo Stuart, Namuwoki

Emilio Torres, Corbita

José Seyes Sánchez, Corbita

Ronald Morales, Kashabri

Javier Sánchez S., Duriñak

Indi M S, Amubri

Yuri Morales Nelson, Suretka

Yeimi Miranda M., Suretka

Vidal Morales W., Corbita

Juan Díaz., Shiroles

Jesusita Sánchez, Corbita

Maria Selles, Yorkin

Manuel Sánchez, Kashabri

Baudilio Selles, Duriñak

Mabel Selles, Kashabri

Pablo Selles, Kashabri

Iriria Selles.

Bertilia Waisa, Corbita

Zaida Molina Díaz, Monte Sion.

Bernarda Morales, Yorkin Stibrawpa

Jairo Sánchez, Kashabri, Grupo Kaksoli

Maura, Kashabri

Yorleni, Kashabri

Alejandra, Kashabri

Danilo Selles, Alto Duriñak

Elsa Serrut Morales, Guabo-Yorkin Bribri-

Panamá General Council

Brenda Hernández, Bambú Grupo Bekuo

Rolando Marín, Guabo-Yorkin Bribri-Panamá

General Council

Carla Rutsch, Pro Regenwald- Voluntaria Yorkin

Mario Selles, Shiroles

Digna Morales S, Kashabri

Rosa Sánchez, Kashabri.

Miguel Jerónimo Villanueva Torres, Tsuiri 2
Professor
Jennifer Salazar G, Tsuiri 2 Student
Félix Hawtez, Bribri
Sebastián Díaz., Suretka, Coroma
Neighborhood Council
Manoli García, Katsi
Ricardo Méndez López, Kashabri, Asoc. Awapa
de Kashabri.
Maria R.S.. Kashabri
Kirnel M.P., Kashabri
Mariano V.S, Kashabri
Henri, Kashabri
Miguel Rojas, Kashabri
Chavela, Duriñak
Mauricio, Duriñak
Justa Romero, Watsi, R.I.B.C.A.
Eliseo Salazar, Amubri Neighborhood
Council
Isidro Linch Smith, Shiroles Neighborhood
Council
Fausto Méndez L., Kashabri Neighborhood
Council
Horacio López, Kashabri, Emergency Local
Committee
Kathia Almengor A Suretka, Acomuita
José Mario Jaslin.
Rolando Marín, Uren
Marlene Vargas M, Corbita
Diana Morales Vargas., Corbita
Rene Rocha Cabraca. Suretka
Pastora López López. Watsi
Timoteo Jackson Pita. Watsi
Terencio Campos Sánchez., Kashabri
Francini Campos Rojas., Kashabri
Fidelina Rojas Morales. Kashabri
Asda Sánchez Porras, Corbita
David Sánchez S., Corbita
Albertina Sánchez, Corbita
Baldomero Waisa, Corbita
Adelina Campos., Corbita
Silica Waisa S. Corbita
Calixto Molina Martínez. Shiroles ADITIBRI fiscal
Aurelia Selles Vargas, Corbita
Damaris Aguirre.
Verónica Mayorga I, Shiroles
Filomena Jaslin Cabraca, Bambú Group Bekuo
Johania Morales Morales, Tayni

**Location: ANAM Office (meeting with cattle
ranchers)**

Date: 20-01-2013

Changuinola, Panama

Yajaira Luna, ANAM-DAPVS-WH Focal point
Israel Tejada, ANAM- Head of the Biodiversity
and Wildlife Department

Lionel Quiróz, ANAM/ coordinator PILA Pacific
Benigno Villamonte, ANAM/PILA Caribbean
María E. Caballero, APAER
Edgardo González, APAER
J. Mendoza, APAER
Leslie A., APAER
Ervin Nixon Morales, APAER
Miguel R., APAER
Edgar Vega Espinosa,
Alcibiades González
Ezequiel V. Atencio
Juan José González,
Justo Pérez, productor
Ivan Chávez, ANAM-Changuinola
Alexis González, productor

Location: AES CHAN75 Office

Date: 21-01-2013

Changuinola, Panama

José Calvo, CHAN75 AES Plant Manager
Rodolfo Ayarza, CHAN75 AES
Yajaira Luna, ANAM-DAPVS-UNESCO Focal
point
Israel Tejada, ANAM- Head of the Biodiversity
and Wildlife Department
Lionel Quiróz, ANAM/ coordinator PILA Pacific
Benigno Villamonte, ANAM/PILA Caribbean

Location: P.H. Bonyic Office

Date: 22-01-2013

Changuinola, Panama

Yajaira Luna, ANAM-DAPVS-WH Focal point
José Mosaquites, Director Palo Seco Forest
Reserve
Israel Tejada, ANAM- Head of the Biodiversity
and Wildlife Department
Lionel Quiróz, ANAM/ coordinator PILA Pacific
Benigno Villamonte, ANAM/PILA Caribbean

