OPEN STANDARDS FOR THE PRACTICE OF CONSERVATION

VERSION 4.0 | 2020

Conservation Measures Partnership

ABOUT THIS DOCUMENT

The *Open Standards for the Practice of Conservation* Version 4.0 is the product of inputs, field tests, and discussions among members of the Conservation Measures Partnership (CMP), which has final editorial authority over the *Conservation Standards*. Substantial input was also provided by members of the Conservation Coaches Network (CCNet) and other CMP partners.

What Is the Conservation Measures Partnership (CMP)?

CMP is a partnership of conservation-oriented NGOs, government agencies, and funders that works collectively to achieve greater impact. We seek better ways to design, manage, and measure the impacts of our conservation actions so that we can learn and improve our efforts and contribute our learning to the broader evidence base.

Current CMP members:

African Wildlife Foundation; Bush Heritage Australia; Conservation International; The David and Lucile Packard Foundation; Disney's Animals, Science, and Environment; Durrell Wildlife Conservation Trust; Foundations of Success; The Gordon and Betty Moore Foundation; International Crane Foundation; International Fund for Animal Welfare; Jane Goodall Institute; Keith Campbell Foundation for the Environment; Margaret A. Cargill Foundation; National Fish and Wildlife Foundation; The Nature Conservancy; Nature Conservancy of Canada; Nature Serve; Puget Sound Partnership; Rare; The Summit Foundation; US Agency for International Development; US Fish and Wildlife Service; Walton Family Foundation; Wildlife Conservation Network; Wildlife Conservation Society; and WWF.

Revisions and Updates:

The Conservation Measures Partnership has approved this document. However, as part of the adaptive management process, CMP members will continue to revise and improve it over time. For updated versions, guidance materials, and further information about CMP, visit CMP's website at: www.conservationmeasures.org and the *Conservation Standards'* website at: www.cmp-openstandards.org. We encourage feedback from anyone who uses these standards – please e-mail us at: CMPinfo@conservationmeasures.org.

Conservation Standards 4.0 Revisions Committee:

The following individuals worked together to develop and refine the content reflected in this version. CMP is grateful to them for their time and insights.

Annette Stewart (Bush Heritage Australia), Ari Cornman (California Fish and Game Commission), Arlyne Johnson (Foundations of Success), Ashleigh Baker (Foundations of Success), Brad Northrup (Conservation Coaches Network), Caroline Stem (Foundations of Success), Catherine Payne (Durrell Wildlife Conservation Trust), Diane Detoeuf (Wildlife Conservation Society), Clair Dougherty (Bush Heritage Australia), Dan Salzer (The Nature Conservancy), Felix Cybulla (Independent, Conservation Coaches Network), Gustavo Gatti (Conserve Brazil), Hui Shim Tan (WWF-Malaysia), Ilke Tilders (Foundations of Success), Irina Montenegro (WWF Chile), John Morrison (WWF US), Judy Boshoven (Foundations of Success), Kerryn Morrison (Endangered Wildlife Trust), Lydia Gaskell (WWF International), Marcia Brown (Foundations of Success), Mariano de la Maza (CONAF Chile), Mariella Saenz (Pronatura), Nick Salafsky (Foundations of Success), Oscar Maldonado (Independent, Conservation Coaches Network), Patrick Crist (PlanIt Forward), Philippa Walsh (Community Solutions), Sandra Andraka (UNDP), Thomas Miewald (US Fish and Wildlife Service), and Will Beale (WWF-UK).

In addition, CMP is grateful to the individuals of the *Conservation Standards* community who reviewed various versions of the *Conservation Standards* and provided important input to refine and improve them.

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INTRODUCTION

BACKGROUND

The conservation community is tackling large, complex, and urgent environmental problems where the stakes are high. People around the world are counting on us; they trust us, they work alongside us, and they are giving us significant resources to act effectively to save the planet. We have great potential to have lasting impact, and indeed, we have made inspiring advances. Even so, few conservation organizations or agencies can provide evidence for what is working, what needs improvement, and what should change.

