Building on the Past to Secure Biodiversity's Future:

Learning from Conservation Planning in Latin America to Strengthen Protected Area Networks through National Gap Assessments

A Workshop Report

Panajachel, Guatemala
April 5 - 7, 2005

CONTENTS

(you can click on the below to link directly to that portion of the document)

Preface

Key Challenges:

Roles and responsibilities of partners in the development of a national gap assessment
Socioeconomic analysis as a component of national gap assessments
Data gathering and data sources for national gap assessments
Approaches to ensuring implementation of a national gap assessment
Communicating the process and products of national gap assessment to others
Integrating existing biodiversity analyses into the development of a national biodiversity vision and gap assessment

Clinics:

Clinic: **Marine** challenges in national gap assessments
Clinic: **Conservation Planning Tools** for use in national gap assessments
Clinic: **Integration of Existing Analyses** into national gap assessments
Clinic: **Marxan** and other portfolio assembly tools for gap analysis

Project Teams Break Outs:

1. Caribbean Conservation Region
2. Mesoamerica Conservation Region
3. South America Conservation Region

Appendices

Appendix 1: Some TNC Strategies for Delivering Technical Assistance

Appendix 2: Notes on Presentations

Appendix 3: Debrief of Each Day

Appendix 4: List of Participants

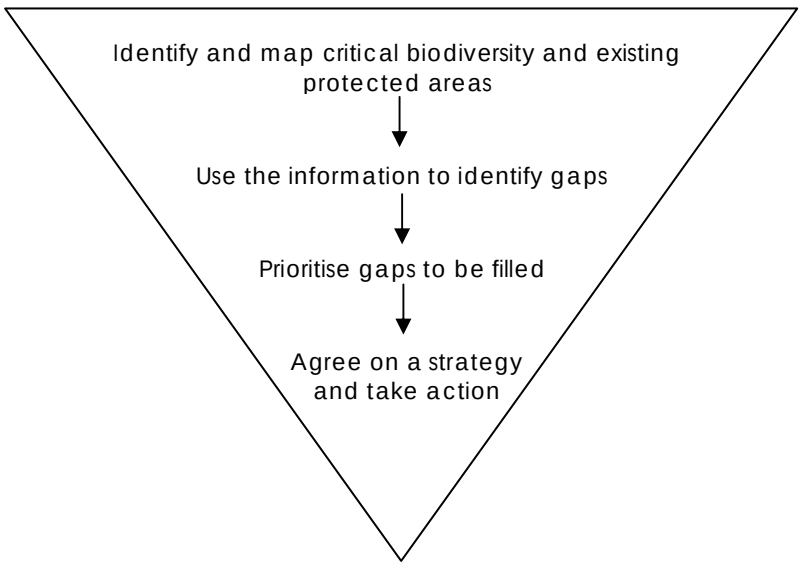
Related documents available on line at:
http://sites-conserveonline.org/gpg/projects/nga_products.html

- Strengthening the World's Protected Area System through National Gap Assessments - Parts 1 and 2. (Jeffrey Parrish)
- Gap Analysis in the Context of the Protected Areas Strategy - The COP7 Strategy (Manrique Rojas)
- Re-thinking (?) Gap Analysis or how to integrate 4 R's into one National Gap Analysis (Pierre L. Ibisch & Christoph Nowicki)
- Key Biodiversity Areas (KBAs) and Gap Analysis (Matthew N. Foster)
- Looking for the GAPs: How does the SACR priority assessment relate to national GAP analysis (Steffen Reichle)
- Integración de esfuerzos para el análisis de vacíos y omisiones de conservación en México - Integrating Existing Analysis (Ignacio March)

PREFACE

The Convention on Biological Diversity (CBD) is a landmark for biodiversity conservation for the planet. To date, 188 countries have ratified and thus become Parties to the CBD. By ratifying the Convention, Parties commit themselves to undertaking national and international measures aimed at achieving three objectives: the *conservation* of biological diversity; the *sustainable use* of its components; and the *equitable sharing of benefits* arising out of the utilization of genetic resources. Since 1992, Governments have developed these commitments through decisions of the Conference of the Parties (COP) – the Convention's governing body – and translated general provisions into practical action. One such is the Decision and Programme of Work on Protected Areas (Decision VII/28), which was agreed at COP-7 in February 2004. Considering that it is widely recognized that protected areas are a cornerstone for securing biodiversity conservation in the long-term, this international commitment for protected areas represents by most accounts a remarkable opportunity to improve the representativeness and management of protected area networks in countries around the world.

Completing a gap analysis of a nation's existing protected area system to identify protection needs and locations for expanding the existing protected area system is one of the first early (2006) commitments made by nations. It serves as the foundation for the building of a comprehensive protected area strategy for each nation and ultimately the planet. A gap analysis identifies the precise needs for protected areas from an ecological perspective and identified where the best new sites might be. Although there are many different methodologies that can contribute to a gap analysis, all are based around a 4 stage process for identifying and locating important areas for biodiversity and comparing these with existing protected areas (see diagram below).



Given the importance of the Convention on Biological Diversity, and the critical nature of gap assessments in influencing the future of the planet's protected area system, The Nature Conservancy and its partners World Wildlife Fund and Conservation International came together in Panajachel, Guatemala on the shores of Lake Atitlan from 5-7 April, 2005 to:

1. understand better the framework and principles for scientifically rigorous, yet methodologically expeditious gap assessments
2. reflect on the lessons learned and achievements from over 5 years of ecoregional and regional conservation planning throughout Latin America and the Caribbean and determine how these experiences can help overcome key challenges to implementation of National Gap Assessments, and
3. begin identifying the way forward for these large international biodiversity NGO's to support collaboratively the implementation of the Programme of Work by national governments.

The following reflects the results of this workshop. The session presented a short series of plenary presentations that explained gap assessments and the Convention on Biological Diversity, and outlined a set of principles for conducting National Gap Assessments. Subsequently, participants broke into small groups over the course of the 3 days to address key challenges and questions that are central to the implementation of a rigorous yet efficient gap assessment. Thereafter, a series of technical clinics were held to address more specific challenges that individual country programs have faced as they embark on support programs for their governmental partners. Finally, representative programs gathered by programmatic region to craft a way forward for their strategy to support rigorous and representative national gap assessments across Latin America and the Caribbean. Those results are presented here.

We'd like to express thanks to the U.S. Agency for International Development (USAID) for their financial support through the Parks in Peril program (managed by The Nature Conservancy) not only for this workshop, but for several years of support for ecoregional assessments across Latin America and the Caribbean. These have served as a primary learning ground for how to advance and support ecological gap assessments of protected areas in the region. We'd also like to thanks the staff of TNC's Parks in Peril program, Guatemala country program, and TNC's Mesoamerican Conservation Region for their tremendous support, hospitality, and support in bringing this workshop to fruition and building momentum for implementation of National Gap Assessments.

1. KEY CHALLENGES

ROLES AND RESPONSIBILITIES *(Session 1A)*

Original question:
How can NISP(National Implementation Support Partnerships[1]) Partners achieve agreement on roles and responsibilities for managing the Gap Assessment Process?

Revised question:[2]
How can interested parties to the National Gap Assessment achieve agreement on their respective roles, responsibilities, and contributions for advancing and managing the process?

Recommendations:

Apply a more systematic approach to National Gap Assessment process through a series of a few sequenced steps. Pay special attention to the government's role and needs.

Beforehand:

1. Clarify TNC's role in Gap Assessment first (internally), then in consultation with others, further clarify/refine.

Identification:

2. Recognize whether the government already has Gap Assessment on its agenda or not, because these two scenarios require two different approaches.
3. Demonstrate to governments and other partners that Gap Assessment isn't additional work, but a way to organize existing work and bring new resources to complete this work (e.g. use Sheldon's presentation)

- NISPS are agreements signed by governmental agencies and national and international NGOs to collaborate in the implementation of the Protected Areas Programme of Work.
- Assumption is that NISP is key tool for completing Gap Analysis, but many necessary institutions are not part of NISP – proposal that others (non-NISP partners) would be captured under the roles and responsibilities aspect
- Proposed fix to change NISP partners to stakeholders?
- What is the challenge to achieve the agreement or defining the roles and responsibilities? Intention of the question is what is the process to define the roles and responsibilities?
- In Guatemala, first who needs to be involved, second what the level of engagement is. Suggest that the process is more comprehensive.
- Key issue is whether we are speaking within the NISP framework or not?
- In Panama, trouble with contributions, not just roles and responsibilities. What will each organization put on the table? Proposed fix to add "contributions" to the question. Isn't contribution a sub-part of role? Decided to add in contributions to the question.
- Is the question between the role of the NISP partners in the Gap Assessment, versus how to get all stakeholders around the table to complete the Gap Assessment?
- In case of Nicaragua/Honduras, only one country will have NISP, but TNC will be involved in Gap Assessment process.
- A formal agreement may not be feasible in every country, therefore should be flexible. Main thing is the outcome, need a cohesive group to complete. Proposed to change NISP Partners to all interested parties – agreed.
- Proposal to move "Gap Assessment process" to after "all interested parties"

Selection:

4. Ensure that all parties understand the government's expectations to compliance with each objective (e.g. Gap Assessment).

Formation:

5. Recognize that different groups play different roles for different activities.
6. Recognize that detail workplan development doesn't come at level of NISP, but through other mechanisms.
7. Differentiate between who should be involved in leadership and operations, and for methods, for completing Gap Assessments.
8. Develop "Board of Governance" to manage broad process, and committees for each activity (Gap Assessment, etc). Also helps with communication between parties (Formation - Implementation).

Implementation:

9. Recognize that NISP agreements are a useful instrument *(starting point),* but *(a collaborative work plan with roles, responsibilities and contributions for NGA is most important to ensure* execution of the collaborative process itself.

