



THE WWF COLLEGE FOR CONSERVATION LEADERSHIP



Online Module Syllabus



WWF Programme Standards

Step 1 - Define

Version – 30 January 2012



Notice

The materials in this syllabus are only part of the learning experience in this module. Learning occurs in the interaction of participant with a facilitator and with other participants.

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Introduction and Overview

As part of a Network-wide effort, WWF has developed the *WWF Standards for Conservation Project and Programme Management* (referred to as the *WWF Programme Standards* throughout this document. They are also known in the WWF Network as “the *PPMS*”).¹ These are the standards of practice for designing, implementing and monitoring conservation projects and programmes in the WWF Network.²

In an increasingly complex and changing environment, these standards are meant to help conservation projects analyse their context, describe their long-term vision and key assumptions, develop effective activities, measure their success, and then to adapt, share, and learn over time. That is, they are to help projects practice adaptive management in order to make them more **effective** and **efficient**.

More broadly, from an organizational perspective these standards are a key foundation to support ‘results-based management’ (RBM)³ within WWF. Efforts towards RBM provide a framework for WWF Network (and partner) collaboration in project design, the tracking of programme delivery and impact, and the development of a performance and learning culture. Three key foundations of RBM are defined as the WWF Programme Standards (PPMS), the GPF (Global Programme Framework) Monitoring and Reporting System, and Insight (a knowledge and information management system that will also automate much of the data collection and analysis required by the network for monitoring and reporting). The processes, systems, skills and culture in each WWF office should be developed to support sound results-based management.

These standards have all been in place since 2005 and they are updated periodically. They are rooted in a long history of project and programme planning and management in WWF, across other conservation organizations, and in other disciplines. They are not meant to be a rigid set of standards that every project must blindly follow, but rather a set of best practices that conservation practitioners can use to support their project. The Conservation Measures Partnership (CMP) ‘Open Standards’ provided an important foundation for the WWF Programme Standards.

The purpose of this module is to teach WWF staff how to apply Step 1 (Define) of the *WWF Programme Standards* to conservation projects – specifically, how to define their initial team composition and operations, project scope and vision, conservation targets, and context and stakeholders.

¹ The WWF Programme Standards materials are available through <https://sites.google.com/a/wwf.panda.org/ppms/>. The WWF Programme Standards Overview and guidance documents are also available externally at http://wwf.panda.org/what_we_do/how_we_work/programme_standards/

² Projects are the basic units of conservation work. A programme (as distinct from a portfolio of projects) is a group of jointly-managed, interdependent projects which together aim to achieve a common vision. In the interest of simplicity, this document uses the term “project” to represent both projects and programmes since these standards of practice are designed to apply equally well to both. ‘Conservation’ in WWF means all forms of programmatic work, so these standards should be applied by all projects, programmes, Global Initiatives, policy work and campaigns that are managed by Conservation/ Programmes departments.

³ Results-Based Management (RBM) is a management strategy or approach by which an organization ensures that its processes, products and services contribute to the achievement of clearly stated results. Results-based management provides a coherent framework for strategic planning and management by improving learning and accountability.

Learning Objectives

The learning objectives for this module are tied directly to the expected outputs for each standard of practice included in Step 1 (Define) of the *WWF Programme Standards*. After completion of this module participants should be able to demonstrate their ability to apply the *WWF Programme Standards* to a real or fictitious project by producing the following outputs for that project:

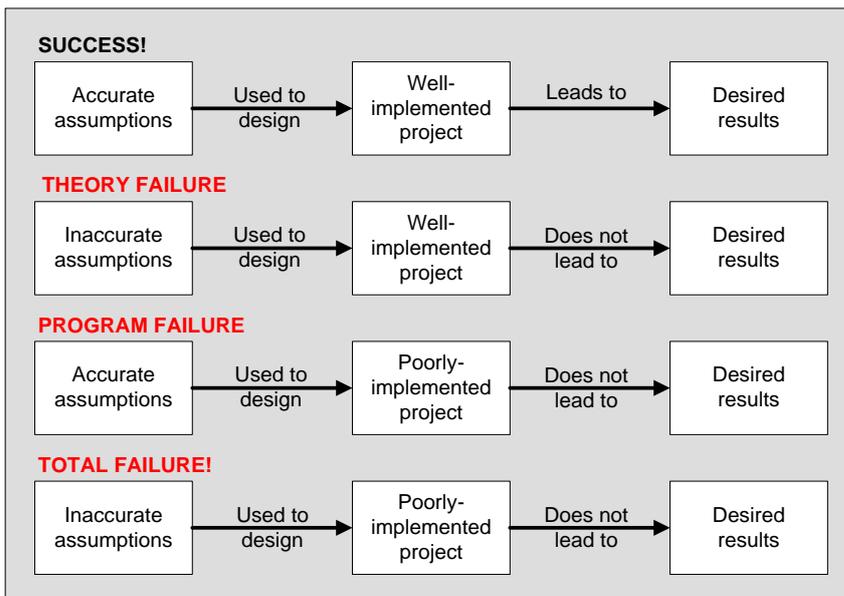
- Selection of initial project team and designation of project leader
- An outline of how the project team will function.
- A brief description of the project's scope, including general ideas on strategic focus.
- If appropriate, a map of the project area
- A vision statement for the project
- Selection of a limited number of conservation targets for the project, including a brief explanation of why they were chosen
- Links identified to other programme targets and/or to generalized nature targets. (And for thematically oriented scopes, an explanation of the link to nature via footprint or threat reduction, or people related strategies).
- A brief analysis of the key direct threats, indirect threats, and opportunities and an analysis of the key stakeholders associated with these factors
- A conceptual model that shows the cause-and-effect relationships among the targets, direct threats, indirect threats and opportunities in diagrammatic form
- A ranking of the critical threats affecting each target and the overall project
- A head start on your project's strategic plan, as all of the above will be key inputs for your plan

What Is Different about This Programme Management Process?

As discussed in the Overview section (Week 0), the *WWF Programme Standards* apply an adaptive management approach that helps project teams determine if their projects are on track, why they are on track or not, and what adjustments they need to make.

To be successful, a project must be based on both a sound project assumptions (theory of change) and good implementation. Often, however, project teams are not explicit about the assumptions behind the strategies they choose. Consequently, when their projects do not produce desired results, the conclusion is often that the project team did not do a good job implementing the project strategies. As shown in Figure 1, however, projects may fail due to theory failure, even when the project team does an excellent job implementing the project activities. An adaptive management approach helps teams determine whether their project failures were due to a poor theory of change, a poor project implementation, or a combination of the two.

Figure 1. Necessary Ingredients for Project Success



In contrast to some planning processes, the adaptive management process proposed by the WWF Programme Standards is designed with project teams and managers as the primary audience – not an external donor or similar agency. The adaptive management process advocated by WWF, as well as some other leading conservation groups (e.g., The Nature Conservancy and the Conservation Measures Partnership), is designed to help these teams and managers plan, revisit, and continually improve their work. This should also help teams to respond well to any externally-imposed planning procedures, but that is not the primary aim. Adaptive management requires that project teams very explicitly identify the assumptions under which they are operating and then systematically test each assumption to see if it holds in their project context. This explicit and systematic testing of assumptions is the key facet of that helps project teams uncover the *why* behind their project successes and setbacks.

Structure

The focus of this module is on learning how to apply Step 1 (Define) of the *WWF Programme Standards* to conservation projects. The structure of the module follows the *WWF Programme Standards*. For each weekly episode, you will read the materials provided and complete the assignment. Ideally, you will apply each of the practical assignments to your own work or project. If you do not have a project, then you should find a project in your office that you can use with occasional advice from the Project Leader on any technical aspects you may be unsure of. However it is worth emphasising here that the exercises in this module will focus on the process of applying the WWF Programme Standards tools rather than the technical accuracy of the outputs.

If you wish, you can compile your assignments into a strategic plan template, available here: <https://sites.google.com/a/wwf.panda.org/ppms-online-modules/key-documents>. This template is an optional tool for compiling and organizing the work from your assignments – you are not required to use it. You may also use Miradi Adaptive Management Software (download instructions here: <https://sites.google.com/a/wwf.panda.org/ppms/step0> for doing much of the planning steps outlined in Step 1 (Define) and Step 2 (Design). If you have any questions, please refer them directly to your facilitator.

Outline of the Module

The outline of the weekly sessions of the module is as follows:

Overview of *WWF Programme Standards* (Week 0)

- Overview of the *WWF Programme Standards*
- First Task – Learning plan and describing your project

Step 1.1: Define Initial Team Composition and Operations (Week 1)

- Step 1.1: Selecting your team
- Assignment 1 – Define your initial team composition and operations

Step 1.2: Define Project Scope and Vision (Week 1)

- Step 1.2a: Geographic or thematic scope
- Step 1.2b: Vision statement
- Assignment 2 – Define project scope and vision

Step 1.3: Define Conservation targets (Week 3)

- Step 1.3: Conservation targets
- Assignment 3 - Select conservation targets

Step 1.4a: Analyze Project Context and Stakeholders (Week 4)*

- Step 1.4a: Project context and stakeholders
- Assignment 4 – Develop a conceptual model, conduct a stakeholder analysis

Step 1.4b: Threat Ranking (Week 5)*

- Step 1.4b: Threat ranking
- Assignment 5 – Threat ranking

** The material covered and the assignments for these weeks are more complex and time-consuming than the material and assignments for other weeks. You should review these sections ahead of time and make sure you plan accordingly so that you can hand in your assignments on time.*

Facilitation and Assessment

Assignments for a certain week should ideally be handed in by the Friday of that same week. The facilitator will review your assignments as soon as possible, preferably within three working days. If you will be late with your assignment, please communicate this with your facilitator and make arrangements that will work for both of you. Also, please directly communicate problems or absences to the facilitator (with copy to cspu-training@wwfint.org). The facilitators will also be responsible for informing participants of any change to their availability. We encourage everybody to exchange email addresses and skype addresses (if possible) with your facilitator so that easy and quick communication is ensured.

Because each assignment builds off previous assignments, please wait for feedback on each assignment before turning in the assignment for the following week. If you are unable to do this or prefer a different arrangement, please discuss this directly with your facilitator.

Remember that your facilitator is available to answer questions and to help you think through situations you are facing. If you run into a challenge applying the *WWF Programme Standards* to your situation, you should consult your facilitator for advice on how to proceed.

We wish you a lot of success for completing your course!

Where to Direct Questions

Please contact your facilitator for:

- Technical and content questions related to applying the WWF Programme Standards
- Communicating absences and arranging alternative dates for assignments.

Please contact Mr Gilles Guignard at WWF-Intl - CSPU (cspu-training@wwfint.org) for:

- Questions regarding accessing and using the PPMS Online Modules Google site and its functions
- Any administrative matters related to registration, payment, etc.

Overview of WWF Programme Standards (Week 0)

Structure for Week 0. In this week you will:

- Read **Introduction to Adaptive Management**, *Overview of the WWF Programme Standards*, and *Overarching Practices*
- Complete First Task

Introduction to Adaptive Management

Conservation takes place in complex systems influenced by biological, political, social, economic, and cultural factors. Project managers and practitioners operating within these complex systems must make important conservation decisions. Yet these managers and practitioners often have limited information and operate in the face of uncertainty. Adaptive management provides a method for making more informed decisions about strategies, testing the effectiveness of strategies used, and learning and adapting to improve strategies.

Adaptive management is one of those “buzz words” – a lot of people are talking about it, but few people clearly define what adaptive management is or why it is important. Some people believe adaptive management is synonymous with good management and that it merely involves trying something and then if it does not work, using common sense to adapt and try something else. Adaptive management is indeed good management, but not all good management is adaptive management. Likewise, adaptive management requires common sense, but it is not a license to just try whatever you want. Instead, adaptive management requires an explicitly experimental – or “scientific” – approach to managing conservation projects. Adaptive management then can be defined as: the integration of design, management, and monitoring to systematically test assumptions in order to adapt and learn.

This definition can be expanded by looking at its 3 components:

Testing assumptions is about systematically trying different actions to achieve a desired outcome. It is not, however, a random trial-and-error process. Instead, it involves thinking about the situation at your project site, identifying what is occurring at your site and what actions might be used to reduce threats or take advantage of opportunities, and then outlining the theory of change (core assumptions) about how you believe your actions will help you achieve your conservation goals and objectives. You then implement these actions and monitor the actual results to see how they compare to the ones predicted by your assumptions. The key here is to develop an understanding of not only which actions work and which do not, but also why they work or do not work.

Adaptation is about taking action to improve your project based on the results of your monitoring. If your project actions did not achieve the expected results, it is because your assumptions were wrong, your actions were poorly executed, the conditions or context around the project have changed, your monitoring was faulty, or some combination of these. Adaptation involves changing your assumptions and your interventions to respond to the new information obtained through monitoring efforts.

Learning is about systematically documenting your team’s planning and implementation processes and the results you have achieved. This documentation will help your team avoid making the same mistakes in the future. Furthermore, it will enable those in the broader conservation community to benefit from your experiences. Other practitioners are eager to learn from your successes and failures so that they can design and manage better projects and avoid some of the perils you may have encountered.

Overview of the *WWF Programme Standards*⁴

There is widespread agreement within WWF that all projects and programmes should go through a robust definition, design, and implementation. There is also agreement that an emphasis on monitoring and learning should be fully integrated into projects and programmes from the beginning and throughout their lives. These are all at the heart of adaptive management. WWF's goal in developing the *WWF Standards for Conservation Project and Programme Management* is to bring together common concepts, approaches, and terminology in conservation project design, management, and monitoring in order to help WWF as an institution improve the way it does conservation.

The WWF Programme Standards provide a consolidated WWF presentation of the practices, tasks and guidance that is used or should be used across the Network. They also provide a set of harmonized general principles and best practices that come from within WWF and from outside. WWF practices conservation at many levels – Global Initiatives, Species Action Plans, Ecoregion Action Programmes, projects at various scales, and policy and footprint work to name a few. WWF also practices conservation through many different ways, using a host of strategies and activities. There are over 1500 projects listed in the project database and many key programme areas already developed or under development. It is in WWF's best interest to define and use a generic set of standards of best practice that can guide all programmes and projects and to which all projects and programmes can be held accountable, so that WWF can continue to improve its conservation results.

WWF as a network constantly strives to improve the quality of its work. To this end, three questions drive its quest for excellence:

- **Is WWF making a difference?** – To what extent are WWF actions across the globe directly or indirectly leading to the conservation of biodiversity and to realizing its Mission?
- **Is WWF doing the right things?** – How do WWF staff know that they have chosen the most effective and efficient strategies to achieve their conservation goals?
- **Is WWF doing things right?** – Are we using our human and financial resources efficiently in order to implement our actions in the most effective fashion?

But how can WWF staff attempt to answer these questions across the diverse landscape of such a dynamic organization? How can they systematically tell if they are on the right track? How can they gather the necessary information to be able to assess the extent to which they are achieving their conservation goals? Clearly, answering these questions is no simple task, but is nonetheless essential if WWF and its staff are to adapt and change over time, learn about the conditions under which their actions are most effective, and convince their supporters and society that conservation is a worthy investment.

A starting point to make sure WWF is well-positioned to consistently and continuously answer these questions is to define what is meant by “quality conservation work” in WWF. To do this, WWF felt it necessary to articulate a framework that clearly defines what the organization believes to be the required elements of effective conservation across all scales and for all types of work. WWF also felt the framework should provide consistency in the definition and use of concepts and terms that are often vague, confusing, or used differently by different people.

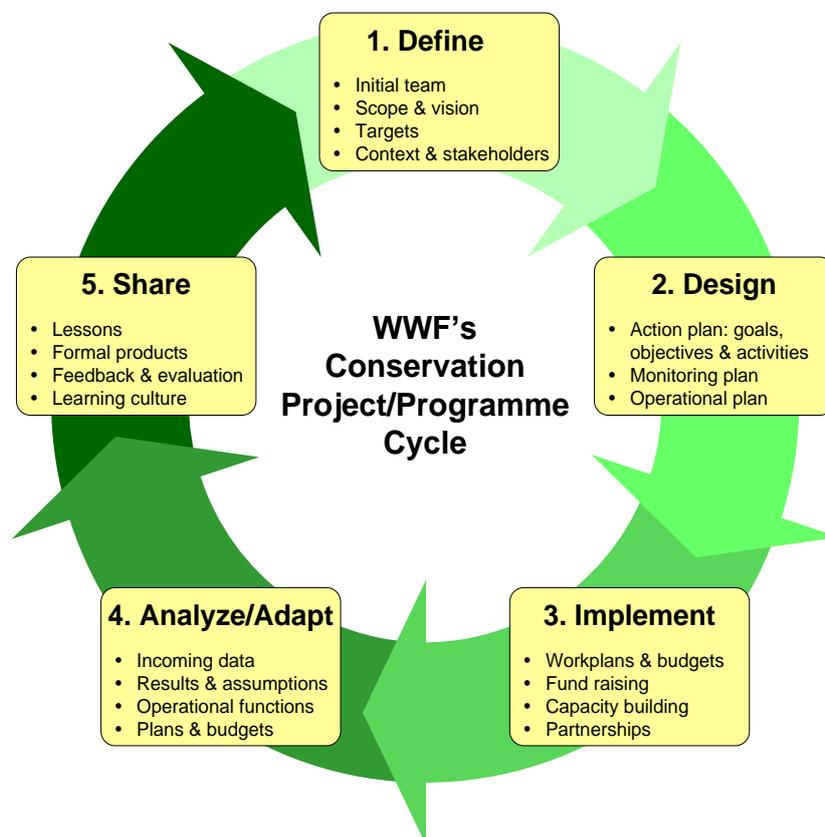
As shown in Figure 2, the WWF project/programme cycle involves 5 main steps:

⁴ The text for the Overview of the WWF Programme Standards borrows heavily from the Introduction document for the Resources for Implementing the WWF Standards, available at: <https://sites.google.com/a/wwf.panda.org/ppms/>.

1. **Define** who will be involved on the project team in the early stages, your project's geographic or thematic scope, your vision of what you hope to achieve, and the context in which you intend to work including threats and opportunities and who the key stakeholders are.
2. **Design** your action plan (including goals, objectives, and activities), monitoring plan, and operational plan.
3. **Implement** your workplans while ensuring sufficient funding, capacity, and partners.
4. **Analyze** your data, results and assumptions, and operational and financial performance **& Adapt** your workplans as necessary based on your findings.
5. **Share** lessons through formal and informal communication products, feedback, and evaluations, and foster a learning culture with key external and internal audiences.

The material presented in this module addresses the first step in the cycle – the Define step.

Figure 2. WWF's Conservation Project/Programme Cycle



By applying the set of *WWF Programme Standards*, managers and practitioners of all levels will have greater confidence in the content of the work, their ability to adaptively manage, and their ability to share with others what works and what does not work. The use of these standards should help increase the confidence of WWF's investors and constituents that WWF is working to understand better the way conservation works and to more effectively define, design, implement, analyze, and adapt its conservation interventions and share its findings with the conservation community.

As described in the *WWF Programme Standards*, these standards are meant to help conservation projects describe their long-term vision and key assumptions, develop effective activities, measure

their success, and then to adapt, share, and learn over time – to practice adaptive management. These standards are rooted in a long history of project and programme planning and management within WWF, across other conservation organizations and in other disciplines. They are not meant to be a rigid set of standards that every project must blindly follow, but rather a set of best practices that conservation practitioners can use to make their work more effective and efficient.

At this point, you should download and read the *WWF Programme Standards Overview*. In particular, you may wish to focus on Step 1 which is covered in this module. The *WWF Programme Standards Overview* is available online at: <https://sites.google.com/a/wwf.panda.org/ppms/> and also at http://wwf.panda.org/what_we_do/how_we_work/programme_standards/

Overarching Practices

Complementing the conservation project cycle outlined in Figure 2, there are three main overarching practices that apply to most or all of the steps in these standards – Engage Stakeholders, Embrace Learning, and Consider Climate Change. Rather than highlighting them for each step, they are described here. Where they need to be addressed during a specific step, they are also included as specific standards in that step.

0.1 Engage Stakeholders

In conducting your project, it is important at every step to make sure you identify, and as appropriate, engage key stakeholders, and understand the social context. You will need to identify stakeholders, determine which roles they might play in both planning and implementation, and develop a strategy to ensure their participation. Implementing this strategy effectively will help ensure that these stakeholders respond positively to your project's activities, help you implement your project over the short-term, and ultimately help ensure long-term sustainability. You should pay particular attention to indigenous, marginalized and overly powerful peoples. Specifically, WWF has agreed social policies on poverty, indigenous peoples, human rights and gender. You should be knowledgeable of these policies and ensure that your project adheres to them where relevant (see Box 1).