Without more rigorous measurement of effectiveness and disciplined recording of our efforts, how will we know if we are progressing as rapidly as needed to achieve our conservation goals? How will we become more efficient? How will we learn from one another? And how will we be able to demonstrate our achievements and build the public and political will needed to expand our resources and meet the challenges we face?

The conservation community urgently needs robust systems for planning, management, monitoring, and learning. We need to base our actions on available evidence wherever possible and adopt a deliberate, adaptive management approach when we must take urgent action with limited information. In all cases, we need to systematically evaluate our results and use this information to learn from one another about what works and what does not work.

To meet these needs, the Conservation Measures Partnership (CMP) has worked since 2002 to combine principles and best practices from evidence-based conservation, adaptive management, and other decision-support approaches to create the *Open Standards for the Practice of Conservation*[1] (*Conservation Standards* hereafter). The *Conservation Standards* bring together common concepts, approaches, and terminology in conservation project and program design, management, and monitoring in order to help improve the practice of conservation. The *Conservation Standards* can be applied at any geographic, temporal, or programmatic scale.

CMP'S VISION

CMP is committed to the vision that global conservation efforts will be more efficient and effective as we learn how to leverage or replicate what works and avoid what doesn't, basing our learning upon the use of evidence, credible measurement of our effectiveness, and the open sharing of lessons. To realize this vision, our respective organizations aspire to:

- Assess the conservation situation and formulate our problems and solutions in terms of available evidence, expertise, and experience

- State our desired results in terms of conservation outcomes, not actions

- Track our progress toward achieving desired results

- Adapt our strategies based on what we have learned

- Share our results respectfully, honestly, and transparently to facilitate learning and contribute to the evidence base

For a full description of member commitments, see CMP's Charter.

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1.   The term "*Open Standards*" is grounded in the Open Source / Creative Commons movement and means standards that are developed through public collaboration, freely available to anyone, and not the property of anyone or any organization. In version 4.0, CMP has switched to the shorthand term "*Conservation Standards*," which better communicates the intent of these standards. The full name remains unchanged.

PURPOSE OF
THE *CONSERVATION STANDARDS*

To help conservation teams realize this vision, the *Conservation Standards* provide a set of best practices for the successful implementation of conservation projects,[2] oriented around a five-step management cycle:

1.
ASSESS

2.
PLAN

3.
IMPLEMENT

4.
ANALYZE & ADAPT

5.
SHARE

START AT THE APPROPRIATE STEP FOR YOUR WORK

Not all teams will start at Step 1 of the *Conservation Standards*. Each team should consider what work they have already done and where they are in their project implementation. Teams can (and should) use much of their existing work as inputs to the *Conservation Standards* process. And they may find it makes sense to enter the process at a later step and come back to earlier steps as they move through the cycle and learn more about their situation.

The *Conservation Standards* are not a recipe to be followed exactly. Rather, they are meant to guide key project management decisions in conjunction with other decision-support tools, while facilitating collaboration and providing a transparent basis for shared decision-making and learning. We expect teams primarily will use the *Conservation Standards* once they determine where or on what theme they will work, using prioritization tools, such as spatial conservation planning. Likewise, the *Conservation Standards* are designed to complement, not replace, related administrative processes and functions, such as contracting and human resources management. This document intentionally focuses on standards and principles, not "how-to" guidance, which is available from various resources CMP members have developed (see later section on Support for Implementing the *Conservation Standards*). We encourage feedback from anyone who uses these *Conservation Standards* (email us at CMPinfo@conservationmeasures.org).

2.   All conservation efforts at any scale can be either explicitly or implicitly described as "projects" – 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. In this document, we use the term "project" to represent both projects and groups of projects (i.e., "programs") at all scales (e.g., ranging from managing a small pond to an entire ocean)

EVOLUTION OF THE
CONSERVATION STANDARDS

The *Open Standards for the Practice of Conservation* are a product of the collaborative work of the Conservation Measures Partnership. Version 1.0 (2004) drew upon the results of the Measuring Conservation Impact Initiative, a 2002 study that reviewed experiences across seven fields, including conservation, to determine common approaches to good project design, management, and monitoring.