Ongoing:

10. Invest in trust, vision building, etc. first, before moving into details.

<u>Experiences</u>:

Brazil:
Need to clarify TNC role in gap assessments, and what we are looking for. Roles of TNC staff for gap follow up.

Bolivia:
Prior to NISP, the Bolivian government was already starting their gap analysis, but it wasn't clear who in the government was to lead gap process. Process of NISP signing helped to clarify roles of government institutions, and established a clear leader for the process on the part of the government.

Jamaica:
Government must play a lead role. Process of coordination- sitting down together to clarify contributions of each group toward the NISP objectives helped to establish clear commitments, and to strengthen ongoing activities to meet CBD commitments. Helped to identify areas that need strengthening.

Panama:
Developed tables for 9 NISP objectives – including Gap Assessment. Per objective and sub-activity, then identified interested parties, resource commitments, and time period to complete.

Ecuador:
Developed a "promoters" group, dealt with communication at regional and local level. Not everyone at the table shares the same level of knowledge for methodology development, etc., so they hired consultants to assist with these issues.

SOCIOECONOMIC ANALYSIS *(Session 1B)*

Original question:
What do NISP Partners need to know about the socioeconomic environment to ensure the quality and improve implementation of GAP Assessment results?

Revised question:[3]
What has to be known about the non-biophysical environment to improve quality of Gap Assessments and enhance feasibility of implementation?

Recommendations:

Three Phases in Gap Assessment[4]

- biophysical analysis
- prioritization of the biophysical results
- implementation of strategies resulting from prioritization

1. The first phase should be conducted "purely", just a biophysical analysis;

2. The second phase of prioritization is where/when one should integrate socioeconomic, political, cultural, legal factors, and the non-biophysical information. The analysis of these factors will aid in the prioritization process.

3. Do not look to collect Socio-economic (non biophysical) information for the sake of collecting it, instead aim to identify relationships between non-biophysical factors and the biophysical factors;

Some non biophysical factors may include

- Macroeconomic and political tendencies
- Infrastructure projects (current and projected)
- Environmental Services
- Legislative frameworks
- International agreements
- Conflicts (local – international)
- Population tendencies (growth)

4. These relationships have to be spatially represented so that they can be integrated into the gap analysis and manipulated accordingly to identify current and potential threat as well as opportunities

5. Develop feasibility indicators for new protected areas establishment using the interactions between the non biophysical information and the biophysical

---

Three Phases in Gap Assessment

a. First, the biological analysis of ecological representativity in the existing system of protected areas.
b. Then, an evaluation of feasibility that needs to use multiple filters. From this you get a priorization of the sites that are most viable.
c. Finally, once the sites are identified, then you have to determine the strategies to achieve biodiversity conservation in those places.

information. Steps 4 and 5 allow you to identify threats, opportunities, and appropriate strategies to mitigate threat and maximize opportunities;

6. We need to include social, economic, political, institutional and legal experts in the gap assessment process;

Final Comment: Gap assessment should include intersected layers on biophysical priorities with those on socioeconomic realities, to identify conservation opportunities.

Experiences:

Shirley Keel: Keep in mind the economic benefit communities may achieve.
Elvis: Actors, expectations, needs and national policies may affect the project.
Carlos: Actors, owners or not, users or not. Their current and future activities. Their needs as main interest to determine the actual pressure on natural resources.
National level: macro development policies, competitive advantages, growing industries.
Joselyne: Macroeconomic tendencies and general political environment that supports them or not.
Maarten: Analysis of infrastructure projects, big policies and macroeconomic tendencies, and environmental goods and services.
Angela: Political factors.
Carlos: SWOT analysis might be baseline or guideline for this social and economic component.

How should it be done? First, the biophysical to keep the "pure" stage, and then the social, political and economic to complement viability. "Pure" because biophysical should contain semi natural environments important for biodiversity.

Expected product: A list of questions that need to be incorporated into the gap analysis to address the socio-economic issues.

There are different types of "partners" in the various stages of a gap analysis

- Design team
- Technical execution team of biological-ecological analysis
- Consultation of initial results
- Adding viability filters, prioritizing, and developing the implementation strategy.
- Consulting the preliminary final results
- Production, dissemination, communication, adoption, and formalization of final product.
- Implementation of results.

Notes from Plenary Session:

- Clarified that not only social and economic are included, but also institutional development, political and legal framework, etc., referred to as non-biophysical environment.
- Good results regarding biophysical analysis have been done, but implementation is an issue.

- Feasibility: term for discussion if to be included in the process, and to include it into what step. First identify priorities in biological terms. Portfolio not only "pure", but need to look at it under new opportunities and threats. Feasibility analysis of budget, political framework, etc. to select areas where you can invest.
- Typically analysis includes only biological, but gap assessment needs to include also non biological.
- Socioeconomic factors in geospatial data.
- Suggested a future and current socioeconomic layer.
- Gap assessment only included the biological layer, and socioeconomic was not described as part of the gap assessment.
- Suggestion for a technical clinic to answer unresolved issues later.

DATA GATHERING *(Session 1C)*

Original question:
How can NISP partners resolve shortage of data to produce a useful gap assessment?

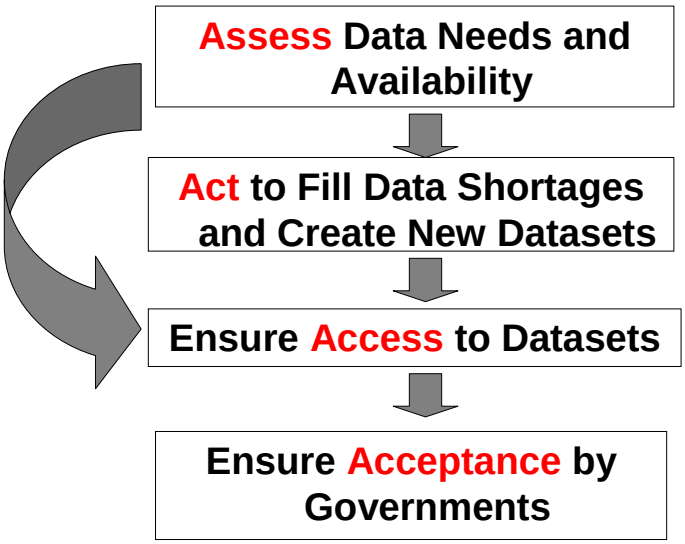
Revised question:
How can NISP partners resolve data problems including shortages, management, access, and production to produce a minimum data set to produce a useful gap assessment?

Recommendations:

Potential Minimum Data Sets:

Biodiversity Features (targets)
Land cover – actual and historical
    Ecosystems across biological realms
    Terrestrial
Freshwater
Marine – intertidal/benthic
Individual species distributions
Distribution and point localities and associations
Critically endangered, threatened, endemic, indicator species
Beta diversity
Human activities
    Conflicting uses effecting viability of targets
    Population density
    Roads
    Future scenarios modeling
Protected areas
    Management effectiveness
Reference taxonomies

Data Issues Framework



Assess Data Needs and Availability: **Getting Access**

To gather critical information (refer to list) in time for GAP analysis through:

- Engagement strategy with clear timeline.
- Creating opportunities for leveraging data (data exchange; joint projects, credits).
- Promoting a certification system (ensure credit) to protect data and intellectual property.

Act to Fill Data Shortages and Create New Datasets: Developing Information Resources

- Collect new data only when necessary
- Draw on existing data sets local and regional
- Develop capacity in underrepresented skill sets for every region
- Construct surrogate/model information to fill blanks and test (past, present, future)
- Employ expert knowledge to review model results
- Use expert knowledge to fill blanks
- Develop capacity to integrate, employ, maintain, and disseminate information

Ensure Access to Datasets: Data Dissemination

1. Standard structure (data standards or data organization)
2. Infrastructure (identify parties of similar interest to build infrastructure so that all can benefit)
3. Simple point of access
4. Communication (let partners know about the standard and give them access to the data)
5. Agreements (on the data use and distribution)

6. When downloading
7. When providing
8. Limiting distribution appropriately depending on partners
9. Within liable limits
10. Metadata
11. Common taxonomies (FGDC, IUCN, ISO9000)
12. Free Access (commons)
13. Language
14. Formats and bilingual
15. Capacity
16. With long term commitment and long term data dissemination objectives

Ensure Acceptance by Governments

- To generate a favorable environment, since the beginning, in order to achieve the recognition or acknowledgement of the information, by the government authorities, produced in the GAP process. (official vs. unofficial data)
- Bilingual methodological tools and result and process documents (Spanish, Portuguese and French vs. English)
- Collaborate with existing data production, dissemination and data management systems and organizations and networks (for example: SIAM-SERVIVE, IABIN, USGS) Don't try to reinvent the wheel

Notes from Plenary Session:

- Concerned about the socioeconomic issues not taken into account, the scope, kind of approach, important to have a common idea on these issues.
- What is the timeframe to accomplish tasks? Answer: Global commitment by end of 2006, but countries may vary their dates.

APPROACHES TO ENSURE IMPLEMENTATION *(Session 2A)*

Original question:
How can the National Gap Assessment Coalition conduct the assessment in a way that ensures implementation of results?

Revised question:
How can the National Gap Assessment Coalition conduct the assessment in a way that enables implementation of results?

Recommendations:

Pre-Assessment:

- Ensure incorporation of the context/background assessment is done as a first step in the NGA process.
- Conduct stakeholder assessment/analysis (who/when) to guide and inform the NGA process.
- Ensure agreement/consent/identification with NGA process with relevant funding institutions in some sort of follow-up committee (parallel).
- Ensure that previously identified key leadership is involved in implementation from beginning of conducting the NGA.
- Ensure appropriate mechanisms for engaging high level officials, as well as technical staff in NGA (e.g. Technical and Political follow-up Committees).