0.2 Embrace Learning

At both project and organizational levels, it is important to develop an environment that is curious, questioning, and encourages risk-taking. It is also critical to document and archive your decisions at each step of the way. Not only does this give you the opportunity to analyze why things worked or did not work, but it also serves as a basis for others to understand the logic of your choices and provides the basic ingredients for sound knowledge management. By embracing learning and sharing information, you will open the door to bring in lessons from the outside to be incorporated where appropriate. You should also register your project on the Insight project database, and periodically share outputs and knowledge on the database.

Box 1. People and Conservation: WWF Social Principles and Policies

Many of the places where WWF works are also home to rural communities and indigenous peoples whose livelihoods and cultures are closely dependent on the natural environment. The success of our work can strongly depend on the degree to which conservation contributes not only to the preservation of biodiversity and ecosystems but also to equitable and sustainable development options for people.

WWF has developed five principles and a set of social policies to guide the inclusion of social development considerations in our programmes, projects and policies. These principles and policies are intended to strengthen our conservation results and ensure their sustainability into the future.

WWF Social Principles:

1. Respect people's rights in accordance with customary, national and international human rights laws;
2. Promote equity within the scope of our projects, programmes and policies at multiple levels, and promote these principles in policy fora and advocacy work at national and global levels;
3. Aim to enhance the natural assets of local communities, particularly the poor, and ensure that our conservation work does not harm vulnerable people;
4. Address weak governance, taking into account cultural and political contexts, through improvements in tenure and income security and decision-making procedures, devolution of environmental management and empowerment to ensure that the rights (and access) of local people to natural resources, which are the basis of their livelihoods, are exercised and enforced;
5. Address the inequitable distribution of environmental costs and benefits and unsustainable production and consumption patterns at multiple levels whenever possible by influencing local policies and practice, global markets, the private sector, national, regional and global policies and processes.

WWF Social Policies:

WWF currently has four social policies that are intended to guide the integration of social dimensions in our conservation work: **Indigenous Peoples, Poverty and Conservation, Conservation Initiative on Human Rights Framework**, and **Gender**. All of these policies can be downloaded at: <https://sites.google.com/a/wwf.panda.org/social-development/home/policies/policies>

0.3 Consider Climate Change

Climate changes are unavoidable for the foreseeable future. The global average temperature is on track to increase more than 2.0 degrees C in the decades to come, with associated -- but difficult to predict -- changes in seasonality, storm events, and the timing and volume of precipitation. Ecological and human impacts may be profound. WWF encourages its programs to be "climate smart" by embracing these four elements:

1. Understanding and responding to existing and future climate change impacts and risks, alongside other conventional threats;
2. Developing and implementing considered (ideally low/no-regret) actions which do not erode options for responding to future climate change and which avoid contributing to greenhouse gas emissions; and
3. Taking an integrated approach to adaptation, contributing to nature conservation and fair, equitable and sustainable development
4. 'Learning by doing' through regular monitoring and revision of actions recognising that adaptation is an ongoing process.

The earlier that such an approach can be integrated into planning the better, yet many WWF projects and programmes are already implementing strategic plans that were developed with only a cursory

examination of climate change. Click here [for long and short versions of climate adaptation guidelines](#) to help you include climate adaptation in your strategic plan.

Climate adaptation can be a complex and confusing subject. For a new project, you may decide to begin project planning without a comprehensive climate vulnerability assessment and to circle back and consider climate implications after a draft plan is complete.

Some References

WWF. 2012. *WWF Standards for Conservation Project and Programme Management*. Available at <https://sites.google.com/a/wwf.panda.org/ppms/> and also at http://wwf.panda.org/what_we_do/how_we_work/programme_standards/

First Task -- Learning Plan and Describing Your Project

Part A. Learning Plan

The training modules for implementing the *WWF Programme Standards* are designed to facilitate learning and positively impact your work. To get the most out of these modules, you should be thinking about how you will apply new knowledge and skills in your job. We also encourage you to do the steps in this module with your colleagues so that your entire team participates in the planning process, making it more likely that the products from this module will be used by your team.

At the end of each module you will be asked to reflect on the learning plan. Did you already have the chance to apply your skills and take action? Did you achieve any results yet? What are you going to do in the coming months to take additional action?

- Develop your learning plan by addressing the following four questions:
 1. Why do you need this module (for current or future position)?
 2. What are you going to learn (what knowledge and skills do you need in order to take action)?
 3. When and where (in what situations) are you going to apply what you have learned (take action)?
 4. What results do you expect from the action?
- For participants working in teams, please answer the following three additional questions:
 5. Who is the leader for the team enrolled in this online module?
 6. How will your team share responsibility for completing the assignments?
 7. What steps will you take to ensure that all team members are able to participate equally and achieve maximum benefit from their participation?

Part B. Describing Your Project/Project Area

In this section we ask you to select the project that you would like to use as an example throughout this module. You are not expected to go into detail, since as you go through this module you are learning to go through all the steps of developing a project from the start.

Please just write a short (1-2 pages maximum) description of your project – including where it is located and why you are focusing on that area, who is involved, what you are trying to conserve or achieve (if known), and what some of the key threats or challenges are. Also identify what phase the project is (e.g. just an idea, planning, implementation, nearly completed) and who manages it. Please also address what participating in these modules will hope to accomplish in terms of your project (e.g. design a new plan, refine or improve an existing plan, just learn about project management, etc.).

Choosing a suitable project will be very important to the success of these modules. A very complicated or unusual project can be difficult for the online medium, so it is best to keep the example simple; it should not be too large (definitely not a whole region), and a clear geographic definition is helpful. Site-based projects work well as training examples, but more thematic projects like species trade, climate change, policy projects etc. can also be chosen.

It is often helpful to articulate the project in terms of a conservation target (e.g. forests, chimpanzees, etc), rather than in terms of a threat (illegal logging, human-elephant conflict) or a strategy (creating protected areas, promoting alternative livelihoods)

Hand in the First Task by posting it on the PPMS Online Modules Google site.

Step 1.1 Define Initial Team Composition and Operations (Week 1)

Structure for Week 1. In this week you will:

- Read the Introduction to Team Composition and Operations, How to Define Team Composition and Operations and Read the Introduction to Project Scope and Vision, How to Define Project Scope and Vision and Examples of Project Scope and Vision.
- Hand in Assignment 1 & 2

Introduction to Team Composition and Operations

Conservation does not happen on its own. Individuals and groups of individuals are the engines behind any conservation project or programme. The most important resources for any conservation project are the people who will be involved in designing and implementing it. Their commitment and skills will influence how effective the project can be. As such, it is important to choose your project team members carefully. This is a step that some organizations overlook or do not consider carefully. For example, organizations often hire project personnel as a project develops, rather than building and drawing upon the existing capacity within the organization. In some cases, tight budgets or poor management may mean that one person is hired and that person or a small group of people is charged with the daunting task of coordinating the project, as well as doing much of the technical work for the project.

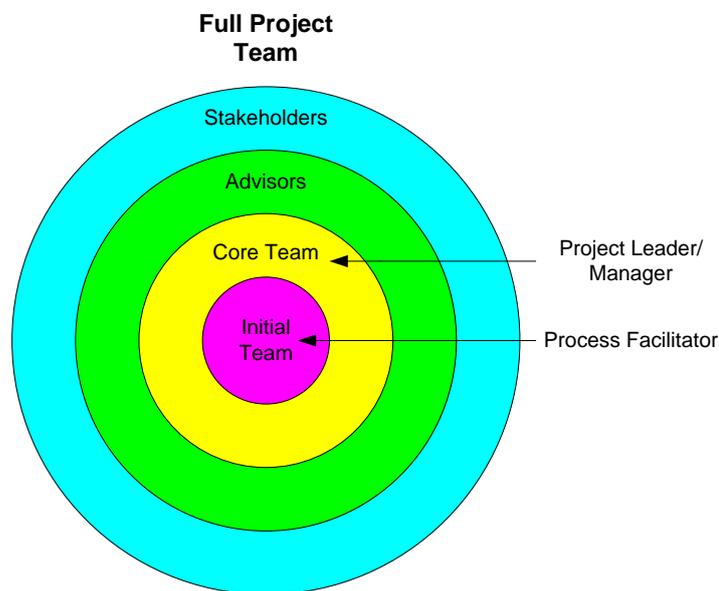
Despite these realities, it is important to give careful consideration to your project team composition and, where possible, push your organization to recognize the importance of this step. Project team members should include representatives from the implementing organization, but, ideally, they should not necessarily be confined solely to the organization. There may be individuals from other organizations, interest groups, or communities who should be part of the team – although, it is important to recognize that, in reality, issues like institutional competition might play a large role in what your team ultimately looks like. Over the life of the project, there are many different potential roles on your team you may need to fill:

- **Initial Project Team** – The specific people who initially conceive of and initiate the project. They may or may not go on to form the core project team.
- **Designated Project Leader/Manager** – Although leadership responsibilities are often shared between team members, normally one individual is appointed as the overall project leader. Specific roles that the leader often plays include managing the performance of other team members, relations with key stakeholders, and the process of going through the project cycle.
- **Core Project Team** – A small group of people (typically 3-8 people) who are ultimately responsible for designing and managing a project.
- **Full Project Team** – The complete group of people involved in designing, implementing, monitoring, and learning from a project. This group can include managers, stakeholders, researchers, and other key implementers. You need a wide range of skills on your project team.
- **Project Advisors** – People who are not on the project team, but to whom the team members can turn for honest feedback and counsel and who can champion your cause.
- **Project Stakeholders** – Individuals, groups, or institutions who have a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities

and have something to gain or lose if conditions change or stay the same. Just because someone is a stakeholder does not mean that you will want them on your project team. But if they are a key stakeholder, you also cannot ignore them in your analyses of the situation. Cultivation of key stakeholders can be a long process itself that may have to begin well before your project gets underway.

- **Process Facilitator** – A process facilitator is a person who can help the project team through the planning process. A process facilitator is typically part of the initial and/or the core team. A good facilitator understands the key elements of the process, has good facilitation skills, and can keep your team from getting too bogged down in any one part of the process. This person does not need to be a “professional” facilitator, but should be someone who is intimately familiar with applying the planning process to “real-world” conservation problems.

Figure 3. Project Team Composition



As shown in Figure 3, you can think of these different roles as a series of concentric circles, with those in the centre typically being the most involved and taking on the most responsibility. There is no strict recipe, however, and each team will likely vary somewhat. Some roles, such as the leader and core project team members, are important for all projects. Projects and programmes in WWF, however, vary enormously in scale and complexity, and you will need to take this into account in deciding whom to involve in the team. In some cases, for example, you may have some stakeholders who are part of the core or initial team. WWF staff will possess some but possibly not all of the required knowledge, skills and experience.

You may need to involve “outside” expertise such as consultants or academic institutions. In addition it may be important to involve key partners with whom you may expect to collaborate in the future. This can help you to build ownership or buy-in for the project. It is worth bearing in mind that such partners (especially external partners) may have different priority issues in mind and you may need to take extra time to define and design the project.

In addition to determining who is on your project team, it is also important to determine how the members of the team will work together. Specific team operations that need to be agreed on include:

- what the team is setting out to do

- what team members will do
- how team members will work together and make decisions
- a rough timeline for project activities
- who else needs to be informed or involved
- what resources are required to move through the project cycle.

It is important that those people who will be implementing the project also be involved in designing and planning it – this is a key part of adaptive management. Nevertheless, the composition of your project team may be somewhat dynamic – as you develop your project and learn that you need certain skills, your project team may grow. It is fine that these people may not have been part of the original design team, but you should make sure they fully understand and accept the process your team has undertaken. It can be useful to document how the team will operate in the form of a project charter. In addition, it can be helpful to draft a concept paper that outlines some initial thinking on the project or concept form. At this early stage you can only do a “rough sketch” of the design; you will not have all the information required to fully define the project, but you can at least clarify what you do and do not know.

How to Define Team Composition and Operations

You need to define your initial project team right at the start of the project. This team should then relatively quickly identify the core and/or full project teams. The composition of the project team may change as you move through the management cycle, although it is usually helpful to maintain continuity of some key members. The following steps are described sequentially, but in practice they are interdependent and are often developed in parallel or iteratively.

1. Appoint a Leader and the Initial Team and Sketch Out the Project

Bring together the people who are charged with initiating the project. Have the team quickly (in an hour or two at the most) sketch out the scope of the project, some probable conservation targets, key threats, potential strategies, and most importantly, likely key stakeholders. You should also keep in mind your timeline and the resources required and likely to be available. At a later date, you will flesh out these items in more detail – either in your strategic plan or a Project Concept Form (available at <https://sites.google.com/a/wwf.panda.org/ppms/templates>).

The main purpose of this step is to use this rough sketch to give you an idea of what skills your project team needs and which individuals and organizations might need to be on the project team.

Box 2. Miradi Adaptive Management Software

Miradi, which means "project" in the Sub-Saharan African language of Swahili, is a software program under development that will help conservation project teams implement an adaptive management process such as that supported by the *WWF Programme Standards*. Based on the Conservation Measures Partnership's [Open Standards for the Practice of Conservation](#) Miradi guides conservation practitioners through a series of step-by-step interview wizards. As practitioners go through these steps, Miradi helps them to define their project scope, and design conceptual models and spatial maps of their project site. The software also helps teams to prioritize threats, develop objectives and actions, and select monitoring indicators to assess the effectiveness of their strategies. Miradi has been developed by the [Conservation Measures Partnership](#) (CMP), a consortium of leading nature conservation organizations, and [Benetech](#), a nonprofit technology development organization.

Miradi is free to all WWF staff and partners. Download instructions can be found [here](#). It is recommended that you try to use it for the assignments in the Step 1 Define and Step 2 Design modules.

2. Select Project Team Members

Based on this initial analysis, start out by thinking about all the possible skills and experience you might require in your core team. These might include:

- Knowledge of biodiversity and threats to the biodiversity
- Knowledge of and experience with the political, social and economic context
- Knowledge of and experience with stakeholders and their concerns
- Skills and experience in developing strategies
- Skills and experience in implementing strategies
- Skills and experience in project monitoring and evaluation
- Skills and experience in communications and fundraising
- Skills and experience in budgeting and risk assessment

Once you have identified the skills, think about possible people who can provide these. Identifying skills before assigning names is good practice and ensures that the core team covers all necessary skills but does not include people whose involvement is not strictly necessary. Again, reality may limit the extent to which you will be able to cover all of these skills within your project team. The list above represents an ideal – you and your project team may have to make some decisions about what skills can be feasibly represented on your team and what skill gaps you might have to accept or try to fill at a later date.

You may wish to develop a table as shown in the example below. Or if you want to be extremely formal about your analysis, you could even rank different candidates on different criteria. You should try to make sure that all the key skills you need are covered. If after reviewing your table of team members there are any gaps, you could note them and work to fill them if possible and as your team moves forward.

Table 1. Sample Analysis of Potential Project Team Members

Skills/Knowledge	Person	Affiliation	Roles	Comment *
Core Team				
Strategic planning, fundraising	Celeste	WWF	Team leader, fundraising	Good leader, respected by major stakeholders
Marine biologist	Paul	WWF	Assembles information on targets & works with science advisors	Good team player; may be leaving in 6 months
Communications	Alejandra	WWF	Promoting project, formal publications	Strong contacts with local and national press

Local politics	Martha	Green Island (local NGO)	Building local consensus	
Monitoring and evaluation; data analysis	??			Check with local university for potential candidates
Fishing policy	Raj	National Fisheries Agency	Helping govt institutionalize project components	Useful link to senior agency officials
Advisors				
Process Coach	Miguel	WWF	Process leader	
Economics	Mei-Lee	World Bank	Economic analysis	Good links to donor community
* Warning: Be VERY careful about writing down negative comments about a person.				

3. Define Roles and Team Operations

Once you have identified some of key people involved in the project, draw up rough “terms of reference” for each person that spell out what they are expected to contribute to the team and what they can expect to get in return. For example, will it be a paid position? How many hours or what percentage of their time are they expected to dedicate to the project? Will they get credit in any scientific publications? If multiple organizations are involved in the project, it may also be useful to develop a formal memorandum of understanding among the partners. Eventually, you will need to develop more formal terms of reference. You can consult WWF Human Resource staff for more guidance on developing terms of reference.

Going forward, it is also helpful to decide how your team will operate. Team operations will include everything from how you will communicate to how often you will meet to how you will make decisions. If your project is large, you should consider formalising governance structures and perhaps having a project organigramme. This can clarify any uncertainties regarding how people and organisations relate to each other, who can make decisions, who has signing/approval authority, etc.

At this stage you can also specify how you will move through each step in the project management cycle. For projects to have a lasting impact, it is usually necessary to produce a robust strategic plan. You may already have (or think you have) a good idea of what needs to be done. On this basis you may decide it makes sense to move quickly through the early project cycle steps and into implementation. This approach is sometimes called “fast project management.” It does not mean abandoning processes but it does mean working through the project cycle quickly and efficiently. On the other hand you may decide (or need) to work through each step of the project cycle systematically and in detail. Alternatively you may use a combination of these approaches to achieve a balance between process and action – for example you move forward quickly on some tasks that are very clear while developing a robust design and plan for the wider project. Specific guidance on what is expected from WWF projects in terms of applying *WWF Programme Standards* is presented in Annex 1 of the *WWF Programme Standards*.

When communicating the project, you have to beware of making definitive commitments about what you plan to achieve, what you plan to do, and how much it will cost. One of the dimensions of the project leader's role is to manage the expectations of stakeholders. You should aim to be clear while at the same time leaving room for adaptation on the basis of new information. Most importantly, you should be open about your ability to make firm commitments at this point in time.

4. Get Institutional Buy-In or Approval Before Moving Forward

Hopefully, you are doing all the steps in the *WWF Programme Standards* with your project team. This is critical to ensuring your team's buy-in to the process and the plan that you will design. It is also important to get buy-in at higher levels as well. Your team may be convinced it has the best project ever to address a particular threat, but if no one else in your office or higher level offices in WWF agrees, the project is unlikely to go anywhere. It is particularly important to get this buy-in early on to help guarantee that the time and resources you spend on planning your project will not go to waste. It can be very helpful to identify one or more advisors or senior managers to whom the core team can turn for honest feedback and counsel and who can champion your cause appropriately. Some projects find it useful to formalise senior management commitment through a project concept.

Some References

The Management Centre, London, UK. *Project Management Training Manual*.

WWF. 2011. *Project Concept Form*. Available at <https://sites.google.com/a/wwf.panda.org/ppms/templates>

WWF. 2006. *Step 1.1 Define Project/Programme Team Composition and Operations*. Resources for Implementing the WWF Project & Programme Standards. Available at www.panda.org/standards and <https://sites.google.com/a/wwf.panda.org/ppms/step1>

Assignment 1 – Define Your Initial Team Composition and Operations

Define your initial team composition and operations

This and future assignments may be hypothetical for your team, depending upon where you are with current or future projects. Where needed, you should approach these exercises as if you and your project team were undertaking a planning process.

- For your project, identify your team leader and who the initial project team will include. Then identify your core project team and their role based on the knowledge and skills that are necessary for the core team to contain. Use the format in Table 1 to record this information. Note if there are any key skill sets missing and how you will try to fill those gaps.
- If this is a real project, then you should also define how your team will operate (e.g., explain how much time and effort you will put into the early project cycle steps related to defining and planning your project, how you will communicate, how often you will meet, etc.). If, however, you are doing a "practice" project, then you can skip this step.
- If you wish, you may use Miradi Adaptive Management software (see Box) for this and subsequent assignments. If you choose to use Miradi, you will need to export a zipped (mpz) version of your file from Miradi and send it to your facilitator. Use of Miradi is optional – you may find it to be a useful tool, but you are not required to use it for any of your assignments. If you have any questions or concerns, please discuss them directly with your facilitator.

Hand in your assignment as Assignment 1 by posting your document on the PPMS Online Modules Google site. Then continue this week's assignments by moving onto Scope and Vision.

Step 1.2 Define Project Scope and Vision (Week 1)

Introduction to Project Scope and Vision

A project's **scope** defines broadly what a project will affect - whether that project is an ecoregional programme, an effort to conserve a priority area, an initiative to combat a particular threat, or actions to protect a species. For example, projects that are focused on conserving a range of species or habitats in a specific place will have a geographic scope or project area. Projects whose boundary is defined by specific species, threats, opportunities or enabling conditions have a thematic scope. Where the scope is thematic, you should also consider whether there is any specific geographic boundary that limits the area in which we are considering the thematic issue (Box 3).

A clear scope sets the rough boundaries for what the project will attempt to do. For example, in a project with a geographic scope that encompasses a specific protected area and its legally designated buffer zone, the project scope makes it clear that the team is focusing only on that area and the biodiversity that is encompassed within that area. Wildlife or natural areas that fall outside of that protected area and buffer zone – no matter how important – would not be part of that project's scope. Likewise, a project with a thematic scope to decrease the threat of elephant poaching for tusks makes it clear that the project team will focus only on elephants (not rhinos or other horned or threatened species) and that it is concerned about the poaching of elephant for tusks. Thus, it should not focus on other threats like revenge killing for crop damage. In reality, there may be some fuzzy boundaries, but a project scope should help a team focus its efforts.