Findings included a series of principles for adaptive project cycle management. Around the same time, CMP also conducted a "Rosetta Stone" exercise to line up the existing planning systems used by different member organizations and identify similarities and differences in approaches and terminology. Building on these products, individual CMP member organizations contributed their project implementation experience to develop and refine the *Conservation Standards* and focus them specifically on biodiversity conservation.

The implementation of the *Conservation Standards* is an ongoing, dynamic process that has included the development of closely aligned organization-specific standards, production of more detailed guidance materials for each step, and training of project teams across the globe. Many CMP member and partner organizations have worked hard to operationalize the *Conservation Standards*. Their efforts have been a driving force in helping the *Conservation Standards* become the common and accepted practice within the conservation community. Likewise, the Conservation Coaches Network (CCNet) is increasingly serving as a global mechanism to promote the *Conservation Standards* and build capacity to implement them. The wide-scale application of the *Conservation Standards* through various mechanisms has provided CMP with helpful feedback for ongoing improvement. Box 1 highlights the main updates in Version 4.0

BOX 1: WHAT'S NEW IN VERSION 4.0?

Version 4.0 reflects the collective input and collaborative effort of CMP members and the broader *Conservation Standards* community. These individuals worked together to propose updates that draw on their on-the-ground experience with implementation. Main highlights include:

- New look and feel but still great technical content
- Provision of greater detail on Steps 3-5
- Clarification about how the *Conservation Standards* support principles from both adaptive management and evidence-based conservation
- Clarification of the relationship between the *Conservation Standards* and other decision-support frameworks
- Refinement of climate change considerations
- Terminology changes to better communicate key concepts
- Incorporation of updates from CMP guidance on social dimensions and human well-being
- Enhanced explanation of how to address thematic projects
- Recognition of spatial dimensions relevant to various steps
- Strengthened focus on the core standards and reduced "how-to" guidance, which is better addressed in more detailed companion documents

RELATIONSHIP OF THE *CONSERVATION STANDARDS* TO OTHER DECISION SUPPORT FRAMEWORKS

The *Open Standards for the Practice of Conservation* are one of several frameworks or processes used to support conservation decision making. Some other examples include Evidence-Based Practice, Structured Decision Making, Strategic Foresight, Systematic Conservation Planning, and Systematic Review (see Schwartz et al 2012 for more information).

While these frameworks have much in common, they are best viewed as complementary approaches with different strengths. The *Conservation Standards* explicitly incorporate many key principles from these frameworks. To effectively implement specific steps in the *Conservation Standards,* teams may wish to mix and match tools and processes more directly associated with these other frameworks. As one example, consequence tables, a tool used in Structured Decision Making, can support the prioritization and selection of strategies. Likewise, situation models and results chains (core *Conservation Standards'* tools) can support other frameworks by providing succinct and effective visual representations of complex relationships.

PHOTO · FELIX CYBULLA · CYBULLA.ORG

USING THE *CONSERVATION STANDARDS*

Using the *Conservation Standards* is part science, part art. You and your team may find that it takes some practice and that you need to be adaptive and responsive to apply them effectively to your real-world situations. For example, although the *Conservation Standards* appear as sequential steps or stages, teams rarely go through the process in a linear fashion from start to finish. Instead, they typically move back and forth through various stages of the cycle. Likewise, not all standards or outputs are appropriate under all conditions and for all projects, so you will need to determine how to adapt these standards for your context.

For each of the five steps of the *Conservation Standards* cycle (Figure 1), this document provides a brief description of the standards of practice (sub-steps) and the expected outputs for that practice (see Annex 4 for a list of all outputs). The *Conservation Standards* process might appear complex or involved, but you probably have already done many of the steps described here. You should not aim to produce flawless outputs as you go through each step. Instead, it is helpful to think of this as an iterative process in which you deliberately, yet rapidly, move through the steps, develop a credible draft of the outputs, and then revise your work over time as your project changes and matures. Likewise, when you encounter data gaps, do not be paralyzed – state your assumptions, move forward with the best available information, and document key decisions and assumptions.