Assessment Process:

- Technical Gap Assessment:
  - Includes Technical and Political follow-up Committees
  - NGA should result in integral vision of national land use, not only conservation area portfolio
  - NGA should take into account stakeholder interest, via use of existing socio-economic data
- Plan of Action:
  - Assess human and financial capacity needs to enable implementation of NGA (e.g. link to National Capacity Needs Assessment).
  - Should include involvement of local stakeholders, such as local governments, indigenous groups, private sector, etc
- Execution:
  - Need clear implementation leadership (roles, responsibilities, and financial and technical commitments).

Experiences:

Need to think about NGA as two parts, identification of gap and plan for "filling" the gaps. For example in Indonesia, Marine Committee created with 5 different key Ministers, to push forward MPA development.

Suggestion: Create a "National Gap Assessment Committee," consisting of key government agencies, which would be responsible for implementing the National Gap Assessment.

Notes from Plenary Session:

- Second point of assessment, integrated vision of land use if it exists within the country. Some countries don't have 5 yrs goal and it may e too much to ask to include in the result. The second part doesn't speak about protected areas, portfolio need to be areas for conservation, protected areas are just one category of them. A big plus is if we can include a status in each diff country for the portfolio. In Mexico we put environmental zoning regulations.
- Promoting a national biodiversity strategy, that goes beyond Pas alone as the strategy for biodiversity, and is therefore more inclusive. Not certain that countries will be ok with that.
- Related to one of the pre-assessment points, there has to be sensitivity due to countries´ different agendas or ideologies competing with each other, perhaps need to individualize. It might not be possible to accomplish the point of high level officials.

COMMUNICATING *(Session 2B)*

Original question:
How can NISP Partners design and communicate the tools, data and results of the GAP Assessment to ensure utility to stakeholders?

Revised question:
How can NGA coalitions communicate the tools, data and results of the GAP assessment to ensure adoption by stakeholders?

Recommendations:

1. Define exactly what the NGA will achieve.

2. Target audiences have to be identified from the beginning.

3. Develop a **communication strategy** from the beginning. Strategy should contribute to institutionalize results. It should include:
   - Messages tailored for target audiences
   - Messages in a friendly language
   - Different mechanisms for communication (depending on audience):
     - A local group has to help with local communication
     - Books and publications
     - Face to face meetings, workshops and presentations
     - Lobbying
     - Audiovisuals
     - Website
   - A mechanism for monitoring progress and evaluating results of communication plan implementation throughout the process.

4. Hire communication expertise from the beginning of NGA.
5. Develop a Clearinghouse Mechanism to guarantee easily accessible information
6. Provide training and capacity building opportunities in the tools and data used (if appropriate)
7. Communication costs have to be budgeted from the beginning.

Experiences:

Maarten: South of Costa Rica, Osa, 2001, Publisher in 2003 as a book and web page. Results have not been adopted because a lack of expertise among stakeholders. Main user (MINAE) could not technically use the information. The book is for sale therefore does not reach as many possible users as desired. There was not a communication strategy. Staff turn-over on the stakeholders created a loss on key communicators. Not many users download technical information from internet.

Tarsicio: ERP in Equatorial Pacífic. There is regional competition and jealousy between Costeños and Serranos. The plan was done only by Serranos, so only until a Costeños took it and communicated it was considered. In Peru, there were no

real buyers for the plan. The budget was not enough for a communication strategy or actions after it was completed.

Pilar: ERP Cordillera Oriental, Colombia. Initial idea was to do one joint plan for Colombia and Venezuela. They had to do only Colombia. 2004 – 2005 the same effort was revitalized for a more regional plan. It has a formal and strong communication strategy. It uses newspaper and web page; there will be a publication. There is no agreement among stakeholders on how to integrate the different studies to identify next steps and missing information.

Shirley: Paraguay. REA (EER). Priority areas for conservation were identified. There was very good exposure, the CDC and Gov were very much linked and had access to newspaper and other communications.

Leo: Mexico. There was not a communication plan, but there were constant efforts to communicate the results. There was communication of results to experts that participated in the process, but no much reaction. You could say that it remained as an internal process and internal communication was good. It was published a wile after. The documents are accessible on a web page, but not very user friendly.

Carlos: Prioritization of PLC in Osa, Costa Rica. The project was very technical, and it was developed that way. Not many external stakeholders participated in the process. Presentations were done, a publication was distributed, and it has not yet been published electronically in a web page. [There are two stages of communication of a project like this, first the one that announces the process and invite to participate. Then the one that communicates the results]. Since the design of the process it has to be clear who will communicate and what role wile the technical implementers will have (this applies to TNC choosing its role too). You have to communicate the results and also the strategies and implementation. The results are only known by the people that did it and very technical peers. The study was done to justify some investments; it is being used for that.

Tarsicio: Chaco. One key step of the plan is to "validate" and "formalize".

Manrique: There is an assumption that the results have to be communicated, but this should be analyzed case by case since there could be negative impacts on that.

Pilar: That risk is minimized with a clear analysis of who has to know about it, why, and how to get to them.

Tarsicio: Why/for whom do we do a GAP assessment? It depends on the country, but it is key to know this in advance.

Notes from Plenary Session:

- Wait until you get the gap analysis instead of communicating since the beginning.
- Q: Bolivia has no funding for communication, perhaps that's why implementation is difficult. I wonder if we really need any more communication, what kind of added value you get.

- A: It depends on what the gap assessment is for, its purpose. If you don't have money to implement it, communication might be a way to get the funding. It is based on the reality of the country.
- One of the advantages of communicating as u go is to create momentum, start engaging audiences, so they get excited about being part of the process.
- Needed to communicate the process and not only the results.
- Be careful not to have it backfire at us, and start driving public opinion.
- Third point is the most important: Need to have communication expertise: when, how, risks, what do we gain, etc.
- Q: Is stakeholder and target audience the same? A: No, target audiences might include a wider public.

INTEGRATING EXISTING ANALYSIS *(Session 2C)*

Original question:
How can NISP partners integrate analyses that are based on different methodologies?

Revised question:
How can NGA partners integrate analyses that are based on different methodologies?

Recommendations:

1. Systematic comparison of methodologies.[5]
2. Identify strengths of each methodology and what they provide.[6]
3. Flexibility is an important point, as well as which are the minimum standards of quality and information.[7]
4. Create a conceptual framework.[8]
5. Keep in mind classification of different types of Gaps.
6. Analyze convenience and importance of using input and elements from other sectors, and of trying to motivate other sectors (cultural and archeological patrimony, sustainable development, etc.) to do similar exercises.

---

[5] Los pasos y cómo se integran, para poder comprender por qué cada organización sugiere cada uno. Entender diferencias, integrar procesos. Usando por ejemplo las reuniones de trabajo con los amigos de otras organizaciones como se ha realizado con TNC-WWF y seria bueno hacerlo con CI y WCS, buscar las complementariedades, homologar terminología. Con ejercicios paralelos hay varias opciones:

- Revisar e integrar los diferentes ejercicios en uno solo
- Revisar e integrar algunos pasos, espacios, personas
- Generar procesos separados e integrar los diferentes resultados

[6] ¿Cuál es el aporte de cada uno de los análisis, cuáles son las metas cuantitativas de cada ejercicio? ¿Todas la tienen? ¿Son necesarios? Se deben revisar cuáles tienen priorización. Tratar de tener un diagrama de complementariedad de las ONG internacionales e incluir las ONG locales de una manera genérica (cual es el aporte de cada organización) y como se pueden ensamblar y tal vez vamos a encontrar GAP en metodologías. Esto debe realizarse en conjunto con las autoridades gubernamentales quienes presentaran los resultados ante la COP.

[7] Definición de la escala y focalizar los recursos.

[8] Identify biodiversity and areas for conservation: Design a vision that considers redundancy resilience, and reconnections of representative biodiversity elements
Compare to existing PA's, ID Gaps and priorities: Identify gap in occurrence, extent, management
Design for Implementation: Design a national biodiversity strategy that includes establishment different conservation mechanism.
Comments: Cuando se tienen muchos portafolios, ¿se pueden sumar? ¿Debemos analizar las diferencias de las metodologías? Muchos de los países no van a tener ni los recursos ni la energía para hacer este tipo de análisis ya que son los gobiernos lo que deben presentar este GAP.

7. Keep 5 principles suggested by TNC but explicitly, so they are transparent.
   a. 4R's: representation, resilience, restoration, redundancy (ecological integrity / viability)
   b. Ecological context must be considered
   c. Analyse different kinds of gaps: (absolute gaps in representation, gaps in viability, and gaps in management)
   d. Hierarchy and implementation (priorities)
   e. Participative processes that use the cooperation and collaboration of different organizations, sectors, and methodologies.

8. Create a technical protocol with punctual and detailed information on the methodology (quality of data, methodology, etc.)