Note that a geographic scope should include only those areas that contain the species and habitats (i.e. conservation targets) that we are concerned about conserving. The scope will not consider the threats to these. If you think about a project to conserve tigers in central India, it should be clear that the scope of the project will be central India and not China, despite the fact that much of the demand for the tiger parts will be coming from China. The project will of course operate wherever necessary to address key threats, but the geographic scope is concerned only with the areas where the conservation targets are found.

In addition to defining broadly what you will focus on and/or where you will focus, the scope should also provide some general ideas on the project's strategic focus. Though these ideas will be refined as

Box 3. Do You Have a Geographic or Thematic Scope?

Geographic scopes typically encompass efforts to conserve or manage ecoregions, priority areas, or protected areas (i.e., specific geographic areas) for a broad range of species and habitats.

Thematic scopes include efforts to address specific threats, enabling conditions, or species, generally over a broad geographic region.

Some teams can become confused about whether they have a geographic or a thematic scope. A team working in a specific watershed might reason that they have a thematic scope because they want to address the threat of urban development in the watershed. In reality, the scope is geographic. The watershed is the scope, and the team has chosen to work on one threat (and presumably others) affecting that watershed.

As another example, consider a project team that is working to protect wetlands across Europe. Their sole focus is on wetlands, and they cover a geographically broad area. In this case, the scope is thematic – wetlands in Europe. There is a particular geographic boundary to the scope – Europe – but the team is not interested in all biodiversity throughout Europe, but rather only wetlands.

you progress through your Steps 1 and 2 of the cycle, defining your main focus helps to clarify what you will do and, conversely, what you are less likely to do, perhaps because it is not a typical approach of your organization. Breaking up your scope into finer units also may make it easier to determine goals, focus strategy development, and begin selection of indicators of success (see Figure 2).

For example, a project with a geographic scope may break it down into finer units such as particular focal landscapes within the overall geographic boundary. Alternatively if the scope of your programme is more thematic in nature such as reducing CO₂ emissions in the UK, your strategic focus may specify certain sectors (e.g. transport, homes, food, energy production etc.). Or a programme focused on the education sector in Mongolia will need to define which areas of the education sector to focus on for the greatest impact.

Table 2 presents some examples aimed to illustrate the different possible types of scope.

Finally, you should justify your choice of scope, explaining its relevance to wider programmes, and to internal or external factors. These external factors could include climate change, whose effects are unavoidable for the foreseeable future (see Box 4).

Box 4. Consider Climate Change

If your project has a **geographic scope**, you should think about the likelihood of shifting ecosystem and species ranges. If your strategic focus is a species, have you considered latitudinal, elevational or other shifts due to climate change?

Or if your project has a **thematic scope** and is aimed for example at footprint reduction, will the focal threat be exacerbated by climate change?

The basic tool used to gauge existing and potential effects of climate change is a **vulnerability assessment**. Some ideas for conducting a very basic, initial vulnerability assessment are included in the PPMS climate adaptation guidelines at www.panda.org/standards. If there are existing climate vulnerability assessments relevant to your scope, by all means use them, but note that it is easy to waste effort on a general climate vulnerability analysis performed by a consultant who does not have specific ecological knowledge of your area and concerns. The very basic climate vulnerability assessment described in the PPMS adaptation guidelines would focus further follow on vulnerability work on very specific climate, ecological, and social questions, allowing subsequent much more focused studies and use of climate resources (i.e. once targets, threats, and drivers have been identified).

Table 2. Examples of Different Scopes

Type of Scope	Example	Links to biodiversity
Geographic scope	Virunga National Park -- the different ecosystems and the biodiversity contained within the boundaries of the park.	The link to biodiversity is direct.
Geographic scope with strategic focus	Yangtze River Basin -- within this, the programme identifies priority landscapes of high conservation value (different actions will take place at different scales).	The link to biodiversity is direct.
Thematic scope with geographic focus	Tiger NI -- wild tigers, focusing on the 13 landscapes that the world's top tiger experts have identified as offering the best chance of growing the world's tiger populations across the species range.	The link to biodiversity is direct.
	Illegal logging (EU) -- Timber produced and/ or imported illegally into the EU, with a focus on imports that affect priority ecosystems as defined by WWF's Global Programme Framework.	The project should identify ecosystems (and perhaps key species) that are being affected. These may be divided into priority ecosystems (as defined by WWF's Global Programme Framework) within the EU and outside the EU.
	Palm Oil (Malaysia) -- High conservation value habitats/species in Malaysia that are liable to be affected by Palm Oil production. (note that this would have a clear relationship to some wider WWF programmes – Heart of Borneo Initiative and the Market Transformation Initiative).	The project should identify specific habitats and species that are affected by palm oil production in Malaysia. Note that some practitioners would argue that those specific habitats and species represent the scope; however the project team has already decided to focus on palm oil since they 'know' this is a major threat, so it is important to include this in the description of the scope.
Thematic and geographic scope with strategic focus	UK Climate Programme: -- CO2 emissions in the UK, focusing on emissions due to transport, homes, food, and energy production.	The footprint issue is clear (CO2 emissions). The link to biodiversity, perhaps better expressed as 'natural systems' in this case, is direct but very broad (the global climate regime).
Thematic scope with geographic focus (more complex)	<p>Canada Fisheries -- Seafood consumed in Canada and/ or produced within Canadian Oceans, with a focus on consumption that affects key fish species and ecosystems as defined by WWF's Global Programme Framework. The scope has four distinct parts:</p> <ul style="list-style-type: none"> • Canadian seafood production (wild caught fish) • Canadian seafood production (aquaculture) • Global seafood production that is consumed in Canada (wild caught fish). • Global seafood production that is consumed in Canada (aquaculture). 	<p>Mirroring the scope, the project should identify the relationships between the scope and biodiversity targets such as:</p> <ol style="list-style-type: none"> a) Key fish species in Canadian Oceans b) Ecosystems and non fish species in Canadian Oceans c) Key fish species in oceans globally d) Ecosystems and non fish species globally <p>Related to this, the project should identify its relationship to major WWF programmes such as the Smart Fishing Initiative, Coastal East Africa Initiative, Coral Triangle Initiative etc.</p>

		Again, some practitioners would argue that the above four areas represent the scope. However the team has defined its boundary as 'Seafood consumed in Canada and/ or produced within Canadian Oceans', and this is a more practical scope from which to plan.
Thematic and geographic scope (Drivers)	Finance sector in China -- To focus on a Driver such as this, the project will need a clear justification, for example in relation to WWF's Global Programme Framework. By identifying relationships to targets in Step 1.3, and through an analysis of Context and Stakeholders in Step 1.4, the project would need to identify priority institutions within the Finance sector.	<p>A project that is focused on a key Driver needs to define how that Driver is related to key footprint and biodiversity. The team knows that the Finance sector has some major effects, but what are the specific relationships through to footprint and biodiversity that will ultimately help the team to prioritise its actions and monitor the project's impact?</p> <p>For example, how do lending and investment policies in Chinese banks affect the sustainability credentials of goods and services that are produced in China or imported into China. Hence, how are habitats in WWF priority places affected? (e.g. forests in South East Asia or Africa). And how do lending and investment policies affect CO2 emissions due to energy production both in China and overseas?</p> <p>In practice, the China Shift sustainable finance strategy has been developed and implemented in conjunction with other strategies, with most of the focus being on Drivers. As a whole, the programme has to define its relationship to footprint and biodiversity.</p>

A project's **vision** is the desired state or ultimate condition that the project is working to achieve. It is typically expressed in a clear and brief summary known as a **vision statement**. A vision statement might include descriptions of the desired state of biodiversity and/or maps of the area and often includes links between people and nature. Your project's vision should guide your project team and also communicate what you are trying to accomplish to outside stakeholders.

Defining a vision enables the core project team members to discuss and agree on what the broad purpose of their project will be. Although this should be a relatively easy task in many conservation projects, it becomes particularly important in multi-stakeholder efforts in which the different partners may have radically different ideas of what they would like to accomplish. If some of the stakeholders are interested in conservation and others are primarily interested in using natural resources to promote rapid economic development, then at the very least, the team needs to negotiate how it will work together. Without clear boundaries, there may be considerable confusion among staff and stakeholders as to where the project ends, and there is a risk of being drawn into an ever-widening circle of interventions. A well-crafted vision statement grabs and directs the project team's attention, sets their agenda, and energizes their work. This statement becomes the common starting point for discussion about more specific activities and outcomes.

It is very important to understand that the primary purpose of a vision is to build consensus among project team members and stakeholders, and in some cases, for external communications. Vision statements are not meant to be overly technical, and you should not get bogged down in technical discussions at this point.

A good vision statement should meet the following criteria:

- **Relatively General** – Broadly defined to encompass a broad range of potential project activities
- **Visionary** – Inspirational in outlining the desired change in the state of the targets toward which the project is working
- **Brief** – Simple and succinct so that all project participants can remember it

Your project's vision statement should fit within the context of WWF's overall mission, which has the three main axes of 1) biodiversity conservation, 2) sustainable natural resource management, and 3) reduction of pollution and environmentally damaging or wasteful consumption. It should also fit within the scope of WWF's Global Programme Framework.

How to Define Project Scope and Vision

Defining your project's scope involves broadly agreeing as a team what your project will affect:

1. Discuss with your team the basic scope of your project

Projects that are focused on a specific place have a *geographic scope* (project area). Typically this is the place where the biodiversity of interest to the project is located. This may be a national park or an existing biogeographic unit, such as a Global 200 Ecoregion or priority landscape. Projects that focus on addressing specific threats or opportunities or conserving particular species have a *thematic scope*. Projects whose boundary is defined by specific species, threats, opportunities or enabling conditions have a thematic scope. Where the scope is thematic, you should also consider whether there is any specific geographic focus.

Often a project area is defined by natural landscape boundaries (a watershed or an estuary), political boundaries (a province, state or country) or the boundaries of one or more protected areas (a marine

reserve or a national park and adjacent forest reserve). In addition to defining broadly what you will focus on and/or where, the scope should also provide some generalized ideas on the project's strategic focus. A project with a geographic scope may break it down into finer units such as particular focal landscapes within the overall geographic boundary. Though these ideas will be refined as you progress through your Steps 1 and 2 of the cycle, defining your main focus helps to clarify what you will do and, conversely, what you are less likely to do. If you are working in a watershed, for example, you may be interested in conserving a forested area that stretches from your watershed into a neighbouring basin. Thus, you may define your project scope as the watershed and the portion of the neighbouring watershed encompassing the forest.

Projects with a thematic scope may not focus on a specific or narrowly-defined geographic area. Instead, they may focus on a population of wide-ranging animals, such as migratory birds, mammals or sea turtles (e.g. WWF's Asian Rhino and Elephant Action Strategy Programme (AREAS)). Or they may focus on certain ecological systems, such as forests, or issues such as illegal trade of rare and endangered species or poverty (e.g. TRAFFIC and WWF's Poverty Reduction Through Improved Natural Resource Management Project). Again it can be helpful to provide some general ideas on your strategic focus e.g a programme whose scope is to reduce CO2 emissions in the UK may choose to break the scope down into key sectors (e.g. transport, homes, food, energy production etc.)

Although defining your project scope is a very important step, you should not overcomplicate it. If there is any doubt about the basic scope of your project, then discuss the options with the members of your project team and see if you have at least a general consensus. If you cannot arrive at some basic consensus, then you need to seriously reconsider whether you should split into multiple projects.

Finally you need to be able to justify your choice of scope, explaining its relevance to wider programmes, and to internal or external factors. These might include WWF Network Global Programme Framework priorities, Millennium Development Goals, NBSAPS, donor and partner priorities, etc. Although the scope should in principle be developed objectively (i.e., based on sound science), it may well be necessary to consider subjective (i.e. politically-driven) criteria. If the project is part of a larger programme (and most should be), it is crucial that the project scope be consistent with the priorities identified at the programme level. If you have a project charter, this relevance should be clearly specified here.

2. Develop a map of your project area

Most place-based conservation projects will typically focus on biodiversity in a defined project area and have a geographic scope. In these cases, you should map out the area and include any relevant features (e.g., different ecosystems, ecosystems, corridors, villages, etc.). You can use something as sophisticated as mapping software or as simple as a rough hand-drawn sketch. In many cases, you will have to take the initial biogeographic unit boundaries that you are handed (which were often developed by people working at a global scale), review the ecological and practical considerations for that unit, and then refine the boundaries to meet your specific needs and current local conditions. Ecological considerations include the ecological basis for the original delineation and the larger ecological context. For example, does the ecoregion represent a unique biome? Or because of the similarity among a number of units, does it make more sense to work on them together? The capacity of your organization and your partners is also important when considering how large or small a unit to work on. For example, do the proposed boundaries make sense to the regional stakeholders and fit their image of what the "site" should look like?

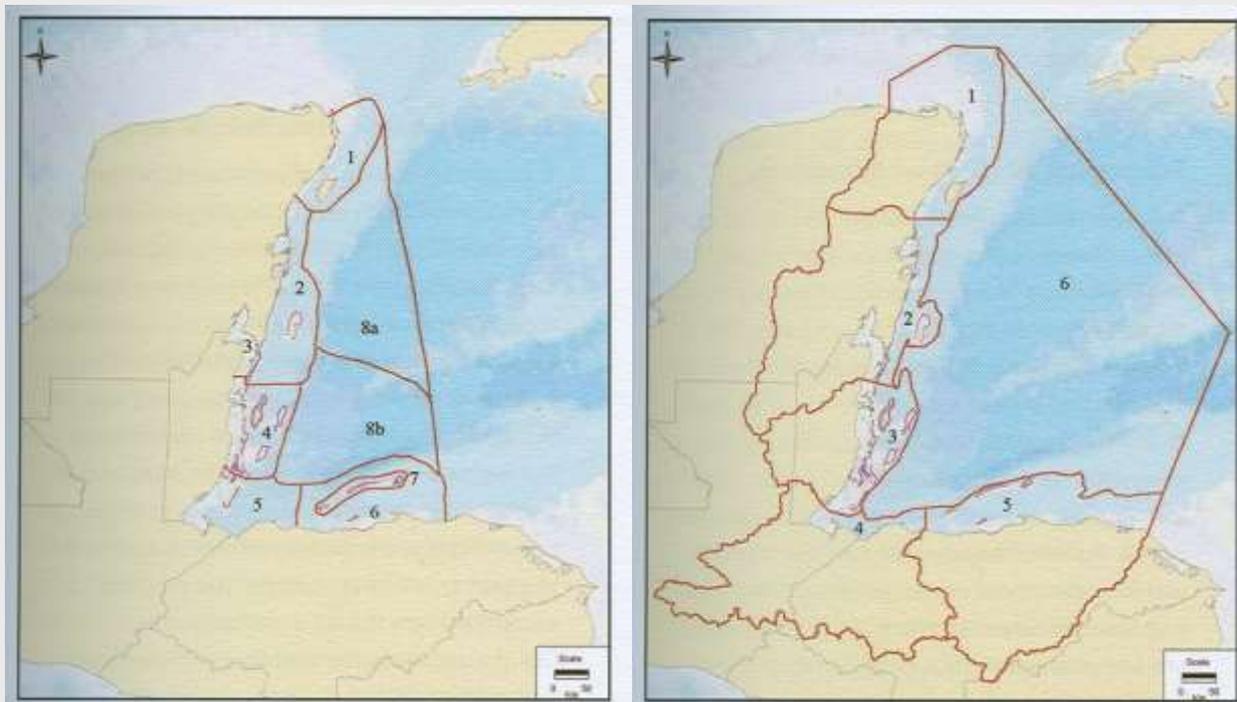
It is not always obvious where the team should draw the project boundaries, but the choice that the project team makes will have profound consequences for the ongoing structure and functioning of the project. Indeed, you define your project by the project area you select, rather than vice versa. Note

that in many cases, project actions may take place outside of the defined project area – for example, political action designed to affect a protected area in a remote province would take place in a national capital.

Projects with a thematic scope may also find it useful to develop a project map. For example, a project focusing on conserving wide-ranging species (e.g., Sumatran tiger or Siberian crane) may be able to identify specific locations on a map where they have critical breeding or feeding sites. Likewise, a thematic project on wetlands may be able to define the highest priority wetlands in a country or region.

Box 5. Defining Your Project Area

The Mesoamerican Caribbean Reef marine ecoregion initiative initially defined its project area to focus on the marine ecosystems shown in the map on the left. Over time, however, they realized that if they really wanted to conserve the marine ecosystems, they had to worry about the adjacent terrestrial areas as shown on the right. This “Reef to Ridge” project area had broad implications for their overall project. There is no one right choice, but each choice would mean a very different focus for the project.



3. Develop a draft vision statement for your project.

As described above, a vision statement is a general summary of the desired state or ultimate condition of the project area or scope that a project is working to achieve. If all the members of your project team agree that the project is focused on biodiversity conservation, for example, drafting a vision should be relatively easy. Depending on the size and makeup of your project team, the team as a whole or a subcommittee should work together to craft a draft statement. If your project area were the Mesoamerican Caribbean Reef, then your initial draft might be:

Diverse ecosystems of the Mesoamerican Reef conserved

If you are part of a multi-sectorial team, then you may find it challenging to draft a shared vision statement. For example, if there are members of your project team (including partners) who believe that the ultimate vision of the project should not be biodiversity conservation, but instead other aims

such as “improving human welfare” or “conserving open space,” then crafting a vision statement becomes a much more difficult exercise. This is especially so if realizing different visions ultimately requires implementing different (and potentially conflicting) strategies. As an extreme example, consider a project in which some team members want to conserve a forest for its biodiversity values and others want to “sustainably” log it for its economic values. The project team here will either have to figure out how to reconcile these two visions or split their work into two separate projects. In this case, you may have to go through a much more formal process of developing a vision statement that includes:

- Soliciting unique submissions from the entire group on paper;
- Crafting a draft proposal based on the submissions, attempting to include elements of the major ideas in the submissions;
- Vetting the draft with the larger group;
- Redrafting the vision statement; and
- Final approval by the group.

Box 6. Developing the Project Area for an EAP

For an ecoregional action programme (EAP), determining scope entails deciding in which ecoregion to work, which is not as straightforward as it sounds. The 50+ ecoregional action programmes are generally based on one or more Global 200 ecoregions. Terrestrial Global 200 ecoregions often contain a number of constituent ecoregions, and these smaller units may sometimes be more realistic units to work on. Freshwater and marine Global 200 ecoregions are generally divided for the purposes of determining the scope of an EAP. A number of WWF efforts have even been directed at conserving conglomerations of multiple Global 200 Ecoregions (e.g., Congo Basin, Forests of the Lower Mekong).

Within an ecoregion, priority areas are usually identified which represent key landscapes that contain (or should contain) important endemic, keystone, or characteristic biodiversity in the ecoregion. These priority landscapes are intended to become projects in and of themselves, and their geographic scope needs to be delineated. When these units have been produced in an expert workshop environment, the boundaries may only be notional and will require a fair amount of work before their appropriate extent becomes clear. Eventually, the boundaries of the conservation landscape will be based on the needs of the biodiversity that led to the identification of the priority area in the first place. Because it may take a while to identify these needs and the specific parcels of land that will contribute to these needs, it is probably best to propose tentative boundaries and continue to think broadly across the area.

Delineation of the boundaries of freshwater systems begins with an accurate map of water catchments, overlaid with freshwater surface features (e.g., rivers, lakes, springs, wetlands). Overlays of terrestrial features may also be of assistance in this process. Natural freshwater barriers such as waterfalls and steep salinity gradients may also help delineation.

No matter what boundary is finally identified for the conservation project, it is critical to document the refinement process and to develop a map of the new boundaries. This map should be distributed to appropriate repositories (regional programs, conservation science program) and perhaps even made available on the program website.

4. Review the criteria for a good vision statement and determine whether your vision statement meets the criteria

Take your draft statement and go through your criteria, one by one. Working off of the example above, your project team should ask itself:

- Is it **relatively general**? Yes, it is general enough to encompass a broad range of current and potential activities.
- Is it **brief**? Yes, it is certainly brief.
- Is it **visionary**? No, it is not really inspirational. This criterion is subjective - what is visionary to one group may not seem at all inspirational to another. Nevertheless, it seems that the vision statement needs more work to meet this criterion.

5. Modify your draft vision statement as needed to make sure it complies with the criteria for a good vision statement

For this example, you would need to work on making it more visionary. Your second draft might read:

Diverse ecosystems of the Mesoamerican Reef conserved, thus providing sustainable livelihoods for local people, while preserving one of the world's great natural treasures.