**Location: ANAM Office (Indigenous groups &
NGOs)**

Date: 23-01-2013

Changuinola, Panama

Yajaira Luna, ANAM-DAPVS-WH Focal point
José Mosaquites, Director Palo Seco Forest
Reserve
Israel Tejada, ANAM- Head of the Biodiversity
and Wildlife Department
Lionel Quiróz, ANAM/ coordinator PILA Pacific
Benigno Villamonte, ANAM/PILA Caribbean

Osvaldo Jordán, Director Alliance for
 Conservation and Development
 Reynaldo Santana, King Naso
 Eliseo Vargas, Naso leadership
 Aguirre Vargas, Naso indigenous group
 David Samudio, FUNDICCEP
 Damaris Sánchez, FUNDICCEP-ADATA
 Yaritza Espinosa, FUNDICCEP Chiriquí
 Ana Sánchez, OMIPILA Chiriquí
 Ariel Contreras, Chiriquí Water and
 Environment Association
 Sara Santos, Chiriquí Water and Environment
 Association
 Gloria Amador, ASAELA Chiriquí
 Hilario Sánchez, ANAM/PILA
 Valentín Pineda, ANAM
 Joel Balker, ANAM
 Ronald Aguilar, APROTENGB
 Emilio Machado, APROTENGB
 Virginia Castillo, OMUB
 Rigoberto López, APROMODE
 Nicanor Villagrán, APROSIEY
 Ricardo Ibáñez, Bonyic Affected people
 Commission
 Eloisa B., Bonyic Affected people Commission
 Olmedo Espinosa A., Bonyic Affected people
 Commission
 Federico Sorteu, Bonyic Affected people
 Commission
 Edwin Sánchez V., ODESEN Teribe
 Humberto Aguilar, Solon
 Aristide Sánchez, OCDESAN
 Celio Guerra, IX Ngöbe-Buglé General Congress
 Maumo Jiménez, IX Ngöbe-Buglé General
 Congress
 Carmencita Tedman MacIntyre, Coordination
 for the Defense of Lands and Waters,
 CODETIAGUAS
 Ezequiel Miranda, ACBiosfera NGO
 Celestino Mariano, Nidriní Regional Cacique
 Marcio Bonilla, Siey-Kjin/Teribe Ingenious group
 Hugo Sánchez, Siey-Kjin/Teribe Ingenious group
 Emerita Sánchez, Siey-Kjin/Teribe Ingenious
 group
 Valentín Santana, Siey-Kjin/Teribe Ingenious
 group
 Anastasia Sánchez, Teribe
 José Torres, Teribe
 Lorenzo Palacios, Commissioner Annexed Areas
 Ngöbe-Buglé
 Edidio Bonilla S., ASAMBIECH
 Pedro Ábrego, CEDETeng
 Bernandino Palacio, CEDETeng
 Natanael Santo, CEDETeng
 Ricardo Sánchez, professor
 Pedro Rodríguez, Local Media
 Agapito Castillo,