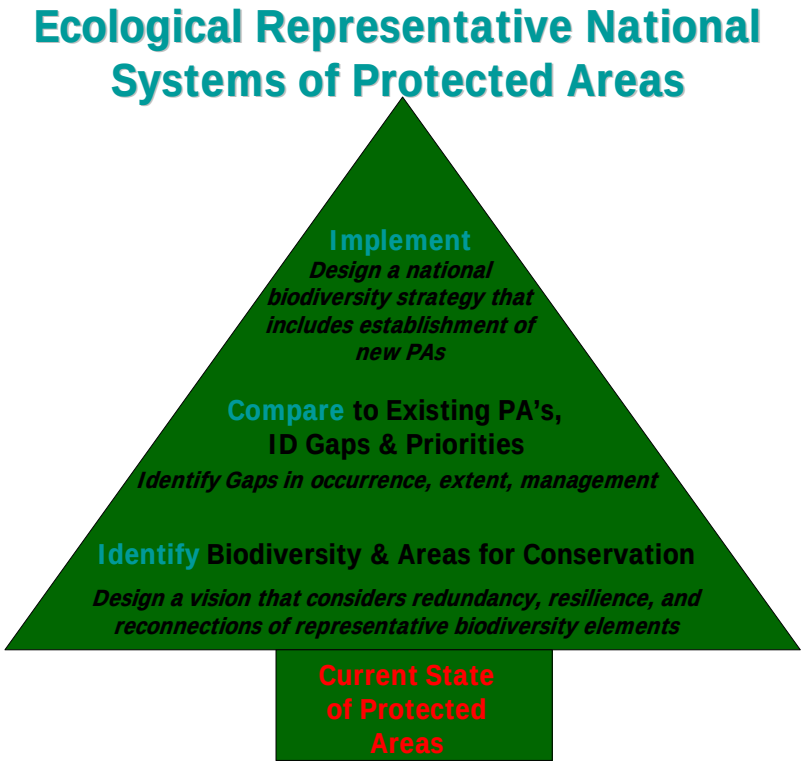
Experiences:

Mexico: Example of many methodologies- integration of portfolios and internal databases. Many countries may not have the amount of time to integrate all of this, what is the recommendation to these countries, decision making needs to start as early as possible. Integrity and quality of Pas, many are only parks "in paper".

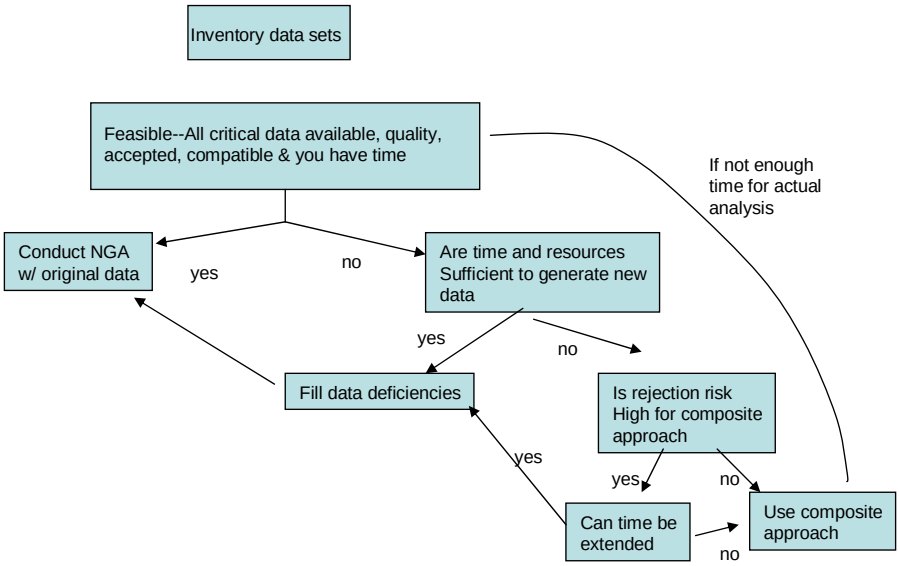
Caribbean: Intent: capture existing data. Action: Centralizing data from Panama.

Belize: Intent: integrate TNC & Belize NGA process. Action: Used the same data same (ERA more specific, NGA more coarse) experts and general methodology, but used different processing tools set different goals.

Next steps:
1. Create a conceptual framework
2. Values to keep: biodiversity, environmental services, conservation elements
3. Criteria for design (5 principles, goals, viability, occurrences)
4. GAP in different aspects (biodiversity, judicial, etc.)
5. Prioritization of sites and gaps
6. Actions to implement gaps and conservation strategies (different conservation scenarios: PA, regional, municipal, private reserves and others according to each country)



Original data vs composite analysis



Notes from Plenary Session:

- Flowchart (original vs. composite analysis) based on data available, quality of data, accepted by parties that buy in. Based on YES/NO answers: Feasible or not: if yes, you can conduct GA with original data; if no, you have to go in a different direction. If there is insufficient time, or no sufficient buy in > use composite approach, and so on.
- Difference between original approach and composite approach: original uses raw data input that you use to drive or generate the original analysis (ingredients); composite, take several approaches from different analyses and put results together.

2. CLINICS[9]

MARINE CLINIC *(Session 2D)*

Question #1:
How to deal with national vs. regional issues in marine NGA?

Solutions:
- TNC brings ecoregional vision to countries for NGA - use ongoing/completed ecoregional assessment information for NGAs
- Potentially, combine NGAs for small island nations – economies of scale and ecological connections
- Ideas for working across boundaries:
    - Use ecosystem context and regional-level forum to shape international collaborations on NGA.
    - Give higher priority to sites that have importance not only nationally, but regionally
    - Some countries will be limited to strictly national considerations.

Question #2:
What are cost effective methods to generate/access GIS information for marine habitats?

Solutions:
- Instead of developing national capacity, look to existing capacity/ regional resources
- Global Marine Initiative has guidance documents on techniques – Don't start from scratch, see what others have done

Specific Marine Tools:
- Can map intertidal habitats with aerial photographs & Landsat
- ShoreZone mapping or intertidal system characterization (e.g., ESI)
- IKONOS helpful for benthic habitats to 30m, spectral data can help identify targets
- Sailing charts go deeper than 30m & can help identify targets
- May make sense to spend $ on field work/data collection
- Offshore examples - CLF's Seascapes (Gulf of Maine), EcoPath and other fisheries management pop. dynamics
- Leveraging local fisherman information (WWF study in Sulu Sea); explain value of protecting recruitment areas, etc

[9] NOTE: Group agreed not to have the Freshwater Clinic due mostly to lack of experience in this field represented at meeting.

- Benthic topography/complexity can be used to identify potentially important habitat areas
- GPG's Marine Global Habitat Assessment is a resource for global datasets that are available (report available at home.tnc)
- CPT (L Sotomayor) to see what other ecoregional assessments have used

Question #3:
How can TNC develop capacity for marine NGAs?

Solutions:
TNC's Global Marine Initiative strategy for COP-7:
- General marine guidance –produce globally Gap analysis guide
- Regional workshops
- Example marine NGAs – working with individual NGAs
- Phone line always open to GMI (Dan Dorfman, Mike Beck, Zach Ferdana)

PiP has funding that *may* be able to be used for a workshop like this

Regional support exists for MAC and is being developed for A-P and SA.

Programs which **lack capacity** for marine NGA should identify this issue and elevate (i.e., Scott Smith and Lynne Hale can provide help).

Question #4:
Are there techniques for integrating terrestrial, freshwater, and marine aspects of Gap analysis?

Solutions:
- Global Marine Initiative is working on techniques - in context of ecoregional assessments
- Difficult to collect and use information for all 3 – but there is a lot of value in doing it
- Example projects: Hawaii, Puget Trough

Question #4:
Should we use Marxan for marine Gap analysis?

Solutions:
- It is the best available tool for now, but should move towards constructing a new tool specifically designed for Gap analysis.
- It is the tool-of-choice in TNC right now.
- Black hole in Marxan: it is static. We need to also include dynamic modeling.

CLINIC: TOOLS *(Session 3A)*

- List problem for which a tool or method is a solution
- Screen to identify which problems may be addressed by a current tool or method
- Prioritize problems
- Identify tools and specific applications of tools

How to address Climate Change?

- Bolivia NGA proposal/process – integrating data on current/future climate, habitat suitability and species ranges (see Pierre)
- Analysis of climate change impacts on ecoregional portfolio (North slope AK - see Earl Saxon)
- Pew Center on Global Climate Change – freshwater systems (rocky mountains, USA, and other places – see Ignacio)
- Coral reef resilience modeling TNC (see Dan Dorfman)
- Global % vegetation change dataset (see Michael Jennings)

Quantifying sensitivity of biodiversity to threat (Environmental Sensitivity Index)

- How does this product impact the results of the NGA?
- No tools available to date
- Bolivia Gap Assessment is working to develop this tool – see Pierre

How to sequence actions to cover gaps?

- SCAT – considers biodiversity value and level of threat (SEUS – see Chris Czell)
- RBI/RAI – locate areas of high biodiversity intactness facing high threats (Caribbean – see S. Schill) similar approach is being used in Bolivia
- MARXAN/SPOT – can be used to identify areas of high irreplaceability and high threat

Understanding PA Management Effectiveness

- IUCN guidance (WCPA)
- WWF – Global Study report
- TNC Scorecards (Tarsicio)

CLINIC: INTEGRATION *(Session 3B)*

Question:
How to integrate assessments across ecoregional/regional and national scale?

3 scales:
- Ecoregional
- Regional = multi-national
- National

Institutional process
- Run parallel regional and national processes and analyses, with same data, regionally and for each country.
- Each country should commit on not allowing species to be extirpated because it is covered in some other country.
- Every country should aspire to maintain the species they have now.

Data Layers
- Need to identify essential regional data layers
- Prioritize the species you want to target such as wide ranging generalists no need to monitor, endangered/landscape and keystone species, etc. should consider.
- Consistent technical approach to modeling is very important.
- Endemism centers should be preserved until info becomes available
- Research questions should be identified for future follow up.
- Resources: Talk to Michael Jennings for more info about available species distribution modeling tools.