This revised version is more inspirational and captures the reasons why your team is working to conserve the diverse ecosystems of this marine site. The extent to which biological and social values dominate or share space in the vision statement should be a reflection of the goals of the program, and will have implications for what activities are prioritized.

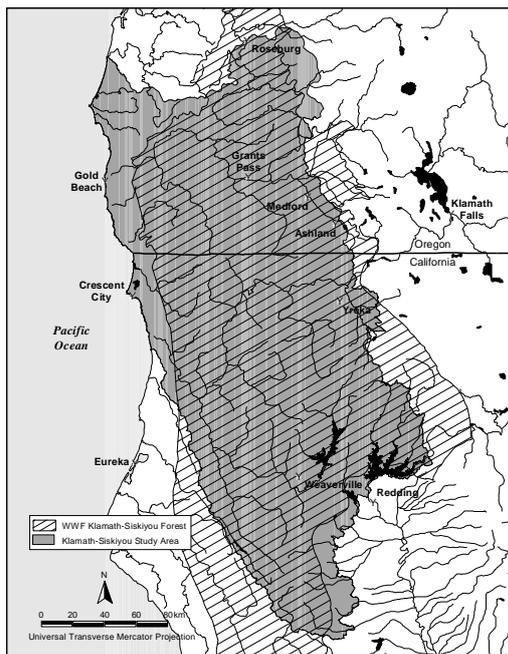
6. Revisit your vision statement as your project evolves

Finally, it is important to remember that vision statements, just like biodiversity visions, may evolve as new information becomes available, stakeholders change, or aspirations change. Both biodiversity visions and vision statements should be viewed as living documents that can change iteratively as planning and implementation proceed.

Examples of Project Scope and Vision

Figure 4 illustrates the final Klamath-Siskiyou ecoregional boundary (“study area”) and the original WWF Global 200 boundary. Most ecoregions make subtle or not so subtle modifications to the boundaries of their units, usually based on the input of experts that they have consulted. Generally, additional adjacent ecosystems are pulled into the planning unit. When watersheds are more closely examined, this also often results in an extension of boundaries.

Figure 4. The Klamath-Siskiyou Ecoregional Boundary



Examples of inspirational vision statements, developed in workshop settings such as described above, include the following:

Yangtze Basin

This one is certainly inspirational, but it could also be considered more poetic than grounded in reality – it is important to consider the audience to whom you will present your vision statement.

“A region where a living river links the Tibetan Plateau and the Pacific; where people thrive in harmony with nature, pandas play in the forests, children swim with dolphins and fish in the clear water, pheasants dance among the rhododendrons, and the cranes sing at sunrise. A region where natural cycles sustain a rich and ancient culture.”

Bering Sea

Although this one is a bit long, the essence of the vision statement is in the first one or two sentences and it is certainly inspirational:

“Our vision of the Bering Sea is to ensure that species assemblages and abundances, community structure and ecological phenomena are maintained or restored within their natural ranges of variation. Within this long-term vision, the cultural diversity of indigenous peoples is a vital part of Bering Sea biodiversity. People locally and globally recognize the unique value of the Bering Sea and committed to conserving it. This also requires working together to minimize or eliminate the impacts of alien species and ensure there are no further human caused global or local extinctions.”

Javan Rhino Project

The following example is adapted from a species-focused WWF project:

“The long-term survival of Javan Rhinos in and around Rhino National Park ensured for future generations.”

Xe Kong Basin, Lao PDR

Finally, this example is adapted from a WWF natural resource management project (as opposed to a biodiversity conservation project) in Asia:

“Livelihoods and natural capital of people in the Xe Kong Basin improved through effective management of upland forests and floodplains.”

Some References

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<http://assets.panda.org/downloads/guidebookpart2.pdf> ;
<http://assets.panda.org/downloads/guidebookpart3.pdf>

Assignment 2 – Define Project Scope and Vision

- For your project, please define the geographic or thematic project scope, and provide some generalized ideas on the project's strategic focus. Remember, this is an important step, but you should not make it unnecessarily complicated.
- Develop a map of your project area (if appropriate). If you do not have the resources to develop a GIS map, then simply outline your project area on a commercial map or draw a sketch of the area and digitally scan this map.
- Develop a vision statement for your project, ensuring it complies with the criteria for a good vision.
- Write a couple of paragraphs explaining the project scope and vision statement. Explain their relevance to wider programmes, and any important internal or external factors (e.g. to WWF's mission and the Global Programme Framework).
- Hand in your assignment as Assignment 2 by posting your document on the PPMS Online Modules Google site.

Step 1.3 Define Conservation Targets (Week 2)

Structure for Week 2. In this week you will:

- Read Introduction to Conservation targets, How To Develop and Use Conservation targets and Examples of Conservation targets.
- Hand in Assignment 3

Introduction to Conservation targets

Identifying targets is typically the next step in the project cycle. Targets define more precisely what the project *ultimately* wants to affect in a positive manner, and usually they are related to biodiversity (but see below for advice regarding human welfare targets and projects with thematic scopes).

The biodiversity related to any conservation project is a complex combination of genes, species, and ecological systems. Conservation practitioners thus often find it useful to select a handful of conservation targets that can represent this overall biodiversity so that they can assess whether conservation efforts are effective over the long term. Choosing targets is a valuable step for all projects, irrespective of scale and type. Defining conservation targets sets the groundwork for subsequent steps, such as a practical and focused threats analysis, strategy development, and long-term monitoring. In addition, as will be discussed in the module for Step 2 (Design) of the *WWF Programme Standards*, your targets will help you set goals for your project, as each target should have a goal associated with it (as well as multiple objectives and strategies that feed into it).

Projects with a geographic scope generally select a limited number of specific targets, which can be focal species and/or habitats (ecological systems). (See Box 7 for a discussion of how WWF uses the word “target” in the WWF Programme Standards and how it has used it in the past). Targets across these two categories should represent and encompass the full suite of biodiversity in the project area:

- **Key Ecosystems (Habitats)** – Key ecosystems are the ecological systems that characterize the terrestrial, aquatic, and marine biodiversity of the project site. Examples include native grasslands, highland paramo, riparian forest, and coral reef. A small site may have only a few ecosystem types, in which case they can all be included as targets. A large complex project area might have many different ecosystem types, in which case a subset will have to be selected as targets to represent the whole.
- **Focal Species** – These include species endemic to the ecoregion, area-sensitive species (including umbrella species), commercially exploited species, flagship species, keystone species, or imperilled species.⁵ Thus, mountain gorillas, humphead wrasse, tigers, snow leopards, Mekong catfish, minke whales, or Himalayan poppies, however unrelated taxonomically, all fit under the heading of focal species whose population structure and trajectories may be selected to measure your success (or lack thereof). Species selected as focal targets are typically those that are not represented by the key ecosystems because they require multiple ecosystems or have special conservation requirements.

⁵ Note: An “indicator species” should not be a conservation target *per se*. Indicator species may be used to monitor the health of other ecosystems or species that are conservation targets.

Box 7. Previous Use of the Word “Target”

In the past the term “target” has had multiple meanings in various WWF planning documents and processes (and in the planning processes of other organisations) and this has led to some confusion.

Use of “target” in TDAs and TDPs

In the mid-late 1990s, WWF established its Target-Driven Activities (TDAs) and Target-Driven Programmes (TDPs). In this context a global conservation target was defined as “a statement of a medium to long term desired conservation outcome or a decision of global significance... [They] represent actual achievements.” An example of such a global conservation target might be: 100 million ha of certified forests by 2005, distributed in a balanced manner among regions, forest types and land tenure regimes.

Use of “target” in Ecoregion Action Programmes

The 2004 Ecoregion Action Program Guide for Practitioners defined a “target” as the amount, type, and configuration of habitats, species, or processes (ecological and socioeconomic) that need to be maintained in order to conserve the focal biodiversity elements (goals). Under this definition, an example of a target might be: 5,000km² of floodplain lakes and river system connected by 2025.

As you will see in Step 2 (Design) of the WWF Programme Standards, these earlier definitions of target are akin to what most organizations would call a “goal” or “objective.”

Use of “target” in the *WWF Standards for Conservation Project and Programme Management*

In order to avoid confusion and to be consistent with the way other organizations use the term “target,” the *WWF Programme Standards* define a conservation target as

“a specific element that a project has decided to focus on and whose condition the project ultimately seeks to impact. Biodiversity targets can be a species or a habitat/ ecological system. Some projects may be linked to human welfare as well as biodiversity targets. In this case, you the project should aim to explicitly define the links between biodiversity and human welfare targets; usually this is done through identifying ecosystem services.”

Under this definition, examples of conservation targets include primary rainforest, floodplain lakes, jaguars, and biological corridors. Note that, in contrast to the earlier definitions of target, a conservation target is neutral – it is just the species or ecosystems. It does not specify what its desired future state should be. When you develop goals (in Step 2, Design of the *WWF Programme Standards*), you will revisit these conservation targets and specify their desired future state.

The target selection process is based on the coarse filter/fine filter strategy. Coarse filter targets are those key ecosystems that, when conserved, also conserve the majority of species within the project area. The fine filter is composed of species and communities that are not well captured by coarse filter targets, and require individual attention. These targets may be rare, face unique threats, or require unique strategies.

In theory – and hopefully in practice – conservation of the conservation targets will ensure the conservation of all native biodiversity within the project area. Selection of conservation targets typically requires input from experts and analysis of spatial data. No project is compelled to include examples of both key ecosystems and focal species (e.g. in some areas, information on focal species is quite difficult to obtain).

Some projects may be linked to **human welfare** as well as biodiversity targets. In this case, the links between biodiversity and human welfare targets should be explicitly defined; usually this is done through identifying ecosystem services. Subsequently (in Step 2.1), associated goals may be set that are related to both types of targets - even if WWF is not the primary actor for all the actions required to meet the goals).

Not all projects will need to define detailed targets. For example, if a project is part of a larger programme, targets and goals may have already been defined at a broader or higher scale, in which case the projects could refer to these rather than creating new targets. Alternatively projects with a **thematic threat or footprint scope** may have one general target labelled "biodiversity" or "sea turtles" (for a turtle bycatch-focused programme). In these cases, the extent to which the targets are tracked would be at the discretion of the project manager.

It is important that all projects are able to explain the link between their scope and biodiversity (via threat/ footprint reduction) as WWF's Mission states the intent to find the balance and harmony between nature and people.

For each target, the current condition or 'health' and desired future condition of each target should then be defined.

Box 8. The 'Target Trap'

Many projects fall into the trap of including as conservation targets things which, although relevant to the project, should not be targets. A useful working definition for a conservation target is

*"a priority for the project to conserve **for its own sake**."*

The 'priority' part of the definition should be clear from the explanation in this chapter, but what is meant by 'for its own sake'?

This basically means that if the target in question was the only thing that existed in the project area, we would still have a project to conserve that target. To test this, imagine a project aiming to conserve a particular wetland which is threatened by the deforestation of low-conservation value forests in the up-catchment area. The wetland is indeed a target, but what about the forest? In this case it would not be a target because we only care about the forest because its status is a threat to the wetlands. If there were no wetland, we would not have a separate project to conserve this forest.

This distinction might seem academic at this point, but once you see the subsequent Define and Design steps, you will realise that by including something as a conservation target, the project is committing itself to take whichever steps are necessary to conserve that thing, for its own sake.

How to Develop and Use Conservation Targets

As outlined in the *WWF Programme Standards*, every conservation project should identify a representative suite of targets that they intend to follow over the long term during Step 1.3 of the initial planning work for their project. The project should then initially and periodically measure the status of these targets so that, after several years of work, it will be clear whether or not the work has been effective. Targets define more precisely what the project *ultimately* wants to affect in a positive manner, and usually they are related to biodiversity. The guidance below is most relevant to projects

with a geographic scope. Note however the additional tips in Box 10 – especially if your project has a thematic scope or if you plan to set human welfare targets.

1. List potential targets

There is no prescribed way to develop a list of biodiversity targets – the critical thing is to develop a list of biological entities (ecosystems, species) that are representative of the area as a whole. How many targets to identify depends on the size of your project area, its ecological complexity, and whether you are engaged in spatial planning and priority setting or strategy and monitoring plan development. When trying to conserve the “full expression of biodiversity of an ecoregion or priority landscape,” there is the tendency to include too many targets to realistically be measured. Since most conservation programs lack the resources to measure so many indicators, it is important to keep the overall number of targets to a manageable level.

For a typical site-based project, it is almost always possible to select a succinct list of four to eight targets that best capture both the biodiversity of the project site, as well as important threats and key conditions for success. For a project focused on an entire ecoregion, we use the following working assumption or hypothesis: in any ecoregion, you can select eight to twelve conservation targets whose successful conservation will reflect overall success in ecoregion conservation. Usually, these targets, be they umbrella or keystone species, representative ecosystem types, or a fundamental ecological process, are vital to your efforts because they also have a disproportionately greater umbrella effect in determining conservation success; conserving or restoring these targets will allow you to conserve many other targets not listed in the chart.

2. Review your initial list of targets and “lump” or “split” targets as necessary

As a general rule, you will want to lump several targets into one if they:

- Co-occur on the landscape,
- Share common ecological processes,
- Share similar critical threats, and therefore
- Require similar conservation strategies.

On the other hand, if an aggregate target contains species or ecosystems that do not meet the above criteria, you may want to think about splitting it. Target lumping and splitting may be refined later in the planning process as you rank your threats and/or develop strategies. See **Error! Reference source not found.**Box 11 for some examples of when to lump and split and TNC (2006) for a useful decision tree for the lumping and splitting of targets.

3. Select a limited number (8-10) of targets

Of the conservation targets identified through the above steps, select a limited number (8-10) that have the following characteristics:

- *Represent the biodiversity of the project area.* The focal targets should represent or capture the array of ecological systems, communities, and species at the project area, and the multiple spatial scales at which they occur. A target that complements other focal targets in this respect is more desirable.
- *Are highly threatened.* All else being equal, focusing on highly threatened targets will help ensure that critical threats are identified and addressed through conservation actions

- *Are viable or at least feasibly restorable.* Viability (or integrity) indicates the ability of a conservation target to persist for many generations. If a target is on the threshold of collapse, or conserving a proposed target requires extraordinary human intervention, it may not represent the best use of limited conservation resources.

Selecting conservation targets is almost always a group effort. One person is rarely knowledgeable enough to develop a robust list of representative targets on their own. A group of people with broad ecological knowledge of the region should discuss and reach agreement on some limited combination of conservation targets that are representative of the region as a whole. It is often useful to have a facilitator for this process.

4. Determine the current condition of the targets and the desired future condition

This next step refers to a tool called a Target Viability Assessment. This is an advanced tool and relies on a fair amount of high quality scientific data, and for this reason will not be addressed in detail in the online modules. Some explanation is below in Box 9, and a more detailed explanation can be found in the Targets guidance at <https://sites.google.com/a/wwf.panda.org/ppms/step1> .

Box 9. Target Viability Assessment

Where you have identified specific biodiversity targets you should next determine the current condition or 'health' and desired future condition of each target. This part of the process relates directly to the setting and monitoring of your Goals (step 2.1 of the Design module)

The first step of the target viability assessment is to specify key ecological attributes (KEAs) for each target. KEAs are aspects of the target's biology that, if missing or altered, would lead to the loss of that target over time. For example, the KEA for salmon might be the population size returning to a river to spawn. It can be useful to consider three possible categories for KEAs .

- **Size** is a measure of the *area* or *abundance* of the target's occurrence.
- **Condition** is a measure of the biological composition, structure and biotic interactions that characterize the occurrence.
- **Landscape context** is an assessment of the target's environment including *ecological processes and regimes* that maintain the target occurrence such as flooding and fire regimes, and *connectivity* such as species targets having access to habitats and resources or the ability to respond to environmental change through dispersal or migration.

For each of your KEAs, you should then determine an indicator (something that you can measure, or an index) that can be used to assess the attribute over time. Based on these indicators, you can then determine the current and desired future condition of each KEA, perhaps using a rating scale such as:

- **Very Good** – Ecologically desirable status; requires little intervention for maintenance.
- **Good** – Indicator within acceptable range of variation; some intervention required for maintenance.
- **Fair** – Outside acceptable range of variation; requires human intervention.
- **Poor** – Restoration increasingly difficult; may result in extirpation of target.

Examples of Conservation targets

Two examples of targets are shown below. Figure 5 is adapted from a real world WWF island Marine Reserve site. First, the team identified the scope of their project as encompassing the entire island Marine Reserve. They then thought about both ecosystems and species that encompassed the full expression of biodiversity at their site. They included key species in their targets, because conservation of their site's ecosystems was not sufficient to ensure the survival of these species.

Figure 5. Scope and select targets for marine reserve site

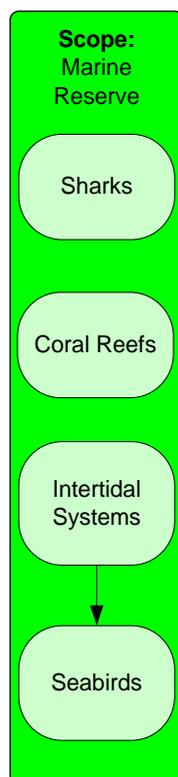


Figure 6. Scope and select targets for tropical forest site

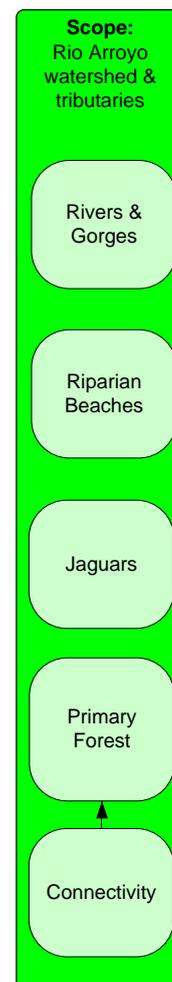


Figure 6 is another example adapted from a real-world WWF project team working in a tropical forest site. As in the first example, the project team tried to keep the overall number of targets to a reasonable level. This site has a mix of targets that includes ecosystems (e.g., primary forest) and species (e.g., jaguars). They also included an ecosystem function (connectivity), although technically this can be considered as a KEA of the forest rather than a target in itself.

Box 10. Additional tips – human welfare targets

We have stressed that targets should normally be biodiversity-related. This does not mean that you should not be using socio-economic strategies to achieve the goals associated with your conservation targets. In fact, threats are generally caused by some social, economic, political, or cultural occurrence or situation. In order to counter the threats, your project will frequently need to use strategies to address the human element. For example, your team may use an alternative income strategy to provide small scale commercial hunters with an alternative source of income in place of hunting of monkeys. In this case, your intervention is a social one but your end goal still relates only to biodiversity (protecting the monkeys).

Nevertheless you may feel that your project should explicitly identify human welfare as an end goal in itself, in addition to goals related to the conservation of biodiversity targets. In this case, you must aim to explicitly define the links between biodiversity and your human welfare targets; usually this is done through ecosystem services. Subsequently (in Step 2.1), you may set goals that are related to both types of targets - even if WWF is not the primary actor for all the actions required to meet the goals. Some examples of ecosystem services linking biodiversity and human welfare targets are below.

Threat	Biodiversity Target	Ecosystem Service	Human Welfare Target
Industrial pollution and/ or over abstraction of water	River tributary	Provision of fresh water	Access to sufficient clean water
Cutting of mangroves for fuelwood	Mangroves	Flood regulation (tidal)	Personal safety/ security from disasters
(Local) air pollution	Forests, Lakes	Cultural services (aesthetic and recreational)	Access to clean air and water, mental and emotional wellbeing
Poaching	Rhinos, tigers	Cultural services (aesthetic and recreational)	Livelihoods through income from tourism
Sedimentation and pollution (due to agriculture)	Coral reefs	Provision of fish	Sufficient nutritious food
Overcapacity of fishing fleets	Whitefish	Provision of fish	Sufficient food and adequate livelihoods in the medium/ long term
Clear-cutting for timber	Forests	Climate regulation	All benefits associated with a stable climate

Box 11. When to Lump and When to Split?

Deciding whether to lump or split targets can seem somewhat confusing. The decision is not always clear-cut, but you should use the guidance in this document to help you determine what makes the most sense for your site.

Some common examples of targets that could be split include:

- Animal or plant species that are directly subject to hunting, fishing, or any other type of harvesting. In such cases, conserving their habitat will likely not be sufficient to guarantee their survival.
- Plant or animal species that are threatened by disease or competition from non-native invasive species. In this case, even if the surrounding habitat or ecosystem remain mostly intact, the affected plant or animal species are likely to die out.
- Specific wide-ranging or migrating species that might be subject to threats that fall outside of your project area.
- Politically important species or ecosystems that your team could use to generate public support for your project (e.g., a charismatic animal such as a panda bear, a historically important species).