FINDING HELP

The *Conservation Standards* website library hosts a variety of resources, many of which have been reviewed and rated by a cross-institutional panel of *Conservation Standards* community members. New resources are regularly added as they come in.

The Conservation Coaches Network website can link you up with coaches, as well as more specific materials to support facilitating teams through various steps in the *Conservation Standards*.
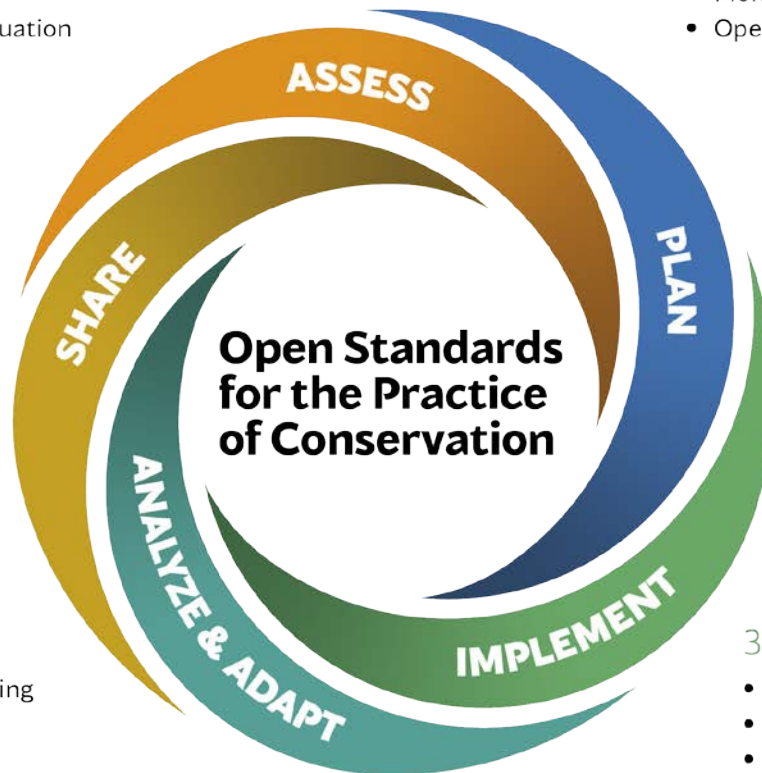

PHOTO: DAN SALZER / THE NATURE CONSERVANCY

Figure 1.
Open Standards for the Practice of Conservation Project Cycle

1. ASSESS
- Purpose & team
- Scope, vision, & targets
- Critical threats
- Conservation situation

2. PLAN
- Goals, strategies, assumptions, & objectives
- Monitoring plan
- Operational plan

5. SHARE
- Document learning
- Share learning
- Foster learning

3. IMPLEMENT
- Work plan & timetable
- Budget
- Implement plan

4. ANALYZE & ADAPT
- Prepare data
- Analyze results
- Adapt plans

Support for Implementing the *Conservation Standards*

There are various ways project teams can get hands-on support and guidance for implementing the high-level standards and principles laid out in the *Conservation Standards*.

Coaches

Because using a results- and evidence-based approach to planning and implementation often reflects a radical shift in the way organizations and individuals think and work, it can be very helpful for teams new to the *Conservation Standards* to work with a coach.

Some organizations have in-house coaches trained in the *Conservation Standards* and key facilitation techniques to help teams work through the process. In addition, some organizations and consultants specialize in providing *Conservation Standards*-oriented coaching and facilitation. Many of these individuals are part of the Conservation Coaches Network (CCNet), a close partner of CMP that aims to foster an engaged cadre of coaches on every continent to support teams working to protect the most important places and solve the most challenging issues for their regions. CCNet also provides training, guidance, and certification for practitioners who want to become coaches.