Advantages of Regional Level
- Better captures ecological functionality of species distributions
- Result: Process could result in two types of sites one of regional importance and one of national importance with designation of protection should be a different level
- Agree on regional vision with National GOs is essential to success yet identify country-specific endemism. Might lead to higher representation in some countries
- Bingos should agree on regional visions
- Need follow up committees for regional visions and NGAs (facilitates fundraising)
- Economy of scale

Advantages of National Level
- Acceptance
- Finer scale data
- Fulfills needs of country
- Prevents extirpation at country level, analyze & implement at country level
- Easier to accomplish politically and technically

MARXAN AND OTHER PORTFOLIO ASSEMBLY TOOLS *(Session 3D)*

Question #1:
How does one define the scope, scale, and level of detail for an NGA?

Solutions:[10]

- Beware of only recycling data - Need to make sure decisions are not driven by data availability. Share results and information resources early to initiate contributions of better data and participation

- Need to represent biodiversity at multiple scales

- Identification of data gaps is important part of Gap analysis. Need to:
  - Identify data gaps
  - Prioritize which ones should be filled
  - Work on filling them in:
    Predictive modeling
    Coarse filter – last resort for filling in data gaps in absence of fine filt.
    Perhaps use surrogate data for missing species data (not ideal)

- Need to establish analysis units early (hexagons vs. watersheds) – rapid assessment of available data to determine scale

- Challenge of lack of digitized information

Question #2:[11]
How can we effectively include species dynamics into a gap assessment? Marxan

---

[10]
Solution/Notes
Need to represent biodiversity at multiple scales (ecol. systems, species, species habitat requirements)
What if data is missing – e.g., species level data?
* Identifying data gaps (i.e., at what scale data is incomplete) is an important part of a good Gap analysis.
* Perhaps use some species data to represent missing data (e.g., birds as surrogates) – but not ideal
What about functionality? Able to spatially define it? If you can, would be a great addition to current Gap methodology
Ecuador – GPA assessment needs to be done for whole country, but data from previous assessments don't cover the whole country (little information for some areas or research/assessments focused in limited areas). Need to:
ID knowledge gaps: Prioritize them, work on filling them in:
Predictive modeling
Coarse filter – last resort for filling in data gaps
Establish analysis units to determine level of detail needed for data
- Debate: Hexagon vs. watershed units
  Hexagon scale depends on scale of analysis (~10,000 hexagons)

What if there is no data available at required resolution? Can do rapid assessment of available data to initially determine a good scale of analysis
Need to make sure decisions are not being driven by availability of data – beware of only recycling data (i.e., only choosing important areas where there is data)
Share results and information resources early to initiate contributions of better data and participation
Challenge of data that isn't digital
Hexagon approach is useful because you don't need geospatial data if it fits into hexagon
Caliper Corp. – company Dan worked for that converts addresses to digitize locations
Look for other parties that have wanted to digitize information but didn't have the resources – to leverage digitization.
Scope needs to be discussed with NGA team – may want to include socio-economic data

[11] Tools Dan Dorfman recommends:

lacks this capacity; it is a static optimization model.

Solutions:

- We need to use simulation models to supplement Marxan analysis to include population dynamics in Gap analysis.
- There are tools available (Alex, Patch Analyst, EcoPath, CrystalBall) – simulation programs that are data-driven and can be parameterized.
- These models should be run before Marxan – used to define moving targets. Need to work out marrying output of dynamic models with Marxan runs.
- Dynamic models are expensive, should only be done for select species/groups – keystone species.
- Gap analyses will need to be dynamic with time – relies on data management. Data needs to be collected and housed so it can be accessed and updated (Digger Protocol). Requires strict data management from the beginning.

Question #3:[12]

Trouble-shooting past problems with Marxan.

Solutions:

- If you weigh threat too heavily, that can drive results

- Alex, Patch Analyst – family of metapopulation simulators
- Fisheries: Ecopath – modeling fish populations

These are simulation programs that are data driven and that you have to parameterize to run the models. There is a need for datasets.

If you know what the probability distribution of your species is, can you run these models? Dan: that would be a starting point, but the kinds of species information you really need is movement capabilities, what kinds of movements does it make, life cycle (growth stages). Run as step prior to Marxan – gives indications on how you may run Marxan – can then use to define target as moving around.

Considerations: Migrations vs. movements within habitats vs. being pushed into new area, different species would require levels of ecological interpretation

Expensive proposition – critical for the most important keystone species, not just for endemics – e.g., large predators and major coral species. Is this stuff high quality or should we be making our own models?

If you know GIS modeling, you don't need these tools – or not hard to change parameters. Need to include Graph theory, nodes.

Are there other methods to do dynamic modeling beyond simulation models?

* Climate change – Looking at shifts in habitat, sea level rise and loss of suitable habitat conditions. There are risks in using it (can't know for sure). George explained dynamic models: 0 = ax + bx + cz (simulation model gives you a number of outcomes based on data inputs. Hugh Possingham (developer of Marxan) is hoping to incorporate this into the next version. CrystalBall – another program George has used (Excel AddIn), needs to be compared to other products available

Once Marxan is run, shouldn't be a static result. If you change goals, stratification units, add better data… should rerun – almost becomes a model. Gap analysis will need to become more dynamic with time, too. How are we going to keep this going? Data needs to be collected and housed in a way that allows it to be updated easily. Requires strict data management from the beginning. How to marry dynamic models with Marxan? Run Marxan 5000 times with multiple inputs? In Marxan, there can be multiple representations of a species/target – series of entities. Dan calls a species more than one target. Not as one species, but "species as a transitory" "species reproducing"…

And can weight these separate targets, based on importance to species.

[12] If you weigh threat too heavily, that can drive results

- May need to do irreplaceability analysis to determine places that are non-negotiable.
- How much playing with the system is required to get results that make sense? In Jamaica, they list out assumptions and then compare results – to make subjectivity clear
- Screening targets – take out targets from areas that they are low quality
- Important not just to look at "best" run, but look at sum runs to look at spatial variability
- Establish minimum target areas – measured through contiguous analysis units
- Think about stratification of targets – to make sure the ones you really want represented are included

- May need to do irreplaceability analysis to determine places that are non-negotiable.
- How much playing with the system is required to get results that make sense? In Jamaica, they list out assumptions and then compare results – to make subjectivity clear.
- Screening targets – take out targets from areas that they are low quality
- Important not just to look at "best" run, but look at sum runs to look at spatial variability
- Establish minimum target areas (minimum dynamic area) – measured through contiguous analysis units
- Think about stratification of targets – to make sure the ones you really want represented are included.

3. REGIONAL BREAKOUT SESSIONS

1. CARIBBEAN CONSERVATION REGION

Caribbean NISPs - FY05 PIP MSS (and non-PIP) - National Protected Areas Gap Analysis
Draft Methodology and Work Plan (As of April 7, 2005)

Background
Countries Involved (completion date of NISP):

- Bahamas (non-PiP funds) (November 2004)
- Dominican Republic (initial stages only)
- Grenada (February 2005)
- Haiti (non-PIP funds) (waiting approval from Andreas)
- Jamaica (January 2004)
- St. Vincent and Grenadines (March 2005)

Overall Methodology (Year to be implemented):

- Information Collection (2005)
- Analysis (2005 into 2006)
- Implementation (2006 onward)

Implicit in this methodology is the need for national (and local) governmental and non-governmental partner buy-in, as implementation of the outcomes will primarily be their responsibility. Therefore, it will be key to include partners in all aspects of project design and implementation from the very beginning stages.

Information Collection/Resource Needs
Status of Data Sets:

- Bahamas: coarse filter target data needed, fine filter target data needs to be compiled and digitized, need socio-economic data (Resource needs: OU level (contract) GIS support)
- Dominican Republic: currently complete, but lacking FW, marine and terrestrial (except amphibian) fine filter targets (Resource needs: OU level (contract) GIS support)
- Grenada: currently complete, but lacking FW & terrestrial fine filter targets
- Haiti: currently complete, but lacking FW, marine, terrestrial fine filter targets, and socio-economic data
- Jamaica: currently complete (not happy with marine and forest cover), but lacking all fine filter targets, MARXAN analysis currently underway (Resource needs: OU level (contract) support to review forest cover classification and distribution and support for purchasing IKONOS marine images, if feasible; support for a student to assist with data collection and ground-truthing)

- St. Vincent and Grenadines: currently complete, but lacking FW & terrestrial fine filter targets
- Caribbean Regional: (Resource needs:
  1. 50% of FW Ecologist (provide support for setting goals and fine filter targets, among other support)
  2. 50% of Terrestrial Ecologist (provide support for setting goals and fine filter targets, among other support)
  3. Full time (staff) GIS Support (MACR-wide)
  4. support for data and data collection
  5. support for standardization workshops (terrestrial, marine, FW)
  6. country-wide IKONOS mosaics for refining targets through national collaborations – or support for ground-truthing (using local university students)
  7. support for PA refinement (validation) and attributing and engaging with CAMPAM and WDPA)

Data Sets to Include at a Minimum:

- Bathymetry – highest resolution bathymetric grid
- Climate – life zones, precipitation
- Climate Change – predicting areas at high risk to climate change (especially coast line changes)
- Connectivity – modeled corridors and graph theory output
- Freshwater – all hydrology features (strata, streams, rivers, lakes, etc)
- Geology – all geology layers
- Imagery – satellite and aerial photography
- Infrastructure – roads, rails, ports, airports
- Land cover – all land cover /land use products
- Marine – all marine features (strata, reefs, beaches, seagrass, etc)
- Political – boundaries, towns, districts, parishes, etc
- Protected Areas – all protected areas, national parks, reserves
- Socioeconomic – agriculture, industrial sites, tourism, population density, human activity surfaces, to determine connections between occurrences and targets, to quantify impacts and threats to PAs, identify opportunities – such as aligning human development objectives with conservation objectives (e.g. disaster preparedness, etc)
- Targets – all freshwater, marine, and terrestrial targets
- Terrestrial – ecoregions, plant and animal fine filter locations
- Topography – highest resolution topographic grid
- Topo Maps – topo maps at various scales (100k, 50k, etc)
- Fine Filter Data, per requirements of individual countries – FW, Marine and Terrestrial

Issues:

- Each Country needs to refine and validate protected area polygons, coarse filter target lists, and goals, prior to running Gap Assessment, to be addressed by OU staff
- Each OU needs to speak with their respective government partners to identify species lists to be included in each countries Gap Assessment, to be addressed by OU staff

Analysis

This will occur at two levels:

- Minimum 10% of all (baseline needs to be defined – historic preferred/recommended) major ecosystem types for terrestrial and marine areas in protection (per CBD Programme of Work on Protected Areas) Gap Analysis – could be greater if country sets higher goal (e.g. Bahamas is setting 30% Marine goal)
- Protected Area Effectiveness Gap Analysis

Issues:

- GPG to assist with defining baseline issue.