Some common examples of targets that could be lumped include:

- A forest block and its associated plant and animal species if the only factors that are affecting the survival of the associated species are the health and area coverage of the forest. For example, a target of “Andean paramo” might incorporate all the paramo grass and rodent species because the species co-occur with the Andean paramo target, they require the same ecological processes supported by a healthy Andean paramo system, and the threats to the paramo itself (e.g., urban encroachment, agriculture) are the same as those affecting the grass and rodent species. Thus, if the Andean paramo is conserved, then the team can be fairly confident the associated grass and rodent species will also be conserved.
- Groupings of animals or plants that share a common ecological process or behaviour. For example, a team could lump the targets of mountain lions, wolves, and bears into one target – “top predators.” Or a team might lump the Ferruginous Hawk, Long-billed Curlew, Cassin's Sparrow, and other threatened migratory birds into one target – “Migratory prairie birds.”
- Similarly, any species or ecosystem that falls under an umbrella species could be lumped with that umbrella species. For example, if a team in Central Asia chooses snow leopards as their conservation target, they might assume that they will also ensure the survival of the blue sheep and the Asiatic ibex – two important species for snow leopard survival.

Practice Exercise

As a practice exercise, examine the following and determine which are conservation targets and which are not. Before looking at the footnote for answers, think about why they are or are not conservation targets.

Scope: Amazon ecoregion

Targets: a) Pink dolphins; b) Deforestation; c) Mamoré River and its tributaries; d) Flooding; e) Water pollution; f) livelihoods⁶

⁶ The conservation targets would be pink dolphins and the Mamoré River and its tributaries. Deforestation, flooding, and water pollution are all direct threats. While addressing livelihood issues is laudable, we would not have this project if livelihoods were the only target, without any biodiversity present.

Scope: Marine reserve

Targets: a) Sea lions' breeding capacity; b) Sea turtle; c) Over fishing; d) Tourism; e) International markets⁷

Some References

WWF. 2009. *Step 1.3. Define Conservation targets*. Resources for Implementing the WWF Project & Programme Standards. Available at www.panda.org/standards and <https://sites.google.com/a/wwf.panda.org/ppms/step1>

The most extensive work about biodiversity target selection comes from The Nature Conservancy. Key resources include:

Parrish, Jeffrey D., David P. Braun, and Robert S. Unnasch. 2003. Are We Conserving What We Say We Are? Measuring Ecological Integrity within Protected Areas. *Bioscience* 53: 851-860. <http://conserveonline.org/workspaces/ecs/documents/resiliency-0/parrish> .

TNC 2006. *Target Selection Tool*. Available at http://conserveonline.org/workspaces/cbdgateway/cbdmain/cap/resources/further_guidance . .

TNC. 2003. *The 5S Framework for Site Conservation: A Practitioner's Handbook for Site Conservation Planning, Chapter 4*. <http://conserveonline.org/docs/2000/11/5-SVOL1.pdf>.

Good presentations about target selection and viability analysis are also available at:

http://conserveonline.org/workspaces/cbdgateway/cbdmain/cap/resources/further_guidance

Assignment 3 - Select Conservation targets

- If your project has a geographic scope, please select a limited number of targets using the steps described above:
 1. List potential targets
 2. Lump or split targets, as necessary
 3. Select eight or fewer targets that meet the criteria described above
- If your project has a thematically oriented scopes and/ or if you choose to set human welfare targets, explain the links to nature (via footprint or threat reduction, or people related strategies).
- Write a short (1-2 pages) description of the final targets and justify their selection, explaining any steps you take to reduce and refine the list. Identify any links to other programme targets (e.g. higher-level programmes) and/or to generalized nature targets (especially for thematic scopes).

⁷ The conservation target would be sea turtle. Sea lions' breeding capacity is an indicator of sea lion health – the target should be sea lions, not their breeding capacity. Over fishing and tourism are direct threats. International markets are an indirect threat that might drive direct threats, such as over fishing.

- (Optional). Provide a brief (tabular) description of the current and future desired condition of each target.
- Write a short paragraph about your impression of the process of selecting conservation targets. Include any challenges you had or anything you found to be useful.
- Hand in your assignment as Assignment 3 by posting your document on the PPMS Online Modules Google site.

Step 1.4a Analyze Project Context and Stakeholders (Week 3)

Structure for Week 3. In this week you will:

- Read Introduction to Project Context and Stakeholders, How to Conduct a Situation Analysis and Document the Results, and Examples.
- Hand in Assignment 4

Introduction to Project Context (Threats and Drivers) and Stakeholders

Before you can begin to develop clear strategies, you need to have a clear understanding of the factors and people that are affecting your defined project scope and associated targets. This involves carrying out a thorough situation analysis and stakeholder analysis, from which you will be better positioned to design effective strategies and activities. The WWF Programme Standards ask you to address the three areas noted below, but your approach may well be integrated and iterative rather than linear. The systems of cause and effect that you need to analyse are often complex, so in the real world before you start this sub-step you need to think carefully about how you will go about the process and the actual tools you will use. The challenge here is to make your logic explicit without spending too much time on trying to develop a perfect model of reality.

Three areas to address:

- Identify and prioritise the key factors affecting your targets – Situation Analysis
- Define key stakeholders and their potential involvement – Stakeholder Analysis
- Clarify the relationships between factors e.g. using a Conceptual Model

A situation analysis is a process that will help you and your project team create a common understanding of your project's context – including the biological environment and the social, economic, political, and institutional systems that affect your scope and associated. It involves an analysis of the key factors affecting your targets – including direct threats, drivers (indirect threats and opportunities), and enabling conditions. Often project teams *think* they have a shared understanding of their project's context and what the main threats and opportunities are. However, in going through a formal process to gather information about the project area and using it to document underlying assumptions about the project's context, project teams often find they have somewhat different perceptions of the same situation. For example, biologists tend to focus on the biological aspects of the site, whereas development organizations tend to focus on the socioeconomic factors. A situation analysis helps all project team members come to a common understanding of your project's context, its critical threats, and the underlying drivers (indirect threats and opportunities) you should be considering in your project planning.

Each of the factors identified in your situation analysis can typically be linked to one or more stakeholders – those individuals, groups, or institutions that have an interest in or will be affected by your project's activities. Stakeholder analysis at this stage in the project cycle helps the project to: identify groups whose participation or support for the project is crucial to its success; recognize the interests of these groups; and assess how they directly or indirectly influence your project.

How to Conduct a Situation Analysis and Document the Results

1. Gather information about the status of your targets and the factors affecting them

In the previous section, you defined conservation targets for your project. Before you can identify effective strategies, you need to know about the current condition of the targets (e.g. viability), the direct threats they face, and the drivers (indirect threats and opportunities) that influence those direct threats

A situation analysis is an analysis of these factors (direct threats, indirect threats and opportunities). The project team can conduct a situation analysis at varying levels of detail, depending on their existing knowledge. For example, a team that has been working for several years on forest management may have a good idea about the current condition of the forests and the extent to which they are threatened by clearcutting, selective logging, slash-and-burn agriculture, road construction and other threats. This same team, however, may feel the need to gather information or consult with specialists to analyze the condition of other targets, such as migratory birds found seasonally in their forest reserve. A project team that is just beginning to work in a site will generally need to dedicate several months to their situation analysis before planning their project interventions.

Sources of information can include: 1) existing literature (scientific publications, grey literature, etc.), 2) new or primary research conducted by your team, and/or 3) key informants, such as resource users, community members, scientists, project managers or others who know something about the current and historic status of each of the targets and what activities are currently affecting (or have historically affected) these ecosystems and species. Thus, a situation analysis can involve anything from a cursory review of existing information and a relatively brief discussion with key informants to an in-depth analysis of documents and a more lengthy process of consultation with key informants. Use your judgment in deciding how much time and energy to devote to a situation analysis. Because a situation analysis lays the groundwork for all subsequent steps in your planning process, it is very important. On the other hand, projects should not get caught in planning paralysis, spending months or even years gathering information without implementing activities.

The following instructions are oriented toward a project team that is just beginning to work in a project site. These instructions should be tailored to the project depending on the experience of the teams, and the type and scale of the project.

a) Begin your situation analysis by gathering information (from secondary literature, primary research and/or key informants) about the current condition of your conservation targets.

You should have already started this part of the analysis in Step 1.3 Targets, but you may decide that you need a more detailed analysis or information. For example, try to answer the following questions:

- What is the current condition of each conservation target? You may want to use a 4-point qualitative scale (very good, good, fair or poor) to summarize your assessment of the condition of each target.
- For each ecosystem target, how does the area that it currently occupies compare to its historic area (when human activities had little or no effect on it)? For each species target, how does its current population size compare to its historic population size from a time when it had few or no threats?
- Given climate projections, have you considered whether the ecosystems and species are likely to remain in the geographic area for the foreseeable future? Is the desired condition for the targets likely to be attainable given climate projections?

b) Gather information about the direct threats to your conservation targets. Direct threats are primarily *human activities* that immediately affect a conservation target (e.g., unsustainable fishing, hunting, oil drilling, construction of roads, pollution or introduction of exotic invasive species), but they can also be *natural phenomena* altered by human activities (e.g., increase in water temperature caused by global warming). Note that direct threats should not include natural phenomena that are not altered by humans (e.g. earthquake). One good source to browse for ideas of different direct threats is the IUCN-CMP Unified Classifications of Direct Threats and Conservation Actions (available through:

Box 12. Direct and Indirect Threats

Biodiversity faces so many threats that it can be confusing to distinguish between direct and indirect threats. The WWF Programme Standards provide the following definitions for these terms:

Direct Threat - A human action that immediately degrades one or more conservation targets. For example, “logging” or “fishing.” Typically tied to one or more stakeholders. Sometimes referred to as a “pressure.” It is helpful to think of direct threats as something that can be *observed*, e.g. seen, heard, etc. as bringing about a change in biodiversity status.

Indirect Threat – A factor identified in an analysis of the project situation that lead to direct threats and often an entry point for conservation actions. For example, “logging policies” or “demand for fish.” Sometimes called a root cause or underlying cause.

<http://www.conservationmeasures.org/initiatives/threats-actions-taxonomies>). Be careful not to confuse direct threats with indirect threats (e.g., logging policies or local people’s need for food) - see Box 12 for an explanation of the distinction between them. We will include indirect threats in the model in a subsequent step.

Questions you should try to answer for this step include:

- What human activities are currently taking place in and around your target ecosystems, and how do they affect these ecosystems? Do they occur throughout the ecosystems or just in specific areas?
- Are there any natural phenomena altered by human activities that represent significant direct threats to these ecosystems?

c) For each direct threat, identify the factors (indirect threats and opportunities) driving or leading to the direct threats that are affecting your site. These factors may include economic, political, institutional, social, or cultural influences. A few examples of opportunities include strong legislation, markets for certified products, a high level of awareness of conservation issues and cultural values that support biodiversity conservation. Questions to consider for this step include:

- Who is involved in this direct threat? What exactly are they doing? Why are they conducting these activities?
- What incentives and disincentives influence this direct threat?
- What economic, political, institutional, social or cultural factors contribute to this threat?
- Are there positive factors (opportunities) that currently contribute or potentially could contribute to decreasing this threat?

d) Document the results of your situation analysis. Prepare a few paragraphs or at least a few bullet points to summarize your understanding of the condition of the overall site and each conservation target, the direct threats to biodiversity conservation and the indirect threats and opportunities.

2. Develop a conceptual model to clarify and portray your understanding of project context

A conceptual model is a tool for visually depicting the results of your situation analysis. It is a diagram that represents a set of causal relationships between factors that are believed to impact one or more conservation targets. A good model should explicitly link the conservation targets to the direct threats impacting them and the factors (indirect threats and opportunities) influencing the direct threats. A conceptual model portrays graphically the situation at your site and provides the basis for determining where you can intervene with your strategies. Note that for large projects or programmes, conceptual models can be very complex. In these cases it may be helpful to have multiple conceptual models, e.g. one for 'large scale' factors, and several others that look at factors in specific sites/landscapes. People are also encouraged to think of the conceptual model as a very flexible tool intended to make a picture (model) of the current situation. Instead of the threats-based model discussed here, some projects prefer to make a model of a commodity chain, of global trade flows, of policy decision making processes, etc. What all of these have in common is that they present a diagrammatic picture that enables us to identify where we may intervene in the system to improve the state of biodiversity.

Box 13. The Magician's Model

As we have already seen in this module, not all projects can be characterised by well-defined species or habitat targets being influenced by directly observable threats. Increasingly WWF projects are dealing with crosscutting thematic and footprint issues. Fortunately, the conceptual model is in fact a very flexible tool. Any representation of reality that enables us to document the interlinkages between different actors, natural processes and human processes can be defined as a conceptual model, and practitioners of the Programme Standards are encouraged to be as flexible and creative with conceptual models as necessary. Some other forms of conceptual model used by WWF have included:

- Commodity value chain diagrams (Market Transformation Initiative),
- Global/regional trade maps (TRAFFIC, GFTN)
- Policy decision process flowcharts (Climate COPs)

The description below provides step-by-step instructions for completing a conventional threats-based conceptual model. Because conceptual models graphically depict much of the work you have done in other stages (e.g., defining your scope and conservation targets), we do not explain how to develop all of the inputs that go into a conceptual model. To illustrate this step, we use a real-world example adapted from a WWF team's conceptual model for a Marine Reserve site.

This exercise is best done with a project team using post-it notes and a flip chart or other set-ups that will allow you to add, delete, and move around factors. You can then capture the results using

flow-charting software such as Microsoft Visio, adaptive management software like Miradi, or the drawing tools in MS Word or PowerPoint.

To build your conceptual model, take the following steps:

- a) **Assemble your project team.** Plan to spend at least a few hours together – ideally an entire day. Bring maps of your site and key documents from your situation analysis.

- b) **Begin with your project scope.** Put the scope of your project area on a card and put it at the far right-hand side or the top centre of your workspace (e.g., large flip chart sheets taped together, a white board, a chalk board, etc.). You can also link your vision directly to the project scope, as shown in Figure 7.
- c) **Add your conservation targets.** Add your conservation targets to the scope area, since your conservation targets are the species, ecological systems, and/or ecological processes that you have chosen to represent and encompass the full suite of biodiversity at your project area. Put each of your conservation targets on a card and arrange them near the project scope card. If relevant, you may also want to show relationships between different targets (e.g., intertidal systems affecting seabirds).
- d) **Place your direct threats into the model.** Identify one of the most important direct threats to your targets and write it on a card (you may wish to use a different colour than the one used for your conservation targets). Put this card on your workspace and use arrows to connect it to the conservation targets that it directly affects (see Figure 7). Repeat this process for the other main direct threats at your site.
- e) **Add indirect threats and opportunities.** In your situation analysis, you have done a lot of thinking about what factors (indirect threats and opportunities) are driving or leading to the direct threats that are affecting your site. These factors will include economic, political, institutional, social or cultural influences. At this point, you are now ready to add those other factors to your model. You should work from right to left to place each of the factors into your model. For example, your team should ask itself, what is causing the direct threat of illegal shark fishing by boats from the mainland? You might identify several factors, including international demand for shark fin and weak law enforcement. You should then ask what are the factors driving those indirect threats and so on, working to the left until your model is reasonably complete (see Figure 8). Do not forget to consider opportunities, as well as indirect threats (e.g., favourable policy environment, community interest in conservation). Be sure to draw the arrows to show the relationship that each factor has on other factors. These arrows will help you later to identify critical factors and identify potential paths along which you could establish your project or programme goals and objectives. If there are uncertainties, you can note them using question marks and try to reconcile them later through further inquiry.

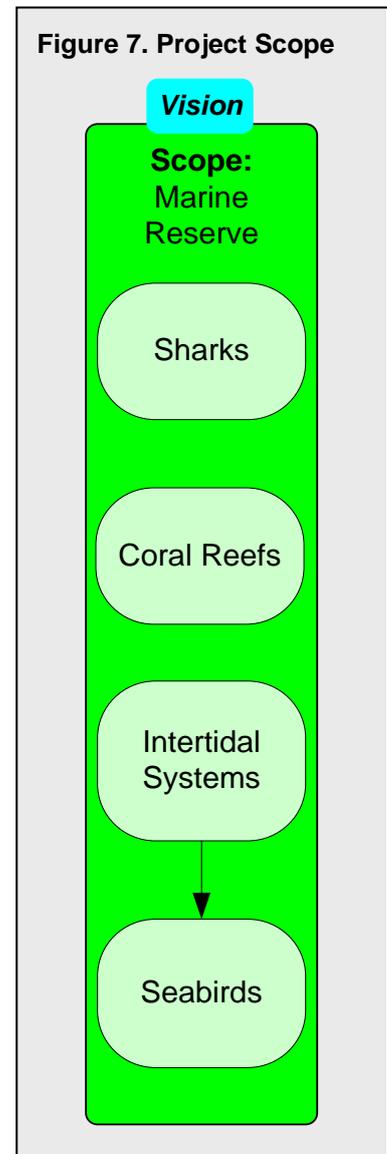
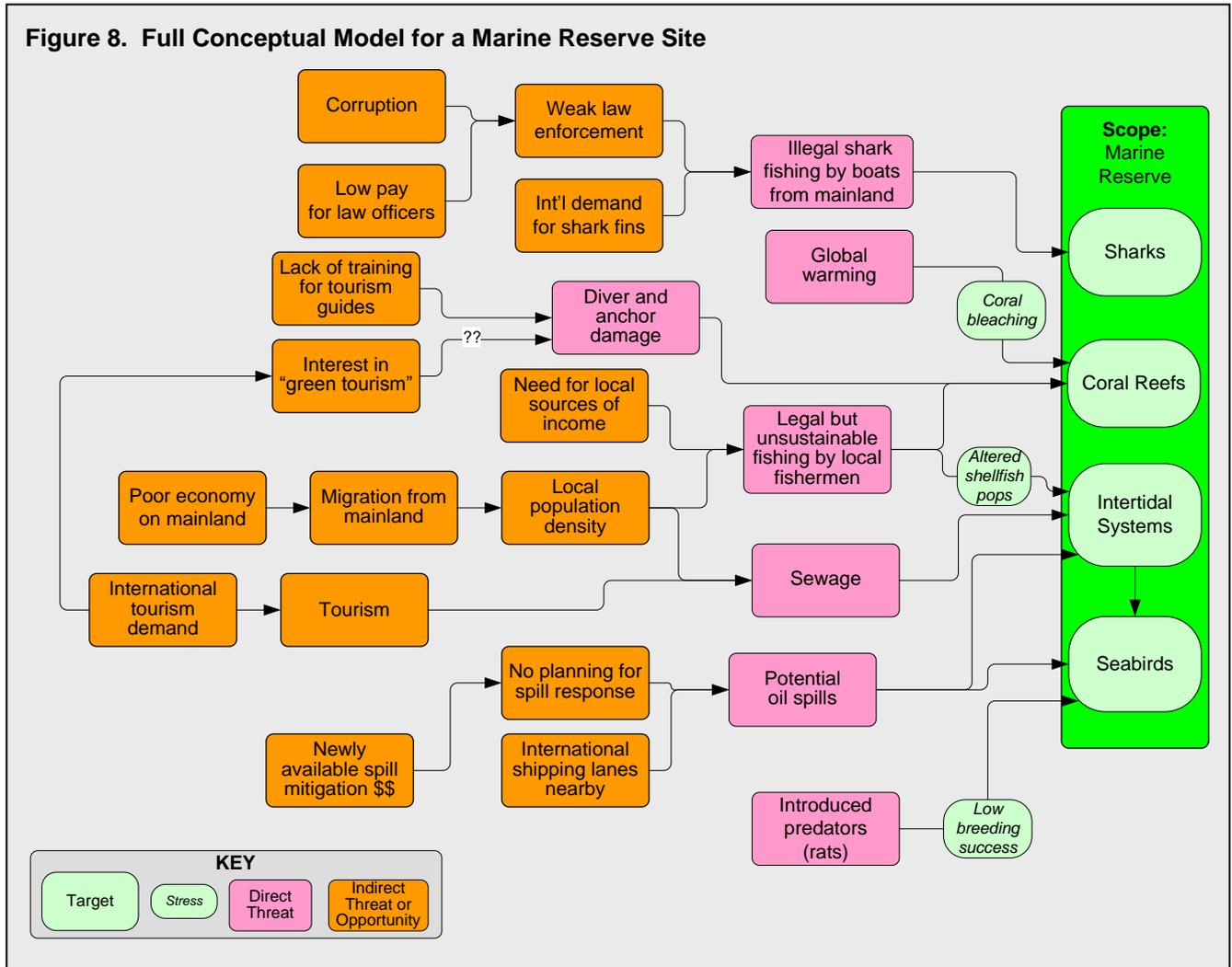


Figure 8. Full Conceptual Model for a Marine Reserve Site



- f) **Complete your model.** As you work, you may have to rearrange, add, delete, or combine cards. Although the process may seem straightforward, you will find that you and your project team will have some lively debates about what should go where. You also may debate about how much detail to include. Only include information that you think will help you decide where we can intervene through project strategies. A final word on conceptual models – don't strive for perfection; strive for a product that will help you and your project team members effectively communicate what is happening at your site and decide what to do in a strategic fashion.
- g) **Document your work.** At the end of the meeting, capture what you have done in a small sketch or using a computer flow-chart program (see Box 14). You may also want to develop brief text paragraphs describing each part of the model. These will provide detail that will be useful to describing your model to others who did not participate, as well as for formally documenting group discussions and decisions.
- h) **Discuss your model.** Discuss with your group your confidence level in the different portions of the model and which stakeholders or other experts you might need to consult to vet different sections of your model. Make assignments as necessary.