Guidance and Tools

CMP member organizations and partners have developed a variety of guides and tools that provide step-by-step guidance or deeper detail on key topics. As shown in Figure 2, these resources help support the implementation of the principles and practices. They include materials such as organization-specific how-to guides, classification systems developed across institutions (e.g., conservation threats and actions classifications), online courses, case studies, videos,

and course curricula. These resources are available via the *Conservation Standards* website (www.cmp-openstandards.org), with most guidance materials vetted and rated by a cross-institutional committee representing both CMP and CCNet members. In addition to these materials, and as discussed earlier, there are a variety of decision-support resources outside the *Conservation Standards* traditional toolbox (e.g., spatial prioritization tools, scenario planning, and consequence tables) that teams may also wish to use.

Figure 2.
Relationship between the *Conservation Standards* and Associated Resources

Miradi Software

Many software programs can be used or adapted to support one or more steps of the *Conservation Standards.* Miradi Software (available in several languages) is designed specifically to walk practitioners through key steps of the *Conservation Standards.* The software serves as a tool to visualize and document what teams want to conserve, key threats and opportunities, priority strategies and specific actions, expected results, associated goals and objectives, and progress toward results.Through standard colors and shapes, Miradi also helps create a visual language to facilitate communication among those familiar with the *Conservation Standards.*

In addition, Miradi provides various areas to document key discussions, evidence, and decisions, an important feature to support adaptive management, evidence-based conservation, and learning more broadly.[3] As Miradi moves to the cloud (via Miradi Share), it provides additional capabilities for team collaboration and cross-project and -organizational learning. Miradi Share also supports the Conservation Actions and Measures Library (CAML), a library of vetted templates and examples for defining theories of change or expected results associated with conservation strategies. Despite these benefits, Miradi may not be appropriate in all contexts, so your team will have to determine whether it works for you.

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3. See glossary for definitions of underlined terms.

Miradi and Miradi Share websites and Miradi's
YouTube channel offer a variety of resources, including
videos, short guides on specific topics, and narrated
presentations.

General Principles and Considerations

There are several essential principles and
considerations relevant to all steps of the *Conservation
Standards*. Annex 3 provides important details on
these, while Box 2 provides a high-level summary.

On the last consideration in Box 2, there are endless
debates as to the relative meaning of technical terms
such as goals, objectives, strategies, activities, targets,
milestones, outputs, and results. While there is no
universal, consistent understanding, the *Conservation
Standards* maintain that it is very important that the
members of your project team and the people with
whom you work have a clear and common definition of
the terms you choose to use. With this in mind, the
technical terms in this document were carefully
selected, underlined when first described, consistently
used thereafter, and defined in the glossary at the end.
As the *Conservation Standards* evolve, we may find
some terms that need updating to improve
communication and adoption of key principles and
steps. Indeed, version 4.0 includes some updates and
clarifications on terminology (Table 1).

BOX 2: SUMMARY OF KEY PRINCIPLES AND CONSIDERATIONS

**When using the *Conservation Standards*, it is
important to keep in mind the following (more
detail in Annex 3):**

Principles

- Collaborate with partners
- Involve stakeholders
- Appropriately use and contribute to the
  evidence base
- Use adaptive management in the face of
  uncertainty
- Document your decisions
- Foster a learning environment

Considerations

- These standards will change over time
- These standards represent the "ideal"
- These standards assume some priority-setting
  has already taken place
- Few projects will start applying the *Conservation
  Standards* at the beginning of their planning
  efforts
- Each project is different and thus needs to
  customize their use of the *Conservation
  Standards*
- These standards apply to projects at any spatial
  and/or temporal scale
- These standards focus on conservation as the
  main aim but can be adapted
- The *Conservation Standards* can be
  implemented using a variety of tools
- These standards seek to clearly define and
  consistently use terminology

