LIVING LANDSCAPES FIELD GUIDANCE

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Conceptual Models

1. What is the tool?

Conceptual Model: A mental map that describes the logic for conservation in your landscape; a schematic representation of the overall goal, targets/objectives, threats and interventions, as well as the causal relationships among these elements in the landscape.

2. What will this tool do for your project (or what conservation challenges will using this tool help you solve)?

Direct benefits

- It helps you to articulate and understand explicitly what you want to do and set priorities for your conservation actions.
- It forces you to lay out all the potential interventions, allowing you to compare them. This can help not only to identify what a project could do, but also what cannot be done by your project alone, suggesting opportunities for collaborations.
- It makes explicit your assumptions about the causal connections that link interventions with threats and conservation targets.
- It provides a strategic context for your interventions (why you are doing, what and where).
- It is a valuable communication tool.

Indirect benefits

- It offers donors a clear, visual representation of the justification for the conservation actions detailed in project proposals.
- It provides a clear framework which can be used to construct annual workplans and to monitor the results of your conservation activities. At the same time, it helps to relate your annual activities to your long-term conservation goal.
- It facilitates explanation of conservation rationale to new conservation actors.
- It facilitates team-building within a project.
- If done in a participatory way, it can:
  - open opportunities for future collaborations with other partners.
  - help all stakeholders come to a more complete understanding of the context for conservation.
  - develop a collective vision for conservation action.
  - foster a sense of mutual ownership of the projects portrayed in the conceptual model.

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Material products

A visual picture of factors affecting conservation and interventions required to achieve conservation objectives within a landscape.

3. What will this tool NOT do for your Project?

- It cannot be seen as a final, static representation of your Project. As your understanding of the system changes, the model must be adapted to reflect your new understanding.
- It does not give you a spatial representation of your landscape or seascape.
- Though it does provide logic for your activities, it cannot replace the careful, detailed planning required to implement each activity.
- It is not conservation itself, it is a planning tool for conservation (i.e., it cannot be used as a sole reporting requirement to indicate conservation success).

Field examples

The *Yasuní Project* in Ecuador found that Conceptual Models were useful for comparing potential interventions and identifying potential opportunities for collaborations (e.g. with economic alternatives and water treatment systems).

The *Lao PDR Program* obtained a visual picture of their conservation objectives and threats by constructing a Conceptual Model.

The WCS *Congo Program* discovered that a Conceptual Model can be very useful even when built at a later stage of project development.

For scarlet macaws in Guatemala, the Conceptual Models were used to communicate and coordinate actions through *Macaws Without Borders*, integrating activities at the international level that were previously isolated.

The Landscape Species Approach

The Landscape Species Approach is a wildlife-based strategy to define ecologically meaningful conservation areas, recognizing the complexity of the biological and social landscape in which conservation occurs (see **Living Landscapes Bulletin 2**). The Landscape Species Approach depends on selecting a set of species with complementary ecological needs (a suite of Landscape Species which collectively represents the biodiversity of the landscape as a whole) (see **Living Landscapes Bulletin 3**). The goal of the approach is for conservation of the suite of Landscape Species to lead to conservation of not only those species, but of all biodiversity in the landscape.

4. What are the requisites for using this tool?

Project type and stage of development

- All projects could benefit from conceptual models. The process is especially useful for landscape-scale projects but it can also be done at a country level. In research and training activities (capacity building), it cannot replace experimental design or research planning, but it can show you how they fit in the larger picture. Ideally, it should be done at the beginning of a Project, but reviewed and adapted periodically and/or if new information comes to light during the process. Even if your Project has already started, it is never too late to do a conceptual model.

- Please note that a single conceptual model does not have to include all activities. A project can be divided into several conceptual models.

Information and data

- Basic information such as the main stakeholders and the main problems facing your landscape should be known. However, do not hesitate to build a model if you do not have a complete understanding of the landscape, because the model can (and should!) be reviewed frequently to reflect your improved understanding of the system as you start working on the Project.

Technical staff skills

- A good facilitator is critical- somebody who can manage group dynamics and is culturally sensitive.

- Species experts who are aware of the threats to your target species in your landscape.

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- It is sometimes helpful to have an outsider involved who can bring an alternative perspective to the model development.

LLP tools

- It may be helpful (but it is not essential) to do a **participatory threats assessment** before the construction of the conceptual model.

- After creating the conservation goal, it can be useful (but it is not essential) to go through the **landscape species selection** process before building the conceptual model (including objectives, threats, interventions, etc.).

5. How to use the tool:

- Study **LLP Bulletin 5** and **Technical Manual 2**. The Bulletin provides the rationale for using conceptual models and the Technical Manual describes in detail the procedure for the construction of the conceptual models. (In preparation for the workshop, you could send participants both the Bulletin and the Technical Manual.)

- For more instruction, view the **LLP Powerpoint presentation**.

- A. Johnson, S. Vannalath, C. Hallam and P. Sisavath. 2006. **'Using Conservation Landscapes to Build Conceptual Models for the Nam Kading National Protected Area Landscape'**.

- Margolius & Salafsky. 1998. **Measures of Success**. Washington DC: Island Press.

- First stages are easily done with sticky tarps and similar simple tools. Later stages could be done with **MIRADI** or similar programs.

6. Who should be involved in using the tool, and why?

- This process can be done either by the Project team alone or in a participatory way with all partners involved. However, it is always important to ensure that the models are enriched with the vision of different actors. If a sense of ownership among the stakeholders is necessary, then the building of the conceptual models must be done in a participatory way. Participants should display a willingness to engage constructively in the process.

- Participation in conceptual modeling could be defined initially by who the model is for, and what the scale of the project is (or will be). If it is a model for your work alone, then the model could be built internally by the team involved in the project. If the model is to understand the whole system and explore linkages with other stakeholders, then it should be done in a more open participatory manner.

7. How long will it take?

- Ideally, at least two days should be used to build the model. If the process includes a threats assessment and species selection, more time will be needed.

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Living Landscapes Program Manuals

WCS-International saves wildlife and wildlands by understanding and resolving critical problems that threaten key species and large, wild ecosystems around the world. Simply put, our field staff make decisions about what causes the needs of wildlife and of people to clash, and take action with their partners to avoid or mitigate these conflicts that threaten wildlife and their habitat. Helping our field staff to make the best decisions is a core objective of the Living Landscapes Program.

We believe that if conservation projects are to be truly effective, we must: (1) be explicit about what we want to conserve, (2) identify the most important threats and where they occur within the landscape, (3) strategically plan our interventions so we are confident that they will help abate the most critical threats, and (4) put in place a process for measuring the effectiveness of our conservation actions, and use this information to guide our decisions. The Living Landscapes Program is developing and testing, with our field programs, a set of decision support tools designed to help field staff select targets, map key threats, prepare conservation strategies, and develop monitoring frameworks.

We describe the application of these tools in a series of brief technical manuals which are available by email from llp@wcs.org.

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