- i) **USE your conceptual model!** A conceptual model is one of the most helpful and versatile tools you will use for your project planning. The process of building a conceptual model with your project team helps all team members explicitly state their assumptions about what is happening at your site and collectively come to an understanding about your site and what you need to do as a team. The model itself is a useful communications tool for your project team, as well as for people outside of your project. It provides a quick, easy-to-understand overview of your project site and the rationale for your project's goals, objectives, and activities. A conceptual model also provides you with the building blocks for developing results chains – a tool that helps make explicit the logical sequences that link your strategies to your targets, in a more detailed fashion than is realistically possible with a conceptual model. Your project team should revisit your conceptual model at least once a year to determine if there are any new threats or factors (or ones that you may have missed in your earlier model) that are now affecting your targets. If so, you will need to make decisions about if and how you will address them.
- j) **Get feedback on your model.** Consult with stakeholders and other experts and then reconvene with your team to discuss how you might change your model based on this input.

Box 14. Software Programs You Can Use to Capture Your Conceptual Model

- MS Visio - This is diagramming software with features that facilitate digitizing flow charts such as conceptual models. The conceptual model in Figure 8 was developed using MS Visio.
- MS Word or PowerPoint - You can use the drawing feature in MS Word or PowerPoint, but this is more time-consuming than MS Visio.
- Miradi Adaptive Management Software mentioned previously includes sophisticated diagramming software.

How to Conduct a Stakeholder Analysis

Your conceptual model summarizes what conservation targets you are working to conserve, what direct threats they face, and what other factors (indirect threats and opportunities) influence these direct threats. Each of the threat and opportunity factors included in your conceptual model has one or more stakeholder groups associated with it. Stakeholder analysis allows you to identify those individuals and groups whose participation in or support for the project is crucial to achieving conservation of your conservation targets, and it helps you analyze how to engage them.

There are a number of ways of undertaking a stakeholder analysis. Workshops, focus groups and interviews are three common approaches. During the course of the project cycle you may use all three, matching the technique to the evolving needs of the project. Whatever approach is used, stakeholder analysis at this stage in the project cycle should focus on the following three steps:

- 1) Identifying a broad range of potential stakeholders and their interests in relation to your conservation targets;
- 2) Assessing the project's potential to reduce threats by changing the attitudes and actions of these stakeholders; and
- 3) Identifying the key stakeholders who are central to your project's success.

We describe key questions to ask at each of these steps and provide a format for organizing the information from your stakeholder analysis.

1. Identify a broad range of potential stakeholders and their interests

To analyse stakeholder groups, you can either start with your situation analysis and conceptual model and think about the key stakeholders associated with each factor, or start with an analysis of the stakeholders and then link them to specific threat and opportunity factors. We recommend the former approach, because it allows you to be more strategic in selecting those stakeholders who directly or indirectly influence the direct threats to your conservation targets.

Begin with one of the direct threats in your model. Identify the relevant stakeholders directly involved in activities associated with the threat and the motivation for their action. Then do the same for the indirect threats and opportunities associated with that direct threat. The main questions you should ask at this step include:

- Who is undertaking which activities that contribute to this direct threat, indirect threat or opportunity?
- What are their motivations? Are their actions driven by economic dependency (livelihood) or economic advantage? Are these resources replaceable by other resources? Do they have legal jurisdiction over the use of the resource and regulate its use for conservation, economic development or another purpose? Are they working to conserve the resource? Have they conducted research on the resource?

Begin to organize your information about the stakeholders and their interests in Table 2. Fill out the first column, putting one of your direct threats on the first line of the first column and the factors contributing to that direct threat below it. In the next column, list the stakeholders related to that factor and describe very briefly how they contribute (directly or indirectly) to the threat. Motivations can be economic, political, social or cultural (e.g. livelihoods, profit, lifestyles, cultural values, spiritual values, regulatory responsibility, etc.).

2. Assess the project’s potential to change these stakeholders

Assess the feasibility of the project influencing each stakeholder group and changing their actions so that they contribute less to the threat. You may want to rank the feasibility as high, medium or low and briefly justify your ranking. Include this information in a matrix like that presented in Table 3.

3. Identify key stakeholders

Decide who your key stakeholders are - those individuals or groups that are central to the success of your project. Key stakeholders may include those who have claims over or direct dependence on the resources, or who have power, authority, or responsibility in relation to the use or management of the resource. The participation of key stakeholders is critical.

Table 3. Example of a Stakeholder Analysis Matrix Related to Direct Threat of Potential Oil Spills

Direct Threat or Factor	Stakeholders and Their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
Potential oil spills	1. Captains of international oil tankers that use nearby shipping lanes	Livelihood	Medium - might be more careful when moving through these waters if they understood the importance of the marine biodiversity here.	Yes
	2. Shell, Exxon and other multinational corporations	Profit	High - some of these companies have strict safety standards (for prevention	Yes

Direct Threat or Factor	Stakeholders and Their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
	that own oil tankers that use nearby shipping lanes		and mitigation of spills) that could serve as examples to other companies. All are sensitive to international pressure from consumers.	
	3. National companies that own oil tankers and other large ships that use nearby shipping lanes	Profit	Low - have few resources to invest in spill prevention and mitigation.	Yes
No planning for spill response	1. Ministry of the Environment	Environmental protection	High – Responsible for development of environmental safety regulations applied to ships.	Yes
	2. Municipality of Puerto Escondido	Governmental responsibilities	Medium - Responsible for protecting citizens and natural resources in case of environmental disaster such as oil spill, but have very little capacity.	Yes
	3. Coast Guard	Governmental responsibility for marine safety	High - Have responsibility for responding to emergencies such as oil spills, but have little capacity (training, equipment).	Yes
International shipping lanes nearby	1. Ministry of the Environment	Environmental protection	Medium - might be able to influence the Ministry of Transportation to relocate some stretches of shipping lanes further away from sensitive coral reefs.	Yes
	2. Ministry of Transportation	Regulates transportation infrastructure to facilitate commerce and economic development	Medium - They might be receptive to relocating some stretches of shipping lanes, if that would help reduce threat to sensitive areas.	Maybe
	3. Coast Guard	Governmental responsibility for marine safety	High - Implement marine safety regulations.	Yes
Newly available spill mitigation \$\$	1. United Nations Environment Program (UNEP)	Biodiversity conservation	High - just developed a program to support planning and preparation for spill mitigation.	Yes
	2. Fundación Ecológica	Biodiversity conservation	High - local conservation organization interested in prevention and mitigation of oil spills.	Yes

Examples

Situation Analysis

As explained earlier, one can document the results of a situation analysis by writing a few paragraphs of text or just a few bullets that summarize your understanding of the condition of the overall site and each conservation target, the direct threats to biodiversity conservation and the indirect threats and opportunities. Here we provide an example of bulleted text explaining a direct threat and the indirect threats and opportunities influencing one of the conservation targets in our Marine Reserve site.

Conservation target: Sharks

Direct Threat: Boats from the mainland not only capture sharks accidentally, as bycatch, but some of them also target sharks. They capture them using primarily longlines. Some of these boats operate at night. When they capture a shark, they cut off the shark fins and toss the rest of the shark back into the ocean.

Indirect Threats and Opportunities:

- There is strong international demand for shark fin. Shark fin is a delicacy in China and Hong Kong. As shark populations have declined worldwide over the past few years, the price of shark fin has increased.
- It is illegal for fishing boats to keep and sell shark products. If sharks are captured as by-catch, the boats are supposed to return the entire shark to the ocean. When boats come into the municipal dock on the mainland, fisheries officers can check their product and, if they find shark parts, then they are authorized to confiscate them and fine the boat US \$500. Law enforcement is weak, however. The Fisheries Department doesn't have enough personnel, so they only check the boats occasionally. Also, because the boats return to the mainland from a large coastal area and bring in different products (finfish, shrimp, etc.), the fisheries officers are more focused on implementing size limits and closed seasons for commercial fisheries than in enforcing regulations to protect sharks.
- There are rumours that some fishing boats may sell their shark fin at sea. The park wardens can't control this because the boats operate outside of the Marine Reserve. The Fisheries Department either doesn't have the capacity to control this activity or they may be getting paid to look the other way. Since their salaries are low, fisheries officers supplement their incomes with bribes.

Stakeholder Analysis

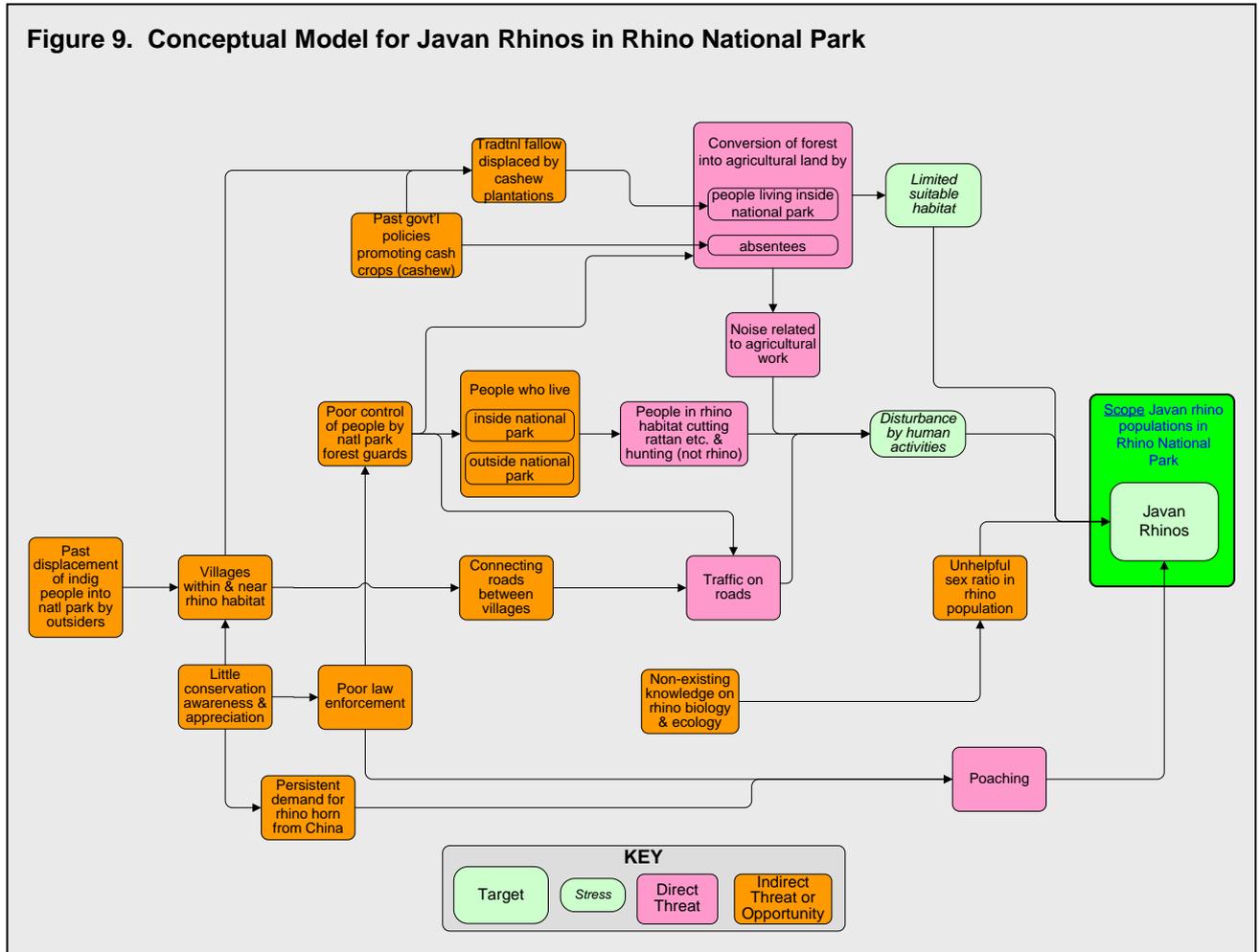
This stakeholder analysis matrix includes the stakeholders involved -- directly or indirectly -- in illegal fishing of sharks in our Marine Reserve site.

Table 4. Example of a Stakeholder Analysis Matrix Related to the Direct Threat of Illegal Shark Fishing

Direct Threat or Factor	Stakeholders and Their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
Illegal fishing by boats from the mainland	1. Boat captains that fish illegally for shark fin	Livelihood	Medium - would reduce illegal fishing if law enforcement stronger	Yes
	2. Boat owners that allow the captains to fish shark fin	Profit	Medium - might be receptive to awareness-raising, as well as law enforcement	Yes
International demand for shark fins	1. Companies that purchase shark fin from the boats and export it	Profit	Medium - could change if there were an incentive to decrease demand	Yes
	2. Companies that sell it wholesale in Asia	Profit	Low - currently no incentive to change. May not be illegal to sell the product in Asia - ask WWF China and WWF Hong Kong.	No
	3. Restaurants and grocery stores that sell it to consumers	Profit	Low - unless consumers demand change (currently unlikely)	No
	4. Consumers	Cultural tastes	?? How strong is cultural tradition? Feasible to change with education? Ask WWF China.	Maybe, if WWF China willing to collaborate
Weak law enforcement	1. Park guards that enforce regulations within the Marine Reserve - understand problem but aren't authorized to take action outside reserve	Strong concern about biodiversity conservation, but limited authority	High - if they could coordinate with Fisheries officers	Yes
	2. Fisheries officers that check fishing boats on Municipal pier	Get a paycheck, not rock the boat.	Medium - might be possible for them to be more proactive if they understood the problem better and were more accountable for their actions (or lack of action). Have little or no understanding or concern about impact of illegal fishing on shark populations.	Yes
	3. Fisheries officers that check products being exported	Same as above (#2).	Same as above (#2).	Yes

Conceptual Model for a species-focused project

Our earlier example came from a site-based project, but you can also use conceptual models effectively for species-focused projects and programmes. Figure 9 is an example based on a real-world model developed by a WWF project team seeking to protect Javan rhinos.



Practice Exercise

As a practice exercise, look at the following factors and mark the correct category. See footnote for answers.⁸

Factor	Scope	Target	Direct Threat	Indirect Threat	Opportunity
Illegal fishing					
International markets					

⁸ Illegal fishing = direct threat; International markets = indirect threat; Rivers and streams = target; Logging = direct threat; Manuripi Wildlife Reserve = scope; Primary forest = target; Lack of social control = indirect threat; Sustainable economic alternative = opportunity; Government regulations = could be either indirect threat or opportunity.

Factor	Scope	Target	Direct Threat	Indirect Threat	Opportunity
Rivers and streams					
Logging					
Manuripi wildlife reserve					
Primary forest					
Lack of social control					
Sustainable economic alternatives					
Government regulations					

Some References

Situation Analysis:

IUCN – CMP. 2006. *Unified Classification of Direct Threats*. Version 1.0. Available through WWF Connect: <https://intranet.panda.org/documents/folder.cfm?uFolderID=60977>; Home > Documents > Network Standards > 2. Programmes > 1. Define - resources and guidance > 1.4 Context and Stakeholders. Another document (*A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions*) is also available at: <http://www.conservationmeasures.org/initiatives/threats-actions-taxonomies> .

PPM&E Resource Portal. Source: <http://portals.wi.wur.nl/ppme/>. [Web site with a lot of links to good M&E resources, methods, and tools – some of which would be helpful for a situation analysis].

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Assignment 4 - Develop a Conceptual Model, Conduct a Stakeholder Analysis

Part A: Develop a Conceptual Model

- Please develop a conceptual model for your project, using the steps described in the previous section. Document your work using one of the software programs described in Box 14.

(Note: you can use Miradi, MS Visio, MS Word or PowerPoint drawing functions to create your conceptual model. If you do not have access to any of these programs, you can also clearly draw out a conceptual model and scan it.)

- Write 1-2 pages of text to explain your conceptual model. Describe the model from the right (conservation targets) to the left (direct threats and then indirect threats and opportunities). Since you already described your conservation targets in a previous section, you can just mention them briefly here. Focus on explaining each direct threat and the indirect threats and opportunities that contribute to it.

Part B: Develop a Stakeholder Analysis

- Identify the stakeholders associated with two of your direct threats and develop a stakeholder analysis matrix for them, using the format in Table 3.

Hand in your assignment as Assignment 4 by posting your document on the PPMS Online Modules Google site.

Step 1.4b Threat Ranking/ Prioritising the key factors (Week 4)

Structure for Week 4. In this week you will:

- Read Introduction to Threat Ranking, How To Develop and Use Threat Rankings, Other Methods for Threat Ranking and Examples of Rankings.
- Hand in Assignment 5

Introduction to Threat Ranking

Conservation must take place in the face of a wide variety of threats. A common challenge for conservation practitioners is determining which of these threats they will try to address. Often, decisions are made applying an implicit set of criteria to evaluate threats. The challenge of this approach is that different people might use different criteria or apply them differently. Moreover, there is a tendency to address threats for which strategies and expertise already exist, rather than addressing those that are posing the greatest threat to the biodiversity at a site.

Threat ranking is a method for making this implicit step more explicit and more objective. It involves determining and defining a set of criteria and then applying those criteria systematically to the direct threats to a project area so that conservation actions can be directed where they are most needed.

The following instructions are oriented toward a project team that has a geographic scope and has defined detailed biodiversity targets. You could apply similar principles in order to prioritise other factors (such as indirect threats or opportunities), and this might be more relevant in that case of a thematic scope. In such cases, you would probably need to adjust the criteria for prioritisation (ranking criteria). On the other hand, in such situations a sound and properly explained judgement on which factors are most critical might be just as useful.

How to Develop and Use an ‘Absolute’ Target-by-Target Threat Ranking

In a threat ranking, a project team will evaluate each direct threat and the impact it is having on the conservation target(s) it is affecting. This can be done absolutely or relatively. In this course we will consider only absolute rankings, where teams consider a criterion and a scale (say, 1 to 4) and evaluate threats by criterion, assigning a number within that scale.⁹

In some cases during threat ranking, you may find yourself evaluating both actual and potential threats. In the case of potential threats, it is best to only include them in your ranking if they are threats that are realistic and likely to occur within a reasonable time period (10 years, for example). So, you might include a road that a local logging company is negotiating with the government as a real potential threat, but you would not include an invasion of your site by Martians as a potential threat.

1. Determine the criteria for ranking

⁹ ‘Relative’ ranking is used when there isn’t sufficient information available to rate each threat against each relevant target. Instead it rates threats against one another, at the level of the whole project site. So, if there are 7 threats, the highest ranked threat in any criterion would get a 7, and the lowest ranked threat would get a 1. For more information on relative ranking, please read the guidance for *Step 1.4 Threat Ranking*, at <https://intranet.panda.org/documents/folder.cfm?uFolderID=60977>

The first step is determining the criteria against which you will rank the threats at your site. For example, is it important to know how much of your target is affected by the threat (scope)? Is it important to know how severe that threat is (severity)? As a starting point, when using an absolute target-by-target ranking, we recommend that project teams consider the criteria of scope, severity, and irreversibility (Box 15). **Scope** refers to the geographic area of impact on the target that can reasonably be expected within 10 years under current circumstances. **Severity** attempts to quantify or categorize the level of damage to the conservation target expected in the specified time frame. **Irreversibility** is the degree to which the effects of a given threat can be undone and the targets affected by the threat restored, if the threat is stopped.

Although your team is free to modify the choice of criteria, you are strongly urged to use only scientifically objective criteria. Other subjective criteria like 'WWF Niche' may ultimately play a role in your decision of which threats to address, but this tool is meant to give us a scientifically objective view of which threats at the most important.

Box 15. Criteria for Absolute Threat Ranking

Scope – Geographic area of impact on the conservation target that can reasonably be expected within 10 years under current circumstances (i.e., given the continuation of the existing situation).

- 4 = Very High:** The threat is likely to be very widespread or pervasive in its scope and affect the conservation target throughout the target's occurrences at the site.
- 3 = High:** The threat is likely to be widespread in its scope and affect the conservation target at many of its locations at the site.
- 2 = Medium:** The threat is likely to be localized in its scope and affect the conservation target at some of the target's locations at the site.
- 1 = Low:** The threat is likely to be very localized in its scope and affect the conservation target at a limited portion of the target's location at the site.