Justo Berche,
 Eliana Briceño,
 Anastacio Aguilar,

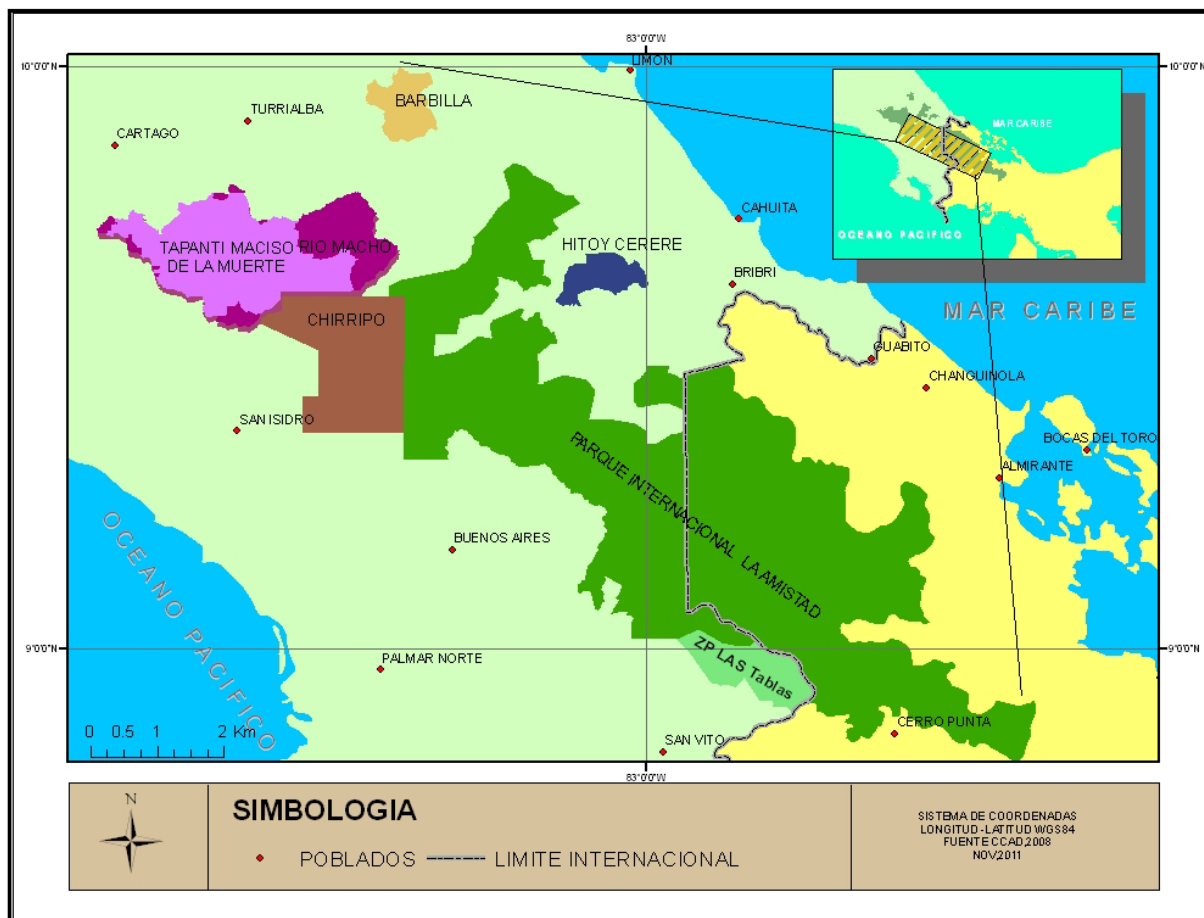
Location: ANAM-DAPVS Office

Date: 24-01-2013

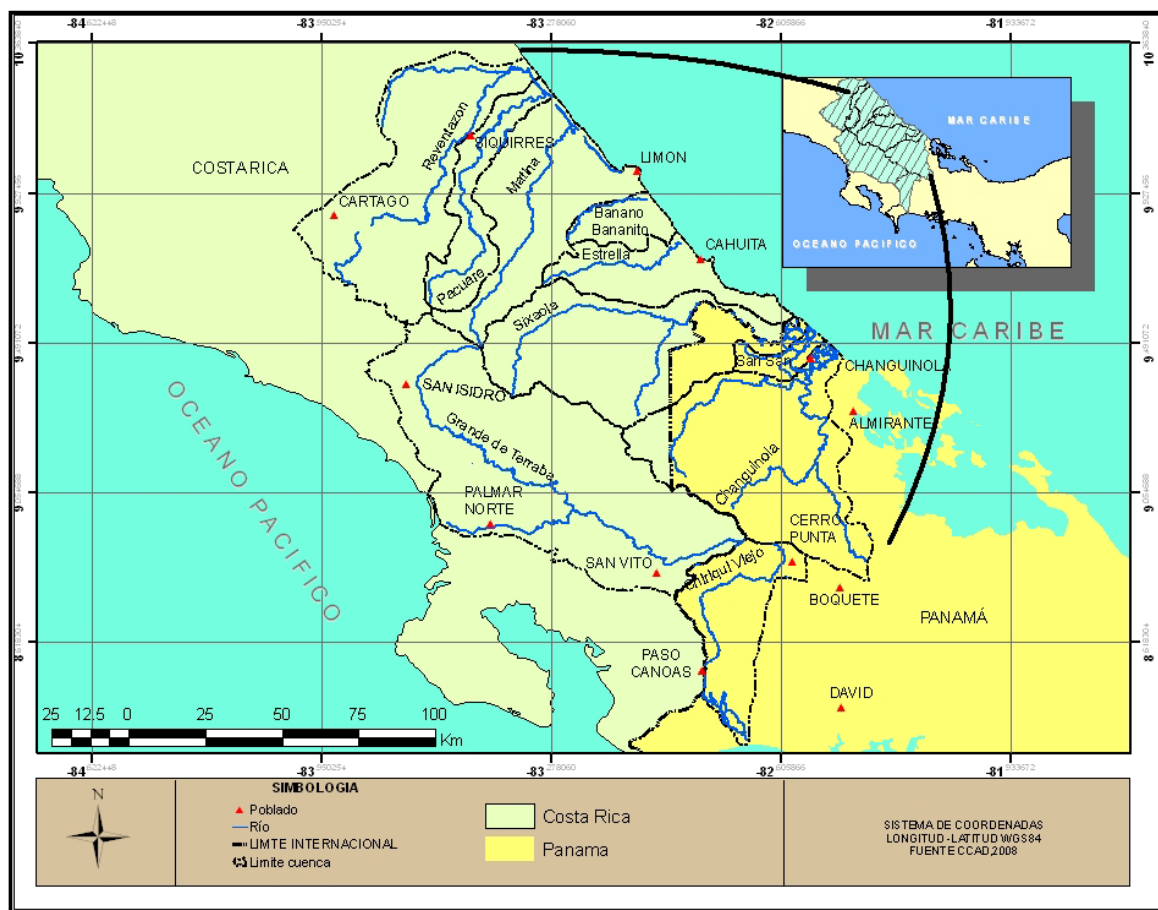
Panama city, Panama

Ibelice Anino, Natural Protected Areas Director
 Yajaira Luna, ANAM-DAPVS-WH Focal point
 Leticia Samaniego de Polo, ANAM-DAPVS, Head
 of Department of Protected Areas
 Management
 Israel Tejada, ANAM- Head of the Biodiversity
 and Wildlife Department
 Lionel Quiróz, ANAM/ coordinator PILA Pacific
 Carlos Córdoba, Ministry of Agricultural
 Development (MIDA)
 Diana Chávez, MINREX, Ministry of Foreign
 Affairs.
 Genáro Robles, BDA, Agricultura Development
 Bank
 Vielka de Garzola, MOP, Ministry of Public
 Works