Table 1.
Updated Terminology in Version 4.0

PREVIOUS TERM/CONCEPT	NEW TERM/CONCEPT	RATIONALE FOR UPDATE
Open Standards	*Conservation Standards*	*"Conservation Standards"* better describes the intent of these standards. It will facilitate communication with new audiences and Internet searchability. The full name will remain the *"Open Standards for the Practice of Conservation."*
Conceptual Model	Situation Model	"Conceptual model" could be very broad. "Situation model" provides a clearer link to the situation analysis process (which can be displayed in a diagrammatic form as a situation model).
Assumptions / Results Chains	Theory of Change	We will not lose "assumptions" or "results chains" but have added "theory of change" to more easily translate to common evaluation language. Results chains are a visual diagram of a theory of change.
Direct Threat	Direct Threat or Pressure	"Pressure" is now an official CS synonym. This avoids the problem of some actors being labeled as "threats."
Strategy	Strategy or Intervention	"Intervention" is now an official synonym for "strategy." This change recognizes that strategies may be high-level in nature (e.g., Promote consumer consumption of sustainable seafood) or more specific (e.g., Implement awareness campaign or Influence retailer purchasing). While teams may use descriptors such as "high-level" or "specific" to clarify the nature of the strategy, they could also use "intervention" as an accepted synonym for the more specific, targeted courses of action.
Action *(not explicitly defined)*	Action	"Action" is now a collective term for strategies and activities. We had used this term generically in the past (e.g., Conservation Actions and Measures Library or Conservation Actions Taxonomy), but we had not explicitly defined it as encompassing all levels.
Names of Steps: 1. Conceptualize 2. Plan Actions and Monitoring 3. Implement Actions and Monitoring 4. Analyze, Use, Adapt 5. Capture and Share Learning	Names of Steps: 1. Assess 2. Plan 3. Implement 4. Analyze & Adapt 5. Share	The new steps use simpler terms and less jargon. Shorter names are more memorable and work well with cycle images showing only the high-level names.
Brown oval = human well-being target	Dark green oval (and brown)	This stylistic change addresses concerns about the use of brown for human well-being targets. Brown can still be used (as in this document, as updates to Miradi are not yet available), but dark green is a new option that shows that all targets are similar but different.

INCORPORATING CLIMATE CHANGE INTO THE *CONSERVATION STANDARDS*

Climate change is occurring and will continue for the foreseeable future. The global average temperature is projected to increase more than 2.0° C in coming decades, with associated sea-level rise and changes in seasonality, storm events, and the timing and volume of precipitation.

Although barely on the radar screens of many conservationists at the time of the first drafting of the *Conservation Standards*, addressing climate change is now a global conservation priority and an issue that practitioners must consider in the design and management of any conservation project. With this in mind, the *Conservation Standards* include climate change text boxes focused on climate adaptation, as opposed to mitigation. Both are important responses, but mitigation actions fit neatly within the existing *Conservation Standards* framework. Preparing for adaptation, however, requires the development of new tools or the modification of existing tools.

Throughout this document, we will use green boxes like this to point out climate-specific considerations relevant to various steps. In general, we emphasize breaking down and understanding the potential effects of climate on key species and ecosystems, its effects on people, and the indirect effects of people's reactions to climate changes on key species and ecosystems. Due to the uncertainty around future climate, as well as the models used to represent potential future climates, we suggest using a range of climate change scenarios to bound your uncertainty.

ASSESS

ASSESS

This step in the *Conservation Standards* cycle involves specifying the basic parameters for your project and assessing your overall context. In particular, it involves determining the purpose of the planning, identifying who will initially be part of your project team, and articulating your project's geographic and/or thematic scope, your vision of what you hope to achieve, and the conservation targets on which you will focus. It also includes making sense of your project's context, including identifying threats, opportunities, and key stakeholders.