Severity – The level of damage to the conservation target that can reasonably be expected within 10 years under current circumstances (i.e., given the continuation of the existing situation).

- 4 = Very High:** The threat is likely to destroy or eliminate the conservation target over some portion of the target's occurrence at the site.
- 3 = High:** The threat is likely to seriously degrade the conservation target over some portion of the target's occurrence at the site.
- 2 = Medium:** The threat is likely to moderately degrade the conservation target over some portion of the target's occurrence at the site.
- 1 = Low:** The threat is likely to only slightly impair the conservation target over some portion of the target's occurrence at the site.

Irreversibility – The degree to which the effects of a threat can be undone and the conservation targets affected by the threat restored, if the threat is stopped.

- 4 = Very High:** The effects of the threat cannot be undone, it is very unlikely the target can be restored, and/or it would take more than 100 years for the target to be restored (e.g., wetlands converted to a shopping centre).
- 3 = High:** The effects of the threat can technically be undone and the target restored, but it is not practically affordable and/or it would take between 21 and 100 years for the target to be restored (e.g., wetland converted to agriculture).
- 2 = Medium:** The effects of the threat can be undone and the target restored with a reasonable commitment of resources and/or in a time period between 6 and 20 years (e.g., ditching and draining of wetland).
- 1 = Low:** The effects of the threat are easily reversible and the target can be easily restored at a relatively low cost and/or in a time period between 0 and 5 years (e.g., off-road vehicles trespassing in wetland).

2. Apply the threat ranking

For this exercise you may wish to use the Miradi software, which has a user-friendly interface to walk you through this process. However, you can also do this in a simple table, like the one in Table 4.

The following steps rely on rating threats on a four-point scale (e.g. very high, high, medium, low – see Box 15) for each criterion and then summing the results. A four-point system is encouraged, as it is easier to resist the temptation to give an average or middle score, as is the case with a 5 or 3 point scale.

The steps for applying the threat ranking are:

- a. **Develop a list of all direct threats** – In your table, in the column headed DIRECT THREATS, write the names of the main direct threats you have identified in your conceptual model.
- b. **List your targets** – In the top row of your table, enter all the conservation targets you are trying to conserve at your site.
- c. **Block off the boxes where there is not a relationship between the threat and the target** – In absolute threat ranking, for each target you only rank the threats that your conceptual model shows directly affect your target. Blocking off the boxes where there is not a relationship will help you remember not to rank threats that do not affect a target. For example, if you are working off of the conceptual model in Figure 10 for your Seabirds target, you would only rank the threats of potential oil spills and introduced predators.
- d. **Rate each threat for SCOPE** – Discuss your rating of each threat based on the proportion of the overall area of a target occurrence affected by an actual threat or likely to be affected by a potential threat, using the 1-4 scale defined in Box 15. Write the number you assign in the appropriate box in the scope column.
- e. **Rate each threat for SEVERITY** – Discuss as a team your rating of each threat based on the level of damage it would cause to a target, using the 1-4 scale defined in Box 15. Write the number you assign in the appropriate box in the severity column.
- f. **Rate each threat for IRREVERSIBILITY** – Discuss as a team your rating of each threat based on the extent to which the effects of the threat can be undone and the target restored, using the 1-4 scale defined in Box 15. Write the number you assign in the appropriate box in the irreversibility column.
- g. **Add up the ratings for each threat by target** – The simplest way to combine these is to add up the three ratings into a single score for each target the threat affects. However, there are other ways to combine the rating numbers that may give a scientifically more accurate assessment. For example, some people like to double-weight Scope and Severity to help avoid situations where a threat that affects only a very small portion of the site but has high severity and high irreversibility (e.g., infrastructure) receives an unduly high overall rating. This is the algorithm used in Miradi.

3. Classify each threat and prioritise

Applying a threats ranking method helps you determine where to act – an often difficult decision when working in complex sites that have multiple threats and multiple targets. Although it may be tempting to evaluate your threats on numbers alone, it is better to classify them into categories of very high, high, medium, and low. These categories are more appropriate, given the somewhat imprecise and nature of the ranking process. For example, the difference between a threat with 12 points and one

with 10 points is likely not significant, but the difference between one with 12 points and one with 5 is significant. This information will enable you to know which are the threats affecting a particular target are the most important for prioritising scarce human and financial resources.

You should use this classification at the target level, but some people like to classify threats at the whole site/project level as well. Determining a threat's importance for the overall site will help you determine its affect on your site as a whole and whether you should devote a lot of project resources to trying to minimize it. Sometimes a threat that is only a medium priority for a particular target might become a high priority for the project if it is affecting a number of targets at the same time. Similarly, if we analyse the threat ranking table vertically, we will see which of our targets are threatened only by single threats and which are affected by multiple threats. This can help us to prioritise our targets -- especially is we consider the target viability assessment at the same time.

A final word of caution. With all of the above in mind, be very careful about assigning false precision to threat ranking. The very useful methodology will give you total ratings for each threat, but don't forget to consider your own intuition as well when you make the final decision on which threats to address!

Table 5. Example of an Absolute Threat Ranking by Target

The following is an example of an absolute threat ranking, based on a real-world ranking done by a WWF project team working in an island marine site. Three criteria (scope, severity, and irreversibility) are used to evaluate seven direct threats across three targets. Each threat is rated using the criteria and a 4 point scale.

DIRECT THREAT	TARGET: Sharks					TARGET: Coral Reefs					TARGET: Intertidal Systems					TARGET: Seabirds				
	SCOPE	SEVERITY	IRREVERSIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVERSIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVERSIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVERSIBILITY	TOTAL	CLASSIFICATION
Illegal shark fishing by boats from mainland	4	4	4	12	VERY HIGH															
Climate Change						4	4	4	12	VERY HIGH										
Diver and anchor damage						1	2	1	4	LOW										
Legal but unsustainable fishing						2	3	4	9	HIGH	3	3	4	10	HIGH					
Sewage											1	1	1	3	LOW					
Potential oil spills											1	2	1	4	LOW	2	3	1	6	MEDIUM
Introduced predators (rats)																2	3	4	9	HIGH

Practice Exercise

Look at the following threats and determine their likely scope, severity, and irreversibility. Because this is hypothetical, you will have to make some assumptions as you determine the rankings. Think about why you would give them the rankings you have chosen. See footnote for answers.¹⁰

Direct Threat	Target	Scope	Severity	Irreversibility
Unpaved logging road cutting through the southern end of a protected area buffer zone	Montane forest			
Paved road connecting two urban centres, cutting through the southern end of a protected area buffer zone	Montane forest			
Over fishing of sturgeon throughout the watershed for commercial purposes	Sturgeon			
Illegal hunting of deer in the wildlife reserve	Deer			

¹⁰ **Unpaved logging road:** *Scope* – Probably medium, since the road is cutting through only a portion of the buffer zone; *Severity* – Medium because the road will allow most wildlife to cross it; *Irreversibility* – Probably a low or a medium because, if the road were left unused, the forest would grow back over the area. **Paved road:** *Scope* – Probably medium, since the road is cutting through only a portion of the buffer zone; *Severity* – Very high because the road will destroy the forest in the area that the road occupies and because the traffic will be great enough that the wildlife will not be able to easily cross; *Irreversibility* – High or very high because the pavement is semi-permanent, making it difficult for the forest to grow back over the area. **Over fishing of sturgeon:** *Scope* – Probably very high, since the over fishing takes place throughout the watershed; *Severity* – Very high or high if the population of sturgeon were almost eliminated; *Irreversibility* – High if the population can recover but it will take a long time or might be very expensive to make that happen. **Illegal hunting of deer:** *Scope* – Probably high or very high, depending upon whether the deer is hunted throughout its range; *Severity* – Very high or high if the population of deer were almost eliminated; *Irreversibility* – Medium because the deer species are resilient and reproduce quickly.

Box 16. Final Tips on the Define Context and Stakeholders step

This Online module provides some suggested approaches to help you carry out this step. But how in practice you go about this step should be tailored to your project. Think carefully about the process and tools you will use:

1) How much do you know already?

A situation analysis can involve anything from a cursory review of existing information and a relatively brief discussion with key informants to an in-depth analysis of documents and a more lengthy process of consultation.

For example, a project team that is just beginning to work in a site will generally need to dedicate several months to their situation analysis before planning their project interventions. By contrast a team that has been working in a place for several years on forest management may already have a good idea about the current condition of the forests and the threats affecting them; however they may feel the need to gather more information and consult with specialists regarding other targets (such as migratory birds that are present only seasonally).

2) Consider who to involve and when

Recognise that there is a close and dynamic relationship between a situation analysis and stakeholder analysis. Who you choose to involve in your situation analysis (and when) will affect the time it takes, stakeholder ownership of the analysis, and the content of the analysis itself.

For some types of work, for example when deep systems change is required, extensive multi-stakeholder engagement may be necessary to build a shared understanding of the situation and hence develop effective strategies.

3) Manage dynamic complexity

There are many tools and analytical methods that you could use. To support your analysis and manage your information, the use of conceptual models is recommended but not compulsory. Conceptual models help you to organise and communicate the information from your situation analysis, allowing you to articulate and make explicit assumptions about cause and effect relationships. They can help you to reduce the effects of dynamic complexity by helping you (and others) to understand it.

4) Include different disciplines and analyse multiple levels as necessary

You should integrate perspectives from social sciences, policy, economics and the natural sciences. You may also need to look at issues at a range of levels, from local through to subnational, national and international. At a local scale, you may explore such issues as livelihood needs and concerns of local people and institutions. At a national or international level, you may analyze the relationship of local issues with such major drivers as national debt, trade policies, government or private investments, and poverty reduction strategies.

5) Consider climate change

As part of this step you may decide to carry out a detailed vulnerability assessment. The PPMS climate adaptation provide guidance on this, and also suggest a way to identify and include the components of climate change in your conceptual model and threat ranking. This makes it easier to prioritize climate impacts and to see how climate may exacerbate existing threats.

Some References

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Assignment 5 – Threat Ranking

- For your project, do an absolute ranking of the direct threats. You can either construct a threat ranking table, or use Miradi, to do the following:
 - Use the 1-4 absolute scale to rank each threat by target for scope, severity, and irreversibility. Be sure to only rank those threats that are relevant for each target. Where you lack information, make your best guess at a ranking, but be sure to note any questions/ concerns.
 - Add up the ratings for the three criteria, by target.
 - Classify the threats by target and across targets into very high, high, medium, and low categories.
- Write a short summary of your observations about:
 - The process in general.
 - Did the results surprise you? Were the results what you expected? Why or why not?
 - Did you have any challenges in applying the ranking?
- Hand in your assignment as Assignment 5 by posting your document on the PPMS Online Modules Google site.

Alternative Assignment 5 – Define the process and tools to use for Step 1.4

For some projects, (for example for some thematic scopes, footprint projects or policy projects), it may not be so useful to carry out a formal process of prioritising threats/ factors using defined criteria. In this case, you should carry out the following alternative assignment. In 1-2 pages, describe how you would go about analysing the context and stakeholders in practice for your chosen project. Consider:

- What are the main gaps in your knowledge and information?
- What tools would you use and when?
- Who would you involve and when?
- How long would the process take?
- The advantages and disadvantages of different approaches.

Annex 1. Glossary

The majority of this glossary comes directly from the glossary provided in the *WWF Programme Standards* (version 2006-12-18). We have added to the glossary only in cases where the Module introduces new terms not directly addressed in this glossary. The selection of specific terms for a given concept and the definitions for these terms are based on current usage of words by the WWF Network, other conservation organizations, and planners in other disciplines. Click here for a [broader glossary of terms](https://intranet.panda.org/documents/documents.cfm?uFolderId=59121&uDocId=70580) (<https://intranet.panda.org/documents/documents.cfm?uFolderId=59121&uDocId=70580>) across the WWF Network.

Action Plan – A description of a project’s goals, objectives, and activities that will be undertaken to abate identified threats and make use of opportunities. For EAPs, the action or conservation plan outlines a comprehensive strategy to conserve and restore the biodiversity of an ecoregion over several decades. A WWF action plan outlines what WWF’s contribution is to a joint project’s overall action plan.

Activity – A specific action or set of tasks undertaken by project staff and/or partners to reach one or more objectives. A good activity meets the criteria of being: *linked, focused, feasible, and appropriate*. Sometimes called an action, intervention, response, or strategic action.

Adaptive Management – The incorporation of a formal learning process into conservation action. Specifically, it is the integration of project design, management, and monitoring, to provide a framework to systematically test assumptions, promote learning, and supply timely information for management decisions.

Assumption – A project’s core assumptions are the logical sequences linking project activities to one or more targets as reflected in a [results chain](#) diagram. Other assumptions are related to factors that can positively or negatively affect project performance – see also [risk factor](#).

Audit – An assessment of a project or programme in relation to an external set of criteria such as generally accepted accounting principles, sustainable harvest principles, or the standards outlined in this document. Compare to [evaluation](#).

Conservation target – An element of biodiversity at a project site, which can be a species, habitat/ecological system, or ecological process that a project has chosen to focus on. Strictly speaking, conservation targets refer to all biodiversity elements at a site, but typically the term is used as a shorthand for a specific element of biodiversity that a project has chosen to focus on. Synonymous with [conservation target](#).

Community of Practice – A group of practitioners who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.

Conceptual Model – A diagram that represents relationships between key [factors](#) that are believed to impact or lead to one or more [conservation targets](#). A good model should link the conservation targets to [threats](#), [opportunities](#), [stakeholders](#), and intervention points, capturing the logic of the intended change behind planned activities. It should also indicate which factors are most important for measures.

Critical Threat – Direct threats that have been prioritized as being the most important to address.

Direct Threat – A human action that immediately degrades one or more conservation targets. For example, “logging” or “fishing.” Typically tied to one or more stakeholders. Sometimes referred to as a “pressure” or “source of stress.” Compare with indirect threat.

Enabling Condition – A broad or high-level opportunity within a situation analysis. For example, the legal or policy framework within a country.

Evaluation – An assessment of a project or programme in relation to its own previously stated goals and objectives. Compare to audit.

Factor – A generic term for an element of a conceptual model including direct and indirect threats, opportunities, and associated stakeholders. It is often advantageous to use this generic term since many factors – for example tourism – could be both a threat and an opportunity.

Forecasting – A method for assessing the financial performance of a project or programme.

Goal – A formal statement detailing a desired impact of a project, such as the desired future status of a target. A good goal meets the criteria of being *linked to targets, impact oriented, measurable, time limited, and specific*. This is a shift from the traditional definition of the term “goal” which is more akin to vision statement in this document.

Indicator – A measurable entity related to a specific information need such as the status of a target/factor, change in a threat, or progress toward an objective. A good indicator meets the criteria of being: *measurable, precise, consistent, and sensitive*.

Indirect Threat – A factor identified in an analysis of the project situation that is a driver of direct threats. Often an entry point for conservation actions. For example, “logging policies” or “demand for fish.” Sometimes called a root cause or underlying cause. Compare with direct threat.

Information Need – Something that a project team and/or other people must know about a project. The basis for designing a monitoring plan.

Intermediate Result – A specific benchmark or milestone that a project is working to achieve en route to accomplishing a final goal or objective (in this case, “intermediate” typically refers to a temporal dimension).

Iteration – The process of repeating the steps in the project cycle, each time refining and adjusting project plans and hopefully coming closer to the project’s vision and goals.

Key Intervention Point – A factor in your conceptual model where you could develop a strategy to ultimately improve the conservation status of one or more targets.

Logical Framework – Often abbreviated as logframe. A matrix that results from a logical framework analysis that is used to display a project’s goals, objectives, and indicators in tabular form, showing the logic of the project.

Magnification – Taking lessons learned from one project and applying them to others, thus increasing the impact of the first project.

Monitoring Plan – The plan for monitoring your project. It includes information needs, indicators, and methods, spatial scale and locations, timeframe, and roles and responsibilities for collecting data. Sometimes called a monitoring plan.

Method – A specific technique used to collect data to measure an indicator. Methods vary in their *accuracy and reliability, cost-effectiveness, feasibility, and appropriateness*.

Objective – A formal statement detailing a desired outcome of a project such as reducing a critical threat. A good objective meets the criteria of being: *outcome oriented, measurable, time limited, specific, and practical*. If the project is well conceptualized and designed, realization of a project's objectives should lead to the fulfilment of the project's goals and ultimately its vision. In some previous WWF planning systems, objectives were sometimes called "targets." Compare to vision and goal.

Operational Plan – The operational plan for your project. Key components include analyses of financial, human, and other resource requirements and risk assessment and mitigation, governance and communications, and project lifespan/exit strategies.

Opportunity – A factor identified in an analysis of the project situation that potentially has a positive effect on one or more targets, either directly or indirectly. Often an entry point for conservation actions. For example, "demand for sustainably harvested timber." In some senses, the opposite of threat.

Practitioners – All people involved in designing, managing, and monitoring conservation projects and programmes.

Programme – A group of projects which together aim to achieve a common broad vision. In the interest of simplicity, this document uses the term "project" to represent both projects and programmes since these standards of practice are designed to apply equally well to both.

Project – A set of actions undertaken by a defined group of practitioners – including managers, researchers, community members, or other stakeholders – to achieve defined goals and objectives. The basic unit of conservation work. Compare with programme.

Project Area – The place where the biodiversity of interest to the project is located. It can include one or more "conservation areas" or "areas of biodiversity significance" as identified through ecoregional assessments. Note that in some cases, project actions may take place outside of the defined project area.

Project Team – A specific core group of practitioners who are responsible for designing, implementing, and monitoring a project. This group can include managers, stakeholders, researchers, operations staff and other key implementers.

Result – The desired future state of a target or factor. Results include *impacts* which are linked to targets, *outcomes* which are linked to threats and opportunities, and *outputs* which are linked to activities.

Results Chain – A graphical depiction of a project's core assumption, the logical sequence linking project strategies to one or more direct threats and their associated conservation targets.

Risk Factor – A condition under which the project is expected to function, but which can cause problems for the project. Often, a condition over which the project has no direct control. Killer risks are those that when not overcome, will completely stop the project from achieving its goals and objectives.

Scope – The broad geographic or thematic focus of a project.

Stakeholder – Any individual, group, or institution who has a vested interest in the natural resources of the project area and/or who potentially will be affected by project activities and have something to gain or lose if conditions change or stay the same. Stakeholders are all those who need to be

considered in achieving project goals and whose participation and support are crucial to its success.

Strategic Plan – The overall plan for a project. A complete strategic plan includes descriptions of a project's scope and vision, targets, analysis of project situation, Action Plan, Monitoring Plan (monitoring plan), and Operational Plan.

Strategy – A broad course of action that includes one or more objectives and the activities required to accomplish each objective. Strategies are generally developed at key intervention points, although, because of limited resources, you will not always be able to develop a strategy for all key intervention points.

Target – Shorthand for biodiversity/conservation target. Note that in earlier WWF lexicons, this term was also used as a synonym for objective.

Task – A specific action in a workplan required to implement activities, Monitoring Plan, or other components of a strategic plan.

Thematic Target – The focus of a non-biodiversity oriented project. For example, average global temperature for a project dealing with global warming. Compare with conservation target.

Threat – A human activity that directly or indirectly degrades one or more targets. Typically tied to one or more stakeholders. See also direct threat and indirect threat.

Vision – A description of the desired state or ultimate condition that a project is working to achieve. A complete vision can include a description of the biodiversity of the site and/or a map of the project area as well as a summary vision statement.

Vision Statement – A brief summary of the project's vision. A good vision statement meets the criteria of being *relatively general*, *visionary*, and *brief*.

Workplan – A short-term schedule for implementing an action, monitoring, or operational plan. Workplans typically list tasks required, who will be responsible for each task, when each task will need to be undertaken, and how much money and other resources will be required.

Annex 2. Wetlands Teaching Example

The following example is adapted from WWF Australia's Wetland Watch project. Two WWF Australia staff members, Christina Mykytiuk and Richard McLellan, participated in the 2006 pilot run of the WWF online module for Step 1 (Design) and Step 2 (Define) of the WWF Programme Standards. They have graciously permitted the use and adaptation of their material for training purposes.

In the following pages, we provide example outputs for the Wetland Watch project for each of the sub-steps under Step 1 -- Define. This material has been adapted for teaching purposes. The intent is to give another real-world example of how the WWF Programme Standards have been applied, not to explain each product in detail. If you want more in-depth information about a particular step, please refer back to the relevant section of the module manual.

Also note that the example is meant to be illustrative and does not include every product that would result from a full strategic planning process. For instance, although we identify five strategies the project will undertake, we have only developed results chains and the corresponding objectives, activities, and indicators for two of those chains.

Brief Project Description

This example has been adapted from the Wetland Watch project in Southwestern Australia. Although the products that follow have been adapted and do not fully match the actual Swan Coastal Plain context, we still include here a brief project description of the true project that will help orient the reader.