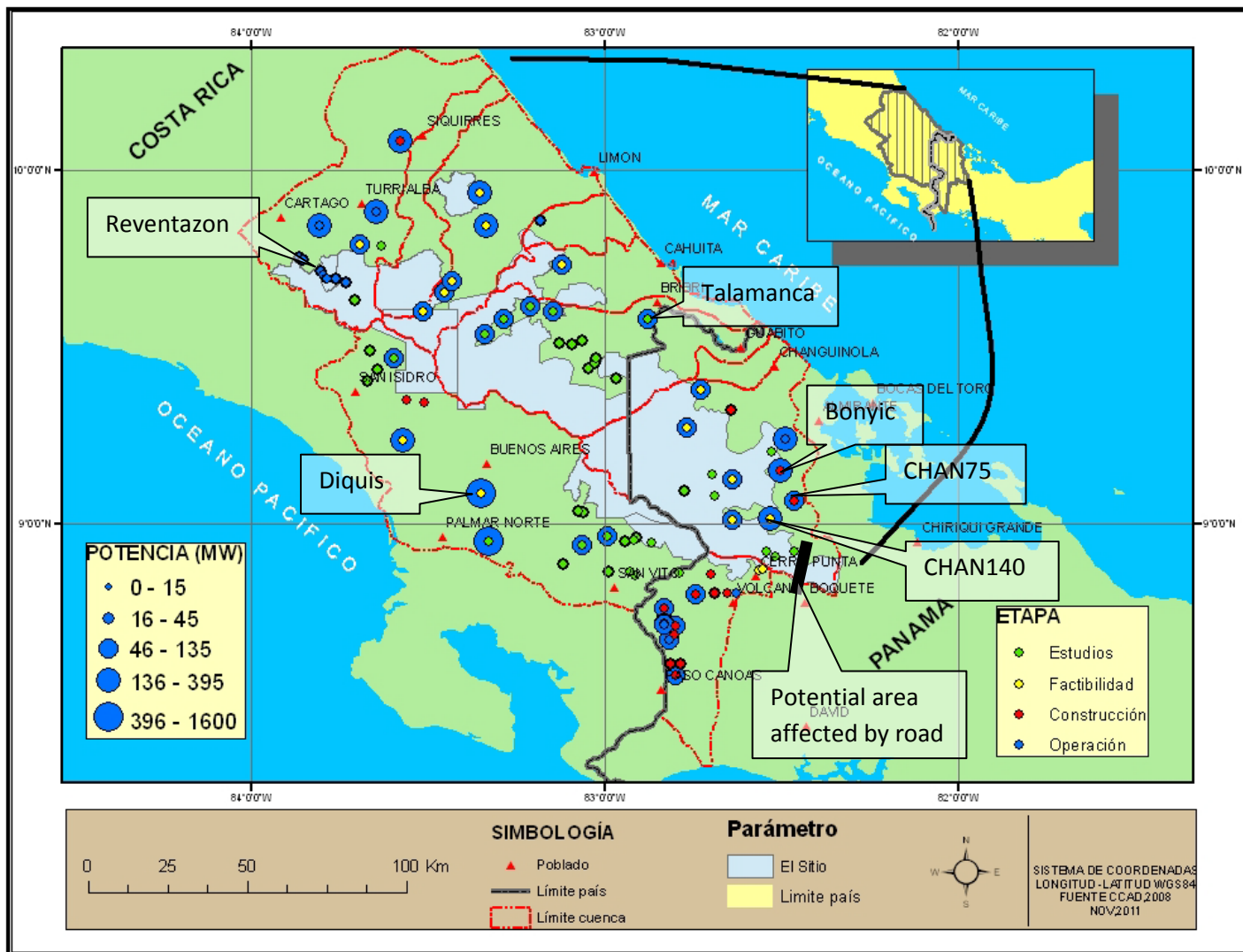
Annex V– Maps



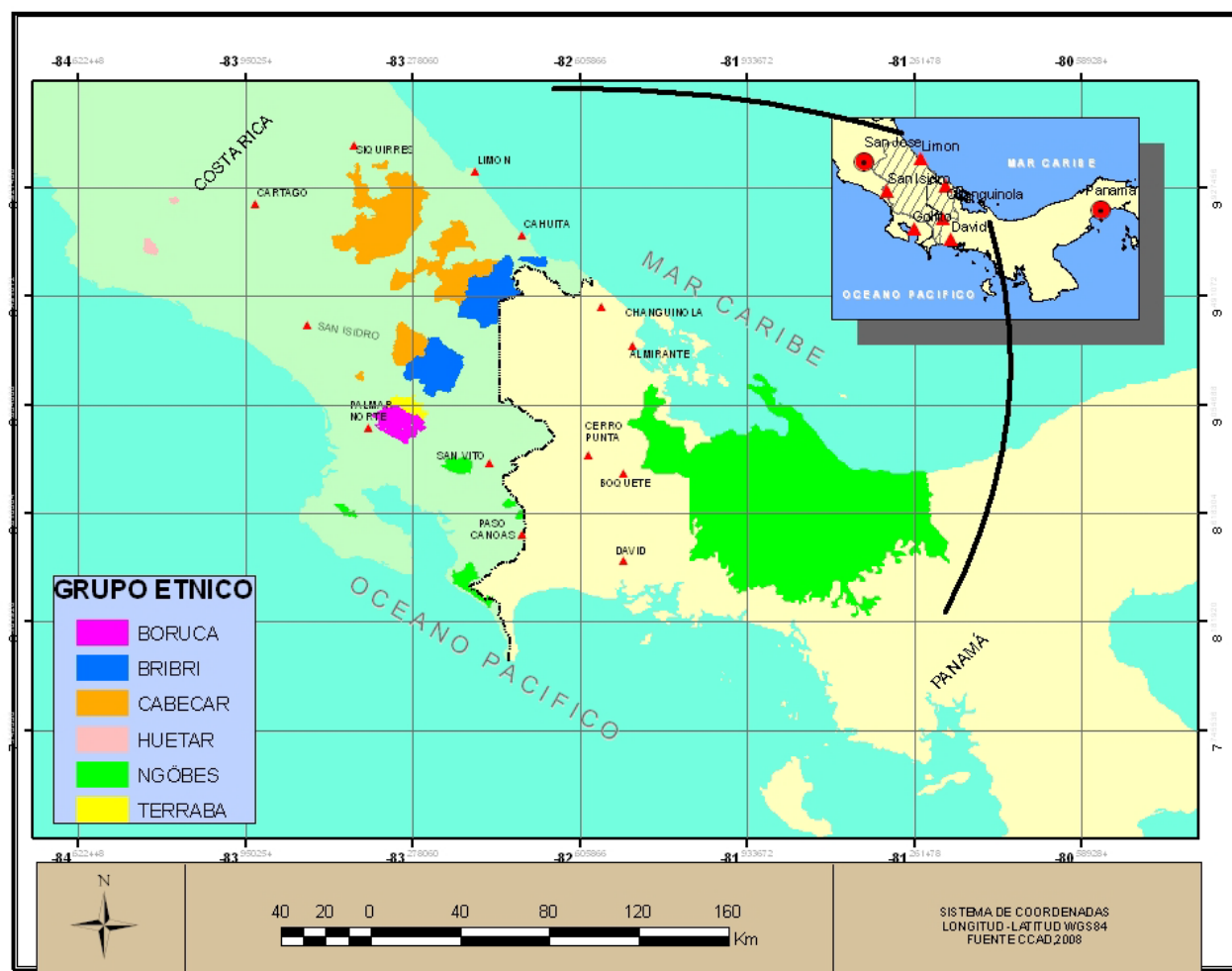
Map 1. Overview of the WH Site Talamanca Range La Amistad Reserves/La Amistad National Park – Costa Rica and Panama (taken from Watson, V., C.Borge & J.A., García. 2011. Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amistad; Costa Rica-Panamá)



Map 2. River systems in WH Site Talamancan Range La Amistad Reserves/La Amistad National Park – Costa Rica and Panama (taken from Watson, V., C.Borge & J.A., García. 2011)



Map 3. Overview of all existing and identified hydropower plants around the WH Site Talamanca Range La Amistad Reserves/La Amistad National Park – Costa Rica and Panama (taken from Watson, V., C. Borge & J.A., García. 2011) NB the indicated status for the stage of development (study, feasibility, construction, operation) is not necessarily correct for the moment of the reactive mission. The area potentially affected by a road construction between Boquete-Bocas del Toro is indicated (by authors).