10% Goal Gap Analysis
This analysis looks at all designated and proposed protected areas in any given country, including management effectiveness, and measures total towards CBD's 10% of major ecosystem types of terrestrial and marine protected area goal. More importantly, via use of MARXAN, analysis identifies potential portfolios to meet protected area gaps. Final product would be a national Programme of Work on Protected Areas to meet the objectives of the CBD's minimum 10% goal.

Protected Area Effectiveness Gap Analysis
Suggested and preferred that we use the IUCN *Guidelines to Management Effectiveness*. Furthermore, there is agreement that TNC should adopt this as a minimum. Countries could elect to develop more detailed effectiveness criteria. Could be completed when countries revise PA polygons.

Engagement

- There is agreement that government, and preferably one governmental entity (and individual), should assume the responsibility for completing the NGA (either through direct leadership or delegation).

- Insert recommendations from Groups 1A and 2A.

- Take advantage of existing PA (or related) coordinating bodies within country.

- Develop communication plan that includes (insert recommendations from 2B).

- Develop data engagement/sharing strategy (insert recommendations from 2A and 1C). Use existing data sharing agreement document. Default is to share data, unless instructed otherwise by data provider.

Outline & Writing of NGA Document
Recommendation to wait for CBD Secretariat's NGA guidelines, expected June 2005 (draft in May). Who writes document to be determined by countries. GEF funds to be made available to countries in August 2005 (average $250K) for NGA process.

Proposed Timeline
Jamaica:

- Data Gathering: mostly complete

- Data Analysis: on-going, review of goals and fine filter targets in May 2005, to be completed early June
- Review: June 2005
- Refinement: June 2005
- Draft Report: end of June 2005

Grenada:

- Data Gathering: mostly complete
- Data Analysis: October 2005
- Workshop Review: early December 2005
- Refinement: between Dec-Jun 2006
- Draft Report: end of June 2006

St. Vincent:

- Data Gathering: mostly complete
- Data Analysis: October 2005
- Workshop Review: early December 2005
- Refinement: between Dec-Jun 2006
- Draft Report: end of June 2006

Dominican Republic:

- Data Gathering: mostly complete
- Data Analysis: completed by August 2005 (IABIN project)
- Workshop Review: September 2005
- Refinement: between Sept-Dec 2005
- Draft Report: December 2005

Haiti:

- Data Gathering: TBD
- Data Analysis: TBD
- Workshop Review: TBD
- Refinement: TBD
- Draft Report: TBD

Bahamas:

- Data Gathering: on-going
- Data Analysis: July 2006
- Workshop Review: August 2006
- Refinement: Sept-Dec 2006
- Draft Report: December 2006

Implementation

Effective implementation will require adoption of the national plan by each government. Need to determine how best to achieve this, will vary country to country. This will require input from local governmental and non-governmental partners – should be addressed in workshops above. Implementation will be multi-year, with terrestrial 10% goal to be met by 2010, and marine 10% goal to be met by 2012.

Similar to the analysis, future implementation will be focused on two areas:

- Improving protected area management effectiveness, an area in which the Conservancy (and others) can play a significant role
- Creation of new protected areas to meet 10% goals, outside of the creation of private preserves, this is an area largely, if not wholly, the responsibility of the respective governments

We will include support from implementation (what ever form this may take) in the PIP MSS FY06 (and beyond) workplan for the Caribbean.

2. MESOAMERICA CONSERVATION REGION

Points of Discussion:
What do we expect from the working group?

1. An overview of the current status of Gap Analyses in the MACR (likely to have uneven conditions)
2. Clarify what is the role of TNC
3. Reflect on our capacity to respond to this challenge (ie. funding, staffing, etc.)
4. What are the next steps?

Initial Discussion:

- Should check the questions to make sure they are the most relevant to our group.
- Given that COP7 commitments are by country, we should look at issues by country. Could do a table.
- TNC should clarify what is our role. Should clarify what TNC can offer to governments. It is suggested that we start by clarifying this in the group.
- In Mexico it has been a slow process. In an instance the government perceived that TNC was pushing its methodology. We must therefore be very careful.
- How about clarifying what expectations we have for this working group?

Overview of Current Status of Gap Analysis in MACR
What should be the elements of this overview?

- Break it by country,
- Include who the partners are (break by resources & technical),
- How involved/interested is the government,
- Stage of the process,
- Available resources (human, data (quality), financial),
- TNC's/partners role/capacity in the country, who is on the lead
- Is there a NISP?

RECOMMEDATIONS AND SUGGESTED ACTIONS
1. Elaborate a diagnosis to assess funds required for each country to develop a GAP analysis (considering the political/institutional process and the technical/ecological process).
2. Focus efforts in Guatemala, Honduras and Nicaragua to start up and strengthen the process, aiming at signing a NISP and fundraising.
3. Data situation is sufficient for freshwater and terrestrial. There is a lack of information for the Pacific.
4. A collection and integration effort is undergoing, but still requires much more work. Fill gaps and integrate info.
5. Look for a process/way where ERA could support national GAPs.
6. Strong fundraising effort and leveraging resources. Assess bilateral and multilateral resources.
7. Assess closely with WCS, Flora and Fauna Int., Birdlife, CI and WWF their plans for

the region within the GAP framework.
8. There scarce human resource within TNC staff to address this challenge, but political position and interest.
9. Define the methodological and conceptual guidelines for GAPs through a Regional Workshop, under the auspices by Protected Areas Regional Committee and sponsored by TNC. Participants: staff from national NPAs authorities, regional organizations.
10. Incorporate lessons learned from Belize and Mexico
11. In order to address Beta Biodiversity in the Region there is a need a technical expertise to be able to establish heterogeneity indexes.

Workplan

ACTIVITY	TIME	RESPONSIBLE
INSTITUTIONAL ASPECTS		
Contact/lobby government and generate interest and assess situation	April	Country Directors (John y Julio)
Sign NISP in Guatemala, Honduras, Nicaragua	?	Country Directors (John and Julio) and Sylvia Charpentier
Contact and coordinate with other regional institutions (WWF, CI, WCS, CATIE, UICN, CCAB/AP, PERTAP)	April	Country Director contacts organizations within his/her country
PERTAP/ Technical Committee AP y CBM	April / July	Juan Carlos Godoy
CCAD		Andreas, John B
Appoint a National Focal point (political)	April/May	Government Authority
Hire a National Coordinator (operations)	May/June	TBD
Organize national teams or committees (technical and political)	May/June	TBD
FUNDRAISING		
Assess funds required by country and regional...really focus on priorities and strategic needs.		Country Directors and Regional Team
Assess available resources in other institutions (leverage funds)		Country Directors and Regional Team (support from EA)
METHODOLOGY		

Lobby PAT Committee to convene the workshop	April	Juan Carlos Godoy
Convene a workshop to develop GAPs guidelines for Mesoamerica	May	Patricia Burdett, Honduras
Organize and held workshop	May or June	Regional Team
Assess experiences from Belize, Mexico and CR	May	Regional Team with country teams
Develop a draft version	May	Lenin/Jeff and regional science team
Develop draft methodological version for Marine and Freshwater	May	Lenin and consultants, TNC advisors
National Technical committees define final methodology for GAPs	June/July	National coordinators
INFORMATION		
Continue information collection and integration		Marco
Identify critical/essential gap information	April	Regional team
Fill essential information gaps	April/May/June	Regional team and others
Coordination with regional initiatives (IABIN, SERVIR, SIAM, etc.) (Ivan Valdespino y Rafael Guillen)	Continue	Lenin, Steve, Marco
OPERATIONS		

3. SOUTH AMERICA CONSERVATION REGION

Note: Colombia, Ecuador, Peru, Bolivia & Brasil have signed NISPs

Recommendations to Meet 5 Principles of NGA

1. Organization and Planning

- Governments should take leadership roles BINGOs should have a support role (low profile)
- Leadership, roles and responsibilities
- Assessment of capacities that will develop the NGAs
- "Technical" team:
  - NGOs/Technical Committee/Consortium
  - Role: Provide Technical Leadership
- "Political" team:
  - Governments (ie. NISP signatories)
  - Role: Facilitation, Communication, Follow-up, Information access, Implementation, shakers!
- Schedule of Activities (see Bolivia)

2. Biological Assessment and Analysis

- Define and agree on Methodology
- Consider other assessments (ecoregional visions, hotspots, IBAs) – Watch out for Scales!
- Guarantee minimal technical criteria (Representation and Resilience, are the more important R's given our time restrictions)
- Include Freshwater and Marine, though time is a limiting factor for these…
- Conservation Effectiveness is important, we need it
- Communicate strategically to specific audiences
- Government must decide on prioritizing gaps with recommendations from the technical team
- Recommendations to Meet 5 Principles of NGA