The Wetland Watch project is being implemented on the Swan Coastal Plain – where it has been estimated that 80% of wetlands have been cleared, filled, drained or otherwise destroyed since European settlement. Only 15% are considered to retain high conservation values. Urban encroachment, residential development, incompatible landuse practices, industry, agriculture, drainage, pollution, runoff, weed invasion and climate change continue to have significant impact on the majority of wetlands that remain. It has been estimated that if the current rate of loss continues, almost all of these remaining wetlands are likely to be lost in 10-20 years.

Another significant threat to the wetlands is a lack of awareness on the part of landowners and the general community of the presence of many seasonal wetland types and of the high biodiversity value of these systems. Due to their seasonal nature many wetlands, particularly damplands and palusplains, are not commonly recognised as wetlands and consequently are not valued or managed for conservation. It is in fact due to their seasonality that these systems contain such high plant species diversity and are so biologically valuable. The wetlands are an integral part of the Swan Coastal Plain, and without immediate action to achieve their protection, will remain under direct threat from human disturbance.

Of the high conservation value wetlands that remain, approximately 50% are under private ownership. Many of these are excluded from existing protective mechanisms (such as the Bush Forever strategy). Wetlands on private land, including those covered by protective mechanisms, are particularly at risk due to a lack of awareness by landowners of the value of these systems, as well as due to a lack of knowledge and skills in wetland management. In order to improve the conservation and sustainable management of the wetlands an essential step is therefore to raise awareness of the presence of different wetland types as well as their values. It is also necessary to build community and landowner capacity to sustainably manage wetlands for the long-term through the provision of resources as well as the establishment of support links with local government authorities, state government agencies, non-government organisations and community groups.

In light of the situation described above, WWF-Australia initiated the Wetland Watch project in 2003 to address the urgent need to secure the conservation of high value wetlands on the Swan Coastal Plain. The primary objective of the project is to improve the management and secure the conservation of high value wetlands on the Swan Coastal Plain, focusing on those that lack the benefits of current protective mechanisms and those under significant threat, including wetlands located on private land.

1.1 Initial Team Composition and Operations

The principal members of the Wetland Watch Project Team are:

Team Leader: Christina Mykytiuk.

Initial Project Team: Christina Mykytiuk, Raquel Carter.

Current Core Project Team: Christina Mykytiuk, Brett Brenchley, Richard McLellan, James Duggie.

Table A1. Project Team Knowledge and Skills.

Core Project Team				
Person	Affiliation	Skills/Knowledge	Roles	Comment
Christina Mykytiuk	WWF	Wetland biodiversity; wetland threats; wetland management; landholder extension; stakeholder liaison; project management.	Team Leader; project manager & implementer	Has built rapport with key stakeholders; is well respected.
Brett Brenchley	WWF	Wetland biodiversity; wetland threats; wetland management; landholder extension; stakeholder liaison.	Project Officer - implementer	New team member (Aug 2006); has brought new experience/skills to project including community awareness raising
Richard McLellan	WWF	Developing strategies; strategic planning; project planning, management & implementation; fund-raising; policies; reporting.	Program Leader; project advisor; project manager mentor; assures alignment with national and global objectives.	Key link for WWF policies, procedures and processes – especially reporting. Well networked.
James Duggie	WWF	Water policy; stakeholder identification; political, social & economic contexts.	Project advisor	Served on the project Steering Committee and provided project management during pilot phase. Well networked – especially to gov't.

Table A2. Project Associate Members and Advisors

Associate Members & Advisors				
Person	Affiliation	Skills/Knowledge	Roles	Comment
Ryan Munro	Town of Kwinana	Kwinana Local Government Area and key stakeholders; technical advice and support	Environmental Officer	Provided office space to host Project Officer.
Ron Van Delft	City of Armadale	Armadale Local Government Area and key stakeholders; technical advice and support	Environmental Planner	Provided additional administrative support.
Sarah Horgan	City of Rockingham	Rockingham Local Government Area and key stakeholders; technical advice and support	Environmental Projects Officer	Provided additional administrative support.
Chris Beaton	City of Cockburn	Cockburn Local Government Area and key stakeholders; technical advice and support	Environmental Officer	Provided additional administrative support.
Rosanna Hindmarsh	Chittering Landcare Group	Ellen Brockman catchment area and key stakeholders; technical advice and support	Environmental Officer	Provided additional administrative support; and hosting of Project Officer.
Justine Lawn	Department of Environment	Technical advice and support.	Senior Environmental Officer	Provided project start-up funding.
Trish Pedelty	Swan Catchment Council	Funding, technical advice and support.	Integrated Water Program Manager	Funding from Swan Catchment Council for project 2005/06 – 2007/08.

The Wetland Watch project team is in regular contact on a daily basis, primarily through the use of telephone and email. It also endeavours to meet, face-to-face as a team, or in part, at least once per week. Christina Mykytiuk, Richard McLellan and James Duggie share office space at WWF-Australia's Perth office, whilst Brett Brenchley is remotely located – about 40 kilometres away at the Town of Kwinana. Project Manager Christina Mykytiuk coordinates team meetings, and oversees the activities of the team and the project. Members of the Core Team met face-to-face for at least one to two hours per week during the development of the Wetland Watch Strategic Plan.

1.2 Project Scope and Vision

The **scope** of the Wetland Watch project is predominantly a geographical area, being:

High Conservation Value wetlands on the Swan Coastal Plain and their bordering natural habitat within the Swan Region

This area has a one of the highest concentrations of High Conservation Value wetlands in the Southwest Australia Ecoregion.

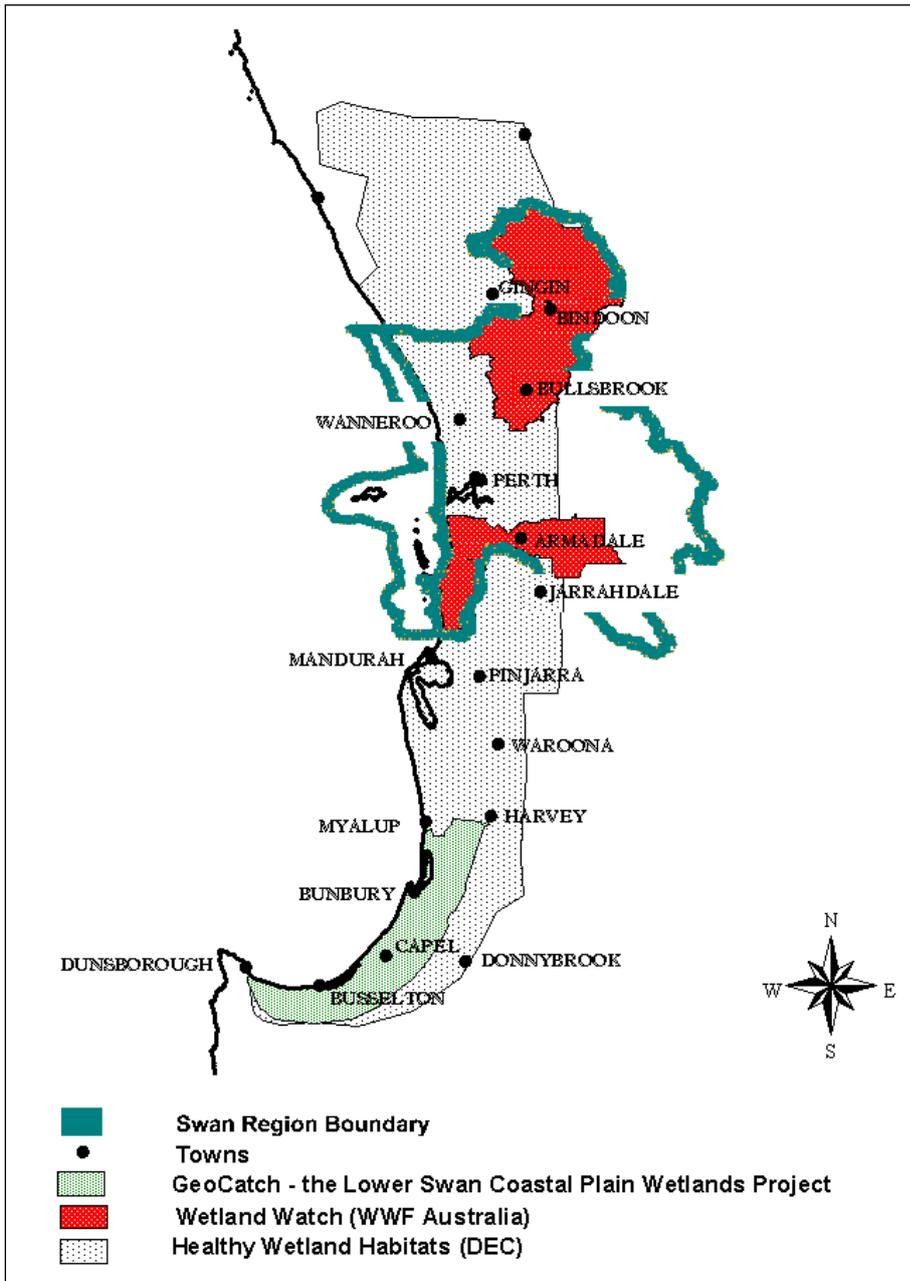
The Wetland Watch project currently operates in two of the main sub-catchments of the Swan Natural Resource Management Region, Western Australia:

- North East - in the Ellen Brook and Brockman River Catchments
- South - in the Local Government Areas of Cockburn, Armadale, Kwinana, and Rockingham (see map below).

The **vision** for the Wetland Watch project is:

To secure the long-term conservation of high value wetlands on the Swan Coastal Plain so that they persevere as rich and viable biodiversity habitats for all wildlife, and for the benefit and appreciation of future generations.

Figure A1. The Swan Natural Resource Management Region, Western Australia.



1.3 Conservation targets

The conservation targets include a mix of ecosystem/habitat and species targets:

- Woodlands adjacent to high-conservation value wetlands
- Seasonally-flooded wetlands (e.g., damplands and palusplains)
- Blue billed ducks
- Shrublands adjacent to high-conservation value wetlands

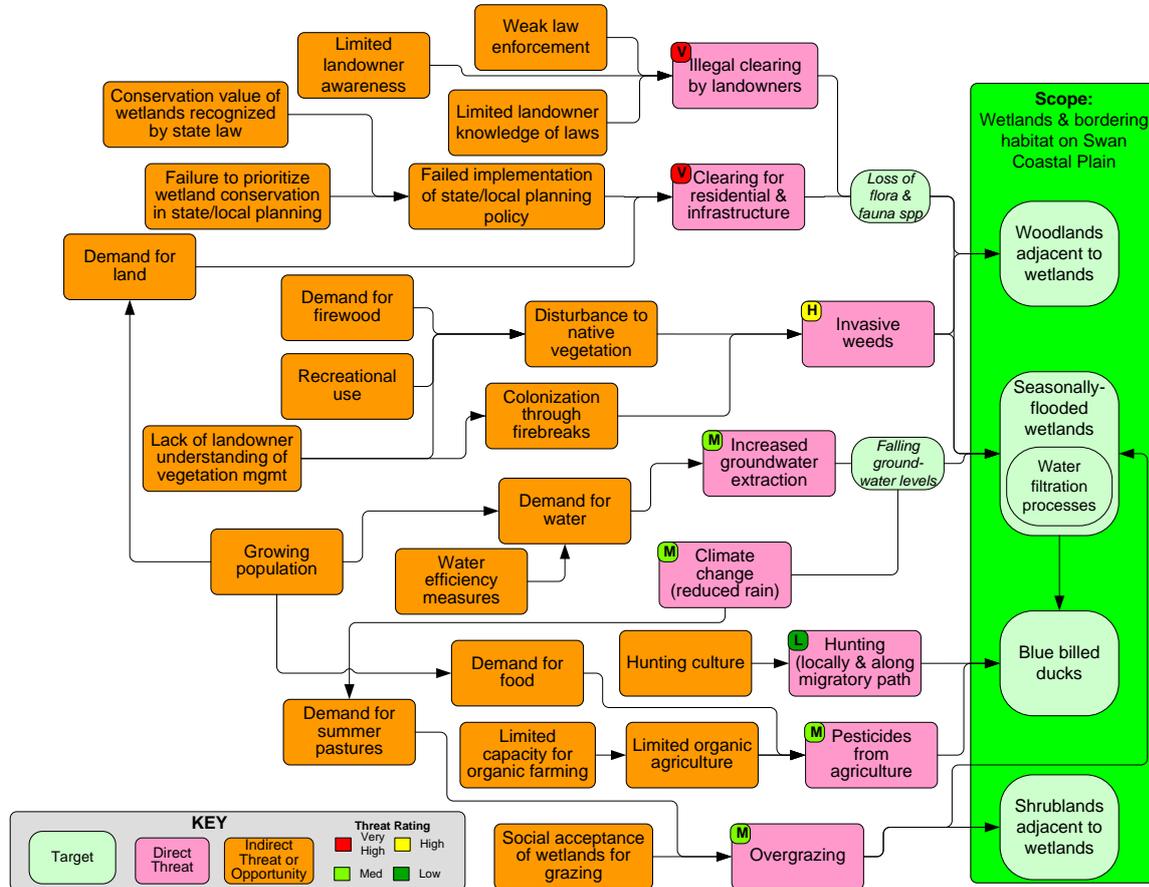
This team also chose to include a “nested” target under seasonally-flooded wetlands: water filtration processes. A nested target is a species, ecosystem, or ecological process that is already captured in

the broader target but that the team feels is helpful to list separately – perhaps because they want to make sure they monitor the status of the nested target or maybe because the target is symbolic or charismatic for the region. For example, a team in Costa Rica might identify a conservation target of lowland tropical forest with tepezcuintle (Agouti paca) as a nested target if ensuring the conservation of that lowland tropical forest is sufficient to guarantee the survival of the tepezcuintle. If, however, the tepezcuintle is subject to a threat that is not affecting the lowland tropical forest – for example, hunting – then, it would be more appropriate to list tepezcuintle as a separate target, rather than a nested target. This is because, even if the coverage of the lowland tropical forest is conserved (coverage remains in tact, forest performs its ecosystem services), the tepezcuintle will still be threatened and could be eliminated at that site. In the wetlands example, if the team is successful in conserving the seasonally-flooded lands, they will also be successful in conserving the water filtration processes it supports. Sometimes teams will use nested targets to make more explicit the biodiversity they care about at their site. See Section 1.3 in the module manual for more detail on nested targets.

It is also useful to point out that the nested target this team chose is an ecological process target – water filtration. WWF conservation targets should be ecosystems, species, or ecological processes. As discussed in Step 1.3 (Week 4 of Module 1), ecological process targets are those processes that create and/or maintain biodiversity. Examples include pollination, seed dispersal, forest connectivity, dispersal of large mammals between protected areas, movements of migratory fish, nursery and recruitment areas for coastal fisheries, and altitudinal migrations by birds. Some teams find it helpful to specify an ecological process as a target if that process is something that the team wants to highlight. In the wetlands teaching example, the team decided to nest its ecological process target of water filtration under the broader target of seasonally-flooded wetlands because, as discussed, adequately conserving the wetlands will guarantee the water filtration functions will continue.

1.4 Conceptual Model

Figure A2. Conceptual Model with Threat Rankings



1.4 Stakeholder Analysis

Table A3. Stakeholder Analysis

Direct Threat or Factor	Stakeholders and their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
Illegal clearing	1. Individual property owners undertaking clearing (legal or illegal) on their property	Personal (recreation, firebreaks, etc.)	High – accounts for only a small proportion of the clearing that occurs, however has significant influence over what occurs on their individual wetland site. Need for education	Yes

Direct Threat or Factor	Stakeholders and their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
	2. Companies/ businesses undertaking illegal clearing on their property	Profit	Medium – has a relatively high level of control over activities occurring on their own land; Not very interested in environmental issues though	Yes
	3. Legal officials not enforcing law	Environmental protection	High – has an interest and stake in stopping illegal clearing, just needs more time and resources	Yes
Clearing for residential development	1. Land Developers planning new residential developments where wetlands are involved	Profit	High – Have an opportunity to go above and beyond legal requirements to conserve and manage wetlands within development sites	Yes
	2. Decision makers (Department of Environment and Conservation and relevant local govt) providing advice/ approval to developments	Environmental protection	High – Responsible for environmental laws and can ensure enforcement.	Yes
	3. Individuals wishing to purchase new home	Shelter, security, comfort, nature	Medium – Driving force behind clearing for development but needs to become aware of impacts of current development methods	Maybe
Invasive weeds - Disturbance to native vegetation	1. Individual property owners managing wetlands	Personal (recreation, firebreaks etc)	High – Can cease, minimise disturbance causing activities. Need for education	Yes
	2. Individuals accessing public wetlands	Personal (recreation)	High – can cease accessing sensitive areas, keep to paths, tracks etc	Yes
	3. Government agencies responsible for managing access to public wetlands	Environmental protection	Medium – can implement measures to reduce public access to sensitive areas. Also to provide education services, interpretive signage. Limited capacity to directly affect the behaviour of individuals	Yes
Increased groundwater extraction	1. Individual property owners extracting for domestic use	Domestic use, recreation	High – Needs education, but likely to change their behaviour, esp. since water efficiency measures are readily available.	Yes

Direct Threat or Factor	Stakeholders and their Contribution to the Threat	Motivations	Feasibility of Stakeholder Contributing to Threat Reduction	Key?
Climate change (reduced rainfall)	1. Consumers worldwide	Livelihood, recreation, general sustenance	Medium – Change needs to happen at the individual level, but it’s a long process with many individuals to influence	No
	2. Companies worldwide	Profit (cheaper to pollute)	Medium – Proportionally large contributor to the problem. Public pressure to become more “green”	Maybe
	3. Governments worldwide	Environmental protection	Medium/High – Pressure nationally and internationally to act; In the government’s interest, but conflicts with corporate interests	Yes
Hunting (locally & along migratory path)	1. Hunters along migratory path	Sustenance, recreation	Medium – Needs awareness raising but unlikely to change behaviour soon because of long-standing traditions and sustenance needs	No
	2. Hunters locally	Recreation	High – Needs awareness raising, may be willing to change behaviour	Maybe
Pesticides from agriculture	1. Consumers	Sustenance, environmental concern	Medium – If made aware of the threat, several will switch to other foods or organic foods. Potential to create more demand for organics.	Yes
	2. Agricultural companies	Profit	High – growing interest in organic market; profitable and good for corporate image	Yes
	3. Local & national governments	Environmental protection	Medium – responsibility of developing and enforcing laws to limit pesticide use. Can make laws more strict but pressure not to do so.	Maybe
Overgrazing	1. Cattle owners	Livelihood, tradition	Low – Deep-seated tradition for summer pastures. Unlikely to change	No

1.4 Threat Ranking

Absolute Target-by-Target

Table A4. Absolute Target-by-Target Rating for Wetland Site

DIRECT THREAT	TARGET: Woodlands adjacent to wetlands					TARGET: Seasonally-flooded wetlands					TARGET: Migratory bird species					TARGET: Shrublands adjacent to wetlands					SITE RANKING	
	SCOPE	SEVERITY	IRREVER SIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVER SIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVER SIBILITY	TOTAL	CLASSIFICATION	SCOPE	SEVERITY	IRREVER SIBILITY	TOTAL	CLASSIFICATION	TOTAL	CLASSIFICATION
Illegal clearing by landowners	3	4	2	16	High	3	4	3	17	High											33	Very High
Clearing for residential & infrastructure	4	4	4	20	Very High	2	4	4	16	High											36	Very High
Invasive weeds	1	2	2	8	Low	3	3	3	15	Medium											23	High
Increased groundwater abstraction						4	3	3	17	High											17	Medium
Climate change (reduced rainfall)						4	3	3	17	High											17	Medium
Hunting (locally & along migratory path)											2	2	3	11	Low						11	Low
Pesticides from agriculture											4	3	2	16	High						16	Medium
Overgrazing																4	3	2	16	High	16	Medium

Relative Whole Site Ranking

Table A5. Relative Whole Site Rating for Wetland Site

DIRECT THREAT	SCOPE	SEVERITY	URGENCY	TOTAL	CLASSIFICATION
Illegal clearing by landowners	6	7	5	18	High
Clearing for residential & infrastructure	7	8	8	23	Very High
Invasive weeds	3	6	7	16	High
Increased groundwater abstraction	5	3	6	14	Medium
Climate change (reduced rainfall)	8	4	4	16	High
Hunting (locally & along migratory path)	1	1	1	3	Low
Pesticides from agriculture	4	5	3	12	Medium
Overgrazing	2	2	2	6	Low
TOTAL	36	36	36		

Note: Normally, a team would not do both an absolute target-by-target threat rating and a relative whole site ranking. For teaching purposes, however, we have included examples of both. Note the differences between the classifications for both methods. Despite their differences, they both give a general sense of which are the greatest threats and which are of lower priority.