Map 5. Indigenous territories in Eastern Costa Rica and Western Panama (taken from Watson, V., C.Borge & J.A., García. 2011)

Annex VI – Photographs



Photo 1. Visit to Paramo ecosystem, National Park Los Quetzales, Costa Rica (18th January 2013, © Gustavo Induni).



Photo 2. Meeting with park rangers, National Park Los Quetzales, Costa Rica (18th January 2013, © Gustavo Induni).



Photo 3. Meeting with P.H. Diqius personnel, Buenos Aires, Costa Rica (18th January 2013, © Gustavo Induni).



Photo 4. Meeting with the Bri-Bri Cabecar Indigenous Authorities. Suretka, Costa Rica, (19th January 2013, © Gustavo Induni).



Photo 5. Meeting with the AES personnel. AES Office for CHAN75 Dam, Changuinola, Panama, (21st January 2013, © Alan Monroy, IUCN).



Photo 6. CHAN75 Dam. The dam is completed and in operation, Panama (21st January 2013, © Alan Monroy, IUCN).



Photo 7. CHAN75 Reservoir, Panama (21st January 2013, © Alan Monroy, IUCN).



Photo 8. Proposed site for the construction of CHAN140 Dam. Changuinola River, Palo Seco Forest Reserve, close to the border with La Amistad WHS, Panama. (21st January 2013, © Alan Monroy, IUCN).



Photo 9. Construction site P.H. Bonyic Dam, Bonyic River, Palo Seco Forest Reserve, close to the limits of La Amistad WHS. Panama (22st January 2013, © Alan Monroy, IUCN)

Annex VII – List of documents received during the mission

	Document	Author	Organization	Date	Format	Observations	Citation
1	Análisis de Viabilidad de los objetos de conservación del sitio binacional La Amistad, Costa Rica-Panamá	INBio-SOMASPA	TNC	Dec-05	digital		The Nature Conservancy. 2005. Análisis de Viabilidad de los objetos de conservación del sitio binacional La Amistad, Costa Rica-Panamá. TNC
2	History repeats? Hydro dams and the riverine ecosystems of Mesoamerica: The case of La Amistad Biosphere Reserve, Panama, and its implications.	William McLarney	ANAI, Inc.	2006	digital		McLarney O., W. 2006. History repeats? Hydro dams and the riverine ecosystems of Mesoamerica: The case of La Amistad Biosphere Reserve, Panama, and its implications. The George Wright Forum. Vol. 23 No. 4 pp 6-12
3	Herramientas básicas para el manejo del Parque Internacional La Amistad (PILA): Costa Rica/Panamá	Iniciativa Darwin	Darwin Initiative	2009	digital		Darwin Initiative. 2009. Herramientas básicas para el manejo del Parque Internacional La Amistad (PILA): Costa Rica/Panamá. Boletín Vol. 1 No. 4
4	Panamá. Plan Estratégico de Gobierno 2010-2014	República de Panamá	República de Panamá	Jan-10	digital		República de Panamá. 2010. Plan Estratégico de Gobierno 2010-2014. Gaceta Oficial Digital, pp. 1-141
5	Media "La Anam entrega áreas protegidas a hidroeléctricas"	Pedro Rodríguez Sanjur	La Prensa (newspaper)	19/03 /2010	printed		Rodríguez S. P. 2010. La Anam entrega áreas protegidas a hidroeléctricas. La Prensa. Panama
6	The threat to biodiversity and ecosystem function of proposed hydroelectric dams in the La Amistad World Heritage Site, Panama and Costa Rica.	William McLarney, Maribel Mafla, Ana María Arias, Danielle Bouchonnet	ANAI, Inc.	22/04 /2010	digital		McLarney O., W., M. Mafla, A.M. Arias, & D. Bouchonnet. 2010. The threat to biodiversity and ecosystem function of proposed hydroelectric dams in the La Amistad World Heritage Site, Panama and Costa Rica. ANAI, Inc.
7	The Situation of the Térraba Indigenous People of Costa Rica: A Request for Consideration under the Early Warning and Urgent Action Procedures of the	Gabriella Habtom	UN Committee on the Elimination of Racial Discrimination	21/07 /2010	digital	letter about the indigenous groups in Costa Rica	