3. Action Plan

- Ideally, NGAs should be **adaptive and updated**
- Communicate **results and strategies** strategically to the appropriate actors
- Present Gaps as **"areas of high biodiversity"** as opposed to "new protected areas"
- Take into account indigenous populations (see OIT 169)

Socio-Economic Needs for NGA

- Engage stakeholders strategically
- Without Socio-Economic, NGA is focused only on "potential biodiversity"
- Three opportunities to integrate socio-economic data:
  - At the beginning as a proxy to biophysical information (access, roads, population centers)

- To prioritize or analyze portfolio suitability (poverty –watch out with this one-, indigenous territories, infrastructure)
- To develop strategies (environmental services)

Strategies for Shortages in Technical Expertise

- Lots of information already, no need to reinvent the wheel, but need to communicate what an NGA is and what it's for to the clients (Gov's.)
- Need a "Resource Center" to obtain methods, tools and reference materials (web, etc)
- South-to-South exchanges:
  - Exchange information and experiences
  - Initiate the concept of a regional approach (cross boundary)
  - Use existing peer networks (CAN, etc) or develop a database of experts and expertise.
- Peer Review may be another avenue, but remember to focus on technical issues
- Lots of technical needs in Marine and Freshwater components
- Seed money for technical issues (EAG, etc)
- Data management
  - Who will do this and how
- Consider that this may not be the last NGA and that data will always be useful
- Capacity varies from country to country, adjust accordingly and have tools that all can use

APPENDICES

SOME TNC STRATEGIES FOR DELIVERING TECHNICAL ASSISTANCE *(Clinic Session 3C)*

TECHNICAL ASSISTANCE SUPPORT NEEDS FOR COP-7 STRATEGY

General:

- Need for better OU – Global communication on needs and support.
- Distribute all relevant information documents on funding and technical needs and support.

	COUNTRY	REGIONAL	GLOBAL
Overall strategy design			
Partnerships			
Gap Assessment	**Bahamas:** • In country FTE on NGA • Direct TA (Design of assessment process from regional or global) • FTE on marine at the Caribbean level • Regional peer review at MAC level with global support (have regional coordinator, need global support) **Colombia:** • Direct TA (mobilizing and integration) • Direct TA, tools/guide (global), funding, regional peer review with global support • Regional peer review at MAC level with global support (have regional coordinator, need global support)		
Capacity Needs Assessment	**SACR:** • Regional workshop to advancing thinking on what is "capacity building" • Identify existing NCA and initiatives • Need tools to do NCA **Bahamas:** • In country FTE? • In country consultant?	• Regional peer reviews?? • Direct TA?? • Regional FTE??	**SACR:** Strategic advice for different models of getting NCAs done • Guide?? • Direct TA?? • Support to regional peer reviews??
Conservation Finance			
Management Effectiveness			
Monitoring			

Plan			
Fundraising	**Bahamas:** • Public/private fundraising capacity		**Bahamas:** • Share proposals, examples and resources

TECHNICAL SUPPORT FOR PROGRAMME OF WORK ON PAs

	Minimum	Ideal
Gap Assessment	**DO:-** Guide Direct TA to 2 countries **NEED-** FTE: .40 FTE $:	**DO-** 3 regional peer reviews Guide with tools Direct TA to 6 countries **NEED-** FTE: 1 $:
Capacity Building	**DO-** Guide Direct TA to 2 countries **NEED-** FTE: .30 FTE $: 15k prof fees, 8K travel	**DO-** 3 regional peer reviews Guide with tools Direct TA to 6 countries **NEED-** FTE: 1 FTE $: 15k prof fees, 20k travel
Management Planning		
Management Effectiveness	• Trying to get ahead of the game this year for 2008 commitments • Mgt Effectiveness workshop (Quito, June 28-30)	
Conservation Finance	Marlon Flores	
Monitoring Plan		

NOTES ON PRESENTATIONS

Overview of COP-7 Protected Areas Strategy (Jeff Parrish, Manrique Rojas)

- Common message from countries to achieve their staffing capacity ($4 million to be extended to $6 million)
- COP-7 Fundraising Campaign to help hire additional staff
- Report on progress made on COP-7 Commitments to be presented in open-ended working group in protected areas (Tuscany, Italy – June 2005). Invitation for attendants to work with governments to present their needs.
- COP-7 plan sets goals and targets; getting to them would depend on context.
- Mentioned scorecard to follow up on activities for each country in South America that could be adapted to other countries
- Millennium Ecosystem Assessment
- Needs: Full internet accessibility of information resources
- Leadership is key feature. Need to determine where government in leadership is in place, where it is not in place. Strategy for national coalitions where it is not in place. Suggested: Accept lack of it as a reality and move forward in spite of it.

Description of the purpose and elements of producing a national gap assessment (Jeff Parrish)

- Building capacity through involving and supporting students.
- Gap analyses are not new; there are different initiatives that are not gap analyses but contribute to gap analyses.
- Some ecological units require more effort than others.
- Explanation of 4-Rs: Representation, resilience, redundancy, and reconnection.
- NGO collaboration working together with governments, filling in the gaps. Making it more ecumenical to incorporate multi-organizational effort and make it available for governments. Example: Mexico. Avoid reinventing the wheel and share expertise.
- First draft of Gaps Guide. (Toolkit meeting in June. Guide will encompass a variety of approaches and datasets)
- Need for expanding work in developing and maintaining Web Toolkit
- Participatory: careful who to include in the process
- The process must consider who should participate, but outcome should be validated by social parties as well.

Bolivia Gap Assessment (Pierre Ibisch)

- New title: "Rethinking gap analysis or how to integrate 4Rs into one national gap analysis"

Q: The total area of Bolivia, budget and length of project
A: 1 million square km, one year, budget $140.000 not including previous work.

Q: Do organizations presented worked together before?

A: Before it was mostly technical support. All government stakeholders were also part of it, with meetings once every two months. Simultaneous review process took place.

Q: Percentage was used to present proposals?
A: We considered functionality and how to integrate regions. In some regions it would be necessary to re-categorize or eliminate some protected areas.

Comment: 10% for 10 year goal is provisional and flexible; it is only to provide a floor for targets.

Q: What was driving the complimentary approaches for including endemism and functionality areas, and a corresponding filter?
A: Not seen as possible to get a good system for every group. Need to decide what was more important, so both were combined.

Example: Amphibian protection. Take into account how this relates to neighboring countries, a problem when facing the scale.

Q: How do you envision this product influencing Bolivia's decisions, considering the poverty and political situation?
A: Country has different problems, five Environmental Ministers, concerned about implementation. We can offer a product that is does not include all stakeholders. Intention is to integrate feasibility based on economic data, Bolivian government, NGOs. This is a vision of how things should be as a way to get funded. Work on the local level.

Q: Where is the data?
A: We have it now. Time consuming process to get the data for species analysis, we tried to get the data from specialists. Data will then be published for the different groups.

Looking for the GAPs: How does the SACR priority assessment relate to national GAP analysis (Steffen Reichle)

Q: What was the price for this?
A: $150,000 (not counting classification system, which was $180,000 and paid before). What this is and what was mapped were the terrestrial ecosystems, which influence how well this is capturing targets. For ecoregions that have a lot of conversion going on this is a good example.

Q: Did you do analysis of best solution?
A: We did several spot runs not only in protected areas. The model picked whatever areas were feasible for the model. Not better to focus on the hotspots but to include other spots. Some regions are ok right now, but we can anticipate threats. Keep it not to much to urgency and threat, not only about how much it has been promoted. Goal is to preserve 10% of every MHT, so we have to look at where this is more feasible. One reason: get senior managers to see where priority ecoregions are.

Pantanal example: Different if seen from a single manager than from a MHT angle.

Q: Here you used only two criteria (roads and population), are you planning to incorporate more layers?
A: We had 4 months to do it, so not much time, but we will redo it next FY.

Q: What is the goal?
A: It is different in every ecoregions depending on the conversion rate. The database is good when speaking about forests but not for grasslands.

Q: What does it mean to be a yellow spot (see ppt)?
A: It is effective conservation that should happen, how you get there depends on you. The yellow areas should be areas that are always in the portfolio. Good resource and tool from South America. Look at it as a possible regional scale for dataset development.

DEBRIEF THE DAYS

Debrief Day 1:

😐	☺
▪ Driving to recommendations that would help our work plans, not too general. ▪ Participation in groups, not having the experts in their area of expertise, but think in where the experts can contribute the most. ▪ Focus on what is doable within the timeframe (2 years) ▪ Prioritize recommendations ▪ Recommendations on methodologies or tools for the different things we are talking about (how to do it) ▪ How to integrate ERP and other types of assessments with gap analysis. ▪ Not to spend so much time figuring out the basic gap analysis. Still need to clarify what gap analysis means. ▪ Budgetary themes need to be covered because some ideas might not be feasible due to budgetary restraints. ▪ Address level of support, technical resources, etc. provided by the region.	