1A. Define Purpose and Identify Project Team

Define Purpose of *Conservation Standards* Work

You can enter the *Conservation Standards* cycle at any point in the process. Wherever you enter, you should start by reviewing and clarifying the purpose of your work, including the specific decisions and decision makers it will support. As part of this review, you may find it useful to revisit your organization's mission and current priorities to help clarify decisions already made, decision-maker expectations, timing of decisions, and assumptions about funding and other resources. If you are collaborating with partners, you should also compare your respective missions and priorities at the outset and identify where your needs and values may be compatible, as well as where they may conflict. Likewise, if you expect to work with a specific donor, you may want to encourage the use of the *Conservation Standards* as the primary process, or at least crosswalk terms and steps to reduce confusion.

You should also draw on what you and others have learned from earlier iterations of this project and/or similar projects. This review will help you determine how much effort you should invest in this process and what steps are relatively more important than others (for example, if targets and goals have already been identified and a threat assessment already exists, then you may be able to review them and move on to developing your situation analysis and strategies).

Project Team

A project is ultimately designed and implemented by a group of individuals who comprise your project team. Team members often include individuals from your organization's staff, as well as other key partners. One team member typically serves as the project leader, responsible for the overall project coordination and moving the team forward. In some organizations, you may also have a higher-level project sponsor or owner to whom the team reports. You should be clear about who is on your team and what the roles and responsibilities of each member are. The key, however, is to recognize and make use of existing skills and experience and identify gaps to ensure that the project moves forward with the best available knowledge. The team composition may change as you move through the management cycle. If you know who will support project implementation, you should involve them from the start. In addition to the project team, you may also need to identify one or more advisors to whom the core team can turn for honest feedback and counsel and who can champion your cause. Once you have done your stakeholder analysis (Step 1D), you should revisit your project team and determine whether any of the stakeholders identified should be part of your project team. This will require your team to be flexible and open to adding new members, if warranted.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Identification of purpose, decision makers, and decisions needed that this work will support

♦ Selection of initial project team, including project leader, core members, and advisory members

♦ Identification of existing skills among team members and key gaps you should fill

♦ Designation of roles and responsibilities

1B. Define Scope, Vision, and Conservation Targets

Scope

Before you think about what you will do (the strategies and activities you will implement), you should have a good understanding of what you broadly hope to accomplish, as this will be the foundation of all of your planning work. A project's scope defines what the project intends to affect but does not necessarily limit where actions that affect the scope take place. There are three common options:

- **Place-based scopes** have a geographic focus and include efforts to conserve or effectively manage ecoregions, ecosystems, priority areas, or protected areas. Place-based scopes may be influenced by similarity of ecosystem types and functions, similarity of threats, the socio-ecological setting, a defined geography, and/or political jurisdictions and management units. An example of a place-based scope is a national park, encompassing the different ecosystems and biodiversity contained within the park boundaries.

- **Target-based scopes** focus on specific species or ecosystems. Species-based scopes may also include a part or all of the species' life history across relevant geographies. An example of a species-based scope might be a global tiger program, focusing on wild tigers across multiple landscapes that offer the best chance of growing the population. An example of an ecosystem-based scope might be mangroves in Asia or global grasslands.

- **Thematic-based scopes** include focused efforts to address specific threats, opportunities, or enabling conditions. An example of a thematic-based scope might be a project focused on illegal logging that aims to reduce timber imported illegally into the European Union or a climate program that seeks to decrease national CO_2 emissions from transportation, homes, food, and energy production.

Regardless of the scope you define, you will need to think about the appropriate scale to achieve the desired impact (e.g., you may need to work across multiple protected area projects that contribute to an overall protected area network). You should also think about the temporal dimension of your work, which will influence how much you can achieve. In most cases, a one-year or five-year project is not going to significantly alter the viability of an ecosystem or species. But, it may influence human behaviors or policy changes that could ultimately affect ecosystem or species viability.

In any project with a geographic footprint, it is often helpful to develop a spatial map that includes key conservation management units and/or political boundaries. This in turn may suggest additional partners, targets, and threats to be considered within the project area.