		United Nations Committee on the Elimination of Racial Discrimination (Seventy-Seventh Session)					
8	Plan de Manejo Parque Nacional Tapantí Macizo de la Muerte	SINAC-ACLAP	SINAC-ACLAP	Aug-10	digital		SINAC. 2012. Plan de Manejo Parque Nacional Tapantí Macizo de la Muerte. SINAC/ACLAP
9	Threats to aquatic biodiversity and biological corridor function in Talamanca, Costa Rica- A participatory approach to analyzing and addressing problems, Final Report.	William McLarney, Maribel Mafla, Ana María Aria	ANAI, Inc.	Oct-10	digital		McLarney O., W., M. Mafla, & A.M. Arias. 2010. Threats to aquatic biodiversity and biological corridor function in Talamanca, Costa Rica- A participatory approach to analyzing and addressing problems, Final Report. ANAI, Inc.
10	Panama dam flooding threatens indigenous families.	Amnesty International	Amnesty International	26/05 /2011	digital		Amnesty International. 2011. Panama dam flooding threatens indigenous families. AI
11	Agreement to stop the way closure	Sr. José Brown & Ngobe community		02/06 /2011	printed	The people who closed the way agreed to open the way in exchange for the construction of a new way that goes from Bocachica to Zegla	
12	Resolución no. 16. Consejo Municipal Prov. Bocas del Toro	H.R. Teófilo Santamaria/Jennifer Ruiz	Consejo municipal Prov. Bocas del Toro	03/06 /2011	printed	The municipal council declares the area of Cochigró as social emergency area. The community of Cochigró are severely affected due to the reduction of the volume of water that the dam holds.	

13	Mutual Agreement contract	Jennifer Ruiz & Ngobe community	09/06 /2011	printed	The owners of the land (Ngobe) agreed to resing any compensation for the use of their properties for the construction of a way.	
14	Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Plan de Trabajo del Área Social.	Carlos Borge Carvajal	09/06 /2011	digital		Borge C., C. 2011.Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Plan de Trabajo del Área Social. Proyecto Gestión Integrada de ecosistemas en la cuenca Binacional del Río Sixaola. Cooperación Técnica GRT/FM-10575-RS.
15	Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Plan de Trabajo del Área Biológica.	Jorge Arturo García	10/06 /2011	digital		García, J.A. 2011.Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Plan de Trabajo del Área Biológica. Proyecto Gestión Integrada de ecosistemas en la cuenca Binacional del Río Sixaola. Cooperación Técnica GRT/FM-10575-RS.
16	Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista	Vicente Watson, Carlos Borge, Jorge Arturo García	10/06 /2011	digital		Watson, V., C .Borge & J.A., García. 2011. Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Plan de

	(Costa Rica-Panamá). Plan de Trabajo						Trabajo. Proyecto Gestión Integrada de ecosistemas en la cuenca Binacional del Río Sixaola. Cooperación Técnica GRT/FM-10575-RS.
17	Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Informe de Avance I	Vicente Watson, Carlos Borge, Jorge Arturo García		Nov-11	digital		Watson, V., C. Borge & J.A., García. 2011. Consultoría Evaluación Ambiental Estratégica Transfronteriza para el sitio Patrimonio Mundial Reservas de la Cordillera de Talamanca-La Amistad/Parque Nacional La Amista (Costa Rica-Panamá). Informe de Avance I. Proyecto Gestión Integrada de ecosistemas en la cuenca Binacional del Río Sixaola. Cooperación Técnica GRT/FM-10575-RS.
18	VI Plan Nacional de Energía 2012-2030	MINAET, DSE	MINAET, DSE	Dec-11	digital		MINAET. 2011. VI Plan Nacional de Energía 2012-2030. MINAET/DSE
19	Seguimiento biológico: Fauna acuática y evaluación socioeconómica de la pesca en el punto medio-bajo de la quebrada Bonyic	Jorge García & Miguel Forero	Proyecto Hidroeléctrico Bonyic	2012	printed		
20	Plan de Manejo Parque Internacional La Amistad	SINAC-MINAET	SINAC-MINAET	Mar-12	digital		SINAC. 2012. Plan de Manejo Parque Internacional La Amistad. SINAC/ MINAET/ ACLAP
21	Providencia de Admisión No. ARBT/BPPS-048-2012	Ing. Iván Chávez	ANAM	11/08/2012	printed	ANAM request an investigation against Raúl Molina, due to infringement of the environmental law. Raúl Molina cut trees and started to colonize forestal land	