Debrief Day 2:

😐	☺
▪	▪ Smaller breakout groups worked better ▪ Questions better focused and they actually helped guide the discussion ▪ Facilitator was better and kept group from getting stuck ▪ Morning was more informative and afternoon was more about finding a common ground ▪ Both, broad sessions and clinics, were useful

LIST OF PARTICIPANTS

Angela Martin
The Nature Conservancy
Parks in Peril Conservation Specialist
amartin@tnc.org
(703) 841-5996
4245 N Fairfax Drive, Suite 100
Arlington VA 22203
USA

Ann Gondor
The Nature Conservancy
Northwest Mexico Conservation Planner
agondor@tnc.org
(520) 622-3861
1510 E. Fort Lowell
Tucson AR 85719
USA

Ann Sutton
The Nature Conservancy
Director of Conservation Jamaica Country Programme
asutton@tnc.org
(876) 877-7335
32 Lady Musgrave Rd
Kingston 5 Kingston0
Jamaica

Pilar Barrera
The Nature Conservancy
Colombia Country Representative
pbarrera@tnc.org
(571) 610-4108
Calle 100 No. 8A-49, Torre B. Oficina 505
Bogota DC 8
Colombia

Bernal Herrera
The Nature Conservancy
Costa Rica Program Scientist
bherrera@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose230-1225 Plaza Mayor
Costa Rica

Bruce Boggs
The Nature Conservancy
bboggs@tnc.org
(828) 281-2178
POB 2746
Asheville NC 28802
USA

Carlos Chacón
The Nature Conservancy
MAC private lands specialist
cchacon@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Dan Dorfman
The Nature Conservancy
Senior Marine Conservation Planner
ddorfman@tnc.org
(831) 459-4830
100 Shaffer Road,USCS-LML-COH
Santa Cruz CA 95060
USA

Elvis Arias
Instituto Nacional de Biodiversidad (INBio)
GRUAS 2 Project Lead
earias@inbio.ac.cr
(506) 507-8288
300 norte y 300 este del cementerio en Santo Domingo
Santo Domingo Heredia
Costa Rica

Estuardo Secaira
The Nature Conservancy
Conservation Science & Stewardship Adviser
esecaira@tnc.org
(502) 2367-0480
12 Ave. 14-41 Zona 10
Guatemala Guatemala1015
Guatemala

Fernando Secaira
The Nature Conservancy
Selva Maya, Zoque and Olmeca Ecoregional Planner
fsecaira@tnc.org
(529) 999-8846-98
Calle 32 N 269 x47 y 47a, Colonia Pinzón
Merida Yucatán 97207
Mexico

Francisco Núñez
The Nature Conservancy
NW Caribbean Project Coordinator
fnunez@tnc.org
(809) 541-7666
Jacinto Mañon esq. Federico Geraldino, Plaza D'Roca, Suite 401
Santo Domingo Santo Domingo 10126
Dominican Republic

George Hanily
The Nature Conservancy
Panama Country Program Director
ghanily@tnc.org
(507) 264-7883
Ave. Samuel Lewis, Edif. Plaza Obarrio
Panama Panama 0832-2555
Panama

Tarsicio Granizo
The Nature Conservancy
Senior Science Advisor for Protected Areas Systems
tgranizo@tnc.org
(593) 222-5713-8
De los Naranjos N44-491 y De las Azucenas, Monteserrin
Quito Pichincha N44-491
Ecuador

Ignacio March
The Nature Conservancy
Mexico Program Science Specialist
imarch@tnc.org
(555) 661-1153
Manuel M. Ponce, 322-2nd. floor
Mexico City D.F. 1020
Mexico

Jason Spensley
The Nature Conservancy
Conservation Learning Group
jspensley@tnc.org
(520) 622-3861
1510 E. Fort Lowell Rd.
Tucson AR 85719
USA

Jeff Parrish
The Nature Conservancy
Director of Conservation Planning
jparrish@tnc.org
(720) 289-4677
3368 West 37th Avenue
Denver CO 80211
USA

Jennifer Molnar
The Nature Conservancy
Reseach Associate, Habitat Assessment Team
jmolnar@tnc.org
(206) 343-4345
217 Pine Street, Suite 1100
Seattle WA 98101
USA

Jen Schimmenti
The Nature Conservancy
Meeting Planner
jschimmenti@tnc.org
(703) 841-7190
4245 N. Fairfax Dr.
Arlington VA 22203
USA

John Morrison
World Wildlife Fund USA
Deputy Director, Conservation Science
john.morrison@wwfus.org
(202) 861-8394
1250 24th St. NW
Washington DC 20037
USA

José Galindo
The Nature Conservancy
New Ecuador NISP Coordinator
Jose_galindo@yahoo.com
(593) 222-2581-13
Calle Los Naranjos N44-491 y Azucenas
Quito Pichincha 17211398
Ecuador

Joselyne Hoffmann
The Nature Conservancy
MAC Regional Conservation Program Assistant
jhoffmann@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Juan Bezaury
The Nature Conservancy
Mexico Program Policy Director
jbezaury@tnc.org
(555) 651-1153
Manuel M. Ponce 322
Mexico DF 1020
Mexico

Juan Carlos Godoy
The Nature Conservancy
PROARCA Policy Specialist
jcgodoy@proarca.org.gt
(502) 236-7048-0
12 ave. 14-41 zona 10
Guatemala Guatemala 1010
Guatemala

Juan José Dada
The Nature Conservancy
Private Lands Specialist, External Affairs
jjdada@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Julio Carcamo
The Nature Conservancy
Honduras Country Program Director
jcarcamo@tnc.org
(504) 232-3298
Colonia Florencia Norte
Francisco Morazán Tegucigalpa 5744
Honduras

Kim Thurlow
The Nature Conservancy
Bahamas Conservation Planner
kthurlow@tnc.org
(242) 327-2414
Caves Village, Bldg 5, Suite 2, West Bay St.
Nassau Nassau
Bahamas

Lenin Corrales
The Nature Conservancy
MAC Regional Scientist
lcorrales@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Leonardo Sotomayor
The Nature Conservancy
GIS & Data Manager
lsotomayor@tnc.org
(703) 841-4192
4245 N Fairfax Dr, Suite 100
Arlington VA 22203
USA

Maarten Kappelle
The Nature Conservancy
MAC Regional Scientist
mkappelle@tnc.org
(506) 220-2552
Apartado 230 - 1225
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Marco Castro
The Nature Conservancy
MAC GIS specialist
marco_castro@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Michael Jennings
The Nature Conservancy
Senior Terrestrial Ecologist
mjennings@tnc.org
(208) 882-3882
530 S. Asbury St., Suite 5
Moscow ID 83843
USA

Michelle Libby
The Nature Conservancy
MAC Conservation Partnership, Director
mlibby@tnc.org
(506) 220-2552
1 km oeste POPS Sabana
San Jose San Jose 230-1225 Plaza Mayor
Costa Rica

Montgomery Ferguson
The Nature Conservancy
Partnership Specialist, Bahamas
mferguson@tnc.org
(242) 327-2414
West Bay St.,Caves Village Suite 2; Building 5
Nassau New Providence P.O. Box CB-11398
Bahamas

David Oren
The Nature Conservancy
Science Coordinator
doren@tnc.org.br
(556) 146-8481-9
SHIN CA-05 Conj. J, Bloco B, 3o Andar
Brasilia Distrito Federal 71.503-505
Brazil

Pierre Ibisch
University of Applied Sciences Eberswalde / Fundacion Amigos de la Naturaleza
Bolivia GAP Analysis
pibisch@fh-eberswalde.de
(433) 346-5479
Friedrich-Ebert-Str. 28
Eberswalde Brandenburg 16225
Germany

Raquel Seybert
The Nature Conservancy
Grenadines PiP Program Manager
rseybert@tnc.org
(340) 773-5575
3052 Estate Little Princess
Christiansted US Virgin Islands 820
USA

Steffen Reichle
The Nature Conservancy
Science Coordinator Southern Andes Conservation Program
sreichle@tnc.org
(591) 334-8076-6
Avenida 2 de agosto - 4. anillo
Santa Cruz de la Sierra Santa Cruz
Bolivia

Richard Jeo
The Nature Conservancy
MAC Regional Science Director
rjeo@tnc.org
(571) 345-6458
4245 N Fairfax Dr
Arlington VA 22203
USA

Robert Weary
The Nature Conservancy
Caribbean Conservation Finance and Policy Advisor
rweary@tnc.org
(434) 951-0595
490 Westfield Rd
Charlottesville VA 22901
USA

Shalini Cawich
World Wildlife Fund
Program Assistant / Mesoramerican Reef
shalini@wwfca.org
(501) 223-7680
8 Fullers Court, 4.5 miles Northern Highway
Belize Belize P.O Box 512
Belize

Shirley Keel
The Nature Conservancy
CERP Terrestrial Team Lead
skeel@tnc.org
(703) 841-2714
4245 N Fairfax Drive, Suite 100
Arlington VA 22203
USA

Steve Schill
The Nature Conservancy
Regional Geospatial Scientist
sschill@tnc.org
(435) 881-7838
307 South 100 East
Richmond UT 84333
USA

Wayne Ostlie
The Nature Conservancy
Sr. Ecoregional Scientist
wostlie@tnc.org
703-841-2713
4245 N. Fairfax Dr., Suite 100
Arlington VA 22203
USA

Sheldon Cohen
The Nature Conservancy
Director of Conservation Finance and Policy
scohen@tnc.org
+1.703.841.2644
4245 North Fairfax Drive
Arlington VA 22203
USA

Manrique Rojas
The Nature Conservancy
Senior Advisor
mrojas@tnc.org
703 841 4188
4245 N. Fairfax Dr. Suite 100
Arlington VA 22203
USA

Carla Gordon
National Environment and Planning Agency
Manager, Protected Areas Branch
cgordon@nepa.gov.jm
876-754-7540
10 Caledonia Avenue
Kingston Kingston 5
Jamaica

Matt Foster
Conservation International
Manager, Latin America Conservation Outcomes
m.foster@conservation.org
202-912-1475
1919 M Street, NW, Suite 600
Washington DC 20036
USA

Olga Lucía Hernández
World Wildlife Fund Colombia
Programme Officer
olhernandez@wwf.org.co
57 2 5582577 x110
Cra 35 #4A-25, Barrio San Fernando
Cali Valle del Cauca VA
Colombia

Paul Hardy
The Nature Conservancy
phardy@tnc.org
703-841-2053
4245 North Fairfax Dr
Arlington VA 22203
USA