						inside the "Bosque protector Palo Seco"
22	Resolution: RYDN-140812-027	Palacio del Rey Naso	Palacio del Rey Naso, Territorio Originario Naso	14/08/2012	printed	Naso King asks to stop all construction, evaluation, etc., activities inside the Naso territory.
23	Petition to clear the way that communicates to the Hydroelectric project	Reynaldo Santana Rey Naso	Palacio del Rey Naso, Territorio Originario Naso	12/09/2012	printed	Rey Naso request to evict the people that are closing the way that communicates to the hydroelectric project
24	Lawsuit against Naso people	Jorge Gavrilidis	Abogado	03/10/2012	printed	Hidroecológica del Teribe sued 4 naso people for closing the road
25	Área de conservación La Amistad Pacífico. Resultados del Monitoreo de la efectividad de la gestión Áreas Silvestres Protegidas 2009, 2010, 2012	Luis Sánchez	Áreas Silvestres Protegidas-SINAC	29/10/2012	power point	
26	Media "El gobierno competirá en el mercado eléctrico"	Alma Solís	La Estrella	01/11/2012	printed	Solís, A. 2012. El gobierno competirá en el mercado eléctrico. La Estrella. Panamá
27	Letter to Sra. Montserrat Martell (UNESCO Office)	Eliseo Vargas, Filidencio Cobillo, David Solis	Convergencia de Pueblos Ukux Abya Yala	07/12/2012	digital	The letter expresses concern because the Naso leadership was not properly (officially) invited to meet with the UNESCO-IUCN reactive mission

28	Resolution: RYDN-211212-039 (<i>Non grata</i> persons statement)	Palacio del Rey Naso	Palacio del Rey Naso, Territorio Originario Naso	21/12/2012	printed	The letter expresses that Naso King declares forbidden the entrance to several people and ONGs to Naso territory	Esquivel, O. 2013. Exigen proteger cuenca hídrica. La Prensa. Panama
29	Media "Exigen proteger cuenca hídrica"	Osman Esquivel	La Prensa (newspaper)	03/01/2013	printed		
30	Resolution No. 8-1-13	Consejo Provincial Chiriquí	Consejo Provincial Chiriquí	08/01/2013	printed	Resumes the meeting between the "Comité Pro defensa del Parque Nacional Volcán Barú" and Chiriquí Provincial Council	
31	Petition for fair land compensation	Naso community	Naso community	09/01/2013	printed	A group of Naso people ask for the fair compensation for their lands. Many of the had already been compensated, but the feel that they did not receive a fair compensation	
32	Comité Pro defensa del Parque Nacional Volcán Barú (Public letter)	Comité Pro defensa del Parque Nacional Volcán Barú	Comité Pro defensa del Parque Nacional Volcán Barú	11/01/2013	printed	The letter requests Silvano Vergara (ANAM) to take actions to protect the Volcan Barú area (concerning hydroelectric projects mainly). The letter suggest many actions that should be taken to ensure the protection of	

the area

33	Impacts on OUV from existing and proposed hydroelectric dams	William McLarney	ANAI, Inc.	17/01/2013	printed	
34	Final position from ANAI about the construction of hydroelectric dams	William McLarney	ANAI, Inc.	17/01/2013	printed	
35	letter of Brirbi organizations (Costa Rica) opposing Talamanca Dam	9 bribri Associations and Committees		17/01/2013	printed	
36	Media "Áreas protegidas en riesgo por canal seco"	Osman Esquivel	La Prensa (newspaper)	17/01/2013	printed	Esquivel, O. 2013. Áreas protegidas en riesgo por canal seco. La Prensa. Panama
37	Letter to IUCN/UNESCO reactive monitoring mission	William McLarney	ANAI, Inc.	21/01/2013	printed	The letter expresses technical details about the fish diversity and characteristics in PILA
38	Naso dissident group letter to UNESCO	Naso dissident group	Naso	22/01/2013	printed	The letter expresses discontent from a dissident Naso group. The letter enlist the reasons why the Hydroelectric proyect must be stopped in the Bonyic watershed.
39	Resolution: RYDN-180113-040 to UNESCO	Reynaldo Santana Rey Naso	Palacio del Rey Naso, Territorio Originario Naso	22/01/2013	printed	The Naso King requests UNESCO mission to endangerlist PILA. He asks for the respect of their rights and the

protection of
mother earth.

40	Impactos negativos sobre el PILA	FUNDICCEP	FUNDICCEP	23/01/2013	power point	Expresses it concern about the hydroelectric projects and other threats in Pacific slope
41	Collection of documents on Management of Costa Rican protected areas	SINAC	SINAC	20/01/2013	digital	Updated management plans of all protected areas included in WH site in Costa Rica, management effectiveness evaluation reports 2010-2011-2012
42	Collection of documents on Management of Panama protected areas	ANAM	ANAM	24/01/2013	digital	Management plan of PILA, management effectiveness evaluation reports 2006 and 2011