Vision

In addition to defining the scope, it is also necessary to decide on a clear and common vision – a description of the desired state or ultimate condition that you are working to achieve. You can summarize your vision in a vision statement, which meets the criteria of being *relatively general, visionary, and brief* (see Annex 2 for descriptions of these criteria). A project's vision should fit within the context of all project team organizations' overall missions.

CLIMATE CHANGE CONSIDERATION 1
SCOPE

In defining your scope, consider whether you are focusing on biodiversity conservation and need to take into account how climate change will affect your conservation targets or if your focus is on reducing the impact of climate change on humans by protecting and restoring ecosystems (i.e., "ecosystem-based adaptation").

This high-level decision could influence your geographic scope definition. When selecting your scope, you should think beyond today and consider likely climate scenarios. You should think about whether ecosystems or species ranges are likely to shift (latitudinally or altitudinally) or the distribution of species within an ecosystem is likely to change. If this is the case, you will probably need to increase the size of your project scope.

You should always base your scope on the best available scientific knowledge, but potential climate impacts are not well-understood. Because of this, monitoring will be key for testing hypotheses and determining if you will need to alter your scope over time.

Conservation Targets

All projects should select a limited number of conservation targets (also known as biodiversity targets).[4] These targets are specific, tangible entities that the project is working to conserve that represent and encompass the ultimate aims of the project. They form the basis for setting goals, selecting actions, and measuring effectiveness. The specificity of conservation targets will vary with the scope or type of project:

- **For place- and target-based projects,** conservation targets are ecological systems/habitats and/or specific species chosen to represent and encompass the full suite of biodiversity in the scope. For place-based projects, conservation of the chosen suite of targets should, in theory, ensure the conservation of all ecosystems and species within the project scope. Most place-based projects can be reasonably well-defined by eight or fewer well-chosen conservation targets. Larger scale place-based projects may require either a few more targets or coarser targets (e.g., instead of one specific bird species, an assemblage of species). Projects may also focus on a single conservation target such as an iconic flagship species (wild tigers) or an ecosystem (mangroves).

- **Thematic-based projects** more narrowly focus on specific factors related to conservation targets, such as a threat, driving factor, or ecosystem service. Teams may identify the specific relevant ecosystem features or species or may only more generally identify "biodiversity" or "natural resources" as their conservation targets.

Where relevant, it can be helpful to map the current geographic extent of a target. The selection of conservation targets typically requires input from experts and analysis of spatial data at various resolutions. It may also be helpful to map the historic and/or anticipated future extent of a target (and related threats as described in Step 1C) under different scenarios (Figure 4 in that section provides an example). Moreover, if your conservation target is wide-ranging, (e.g., a bird species across its range or the full extent of an ecosystem type), it may be useful to divide it into spatially explicit sub-targets (e.g., specific populations of the bird species or life history components, such as breeding, migration, non-breeding).

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4   We recognize the term "target" can be confusing, and some people use it to refer to the value within a goal or objective that they are trying to attain. For version 4.0, we tried hard to identify an alternative but did not reach consensus. A few terms that had a fair amount of support (but also some strong opposition) include "focus," "value," and "interest." Your team may wish to use one of these terms if they work better for your context.

Ideally, you should also determine the current status of each conservation target. At the most basic level, this involves using available evidence to develop an overall assessment of the health or "viability" of each conservation target. More detailed status assessments involve specifying key attributes of each conservation target, determining indicators for each attribute, outlining the acceptable range of variation for each indicator, and finally determining the current status (i.e., baseline value or trend) of the attribute in reference to this range of variation. This information sets the foundation for developing good goals for your conservation targets, monitoring target status, and understanding key threats to your targets. In some cases, however, it may be better to address target viability later in the *Conservation Standards* process, especially if you need to consult with subject experts and/or you are still refining your targets.

CLIMATE CHANGE CONSIDERATION 2
CONSERVATION TARGETS

When you consider the potential impacts of climate change later in the process, you will learn more about whether the ecosystems, habitats, and species will remain in your project's geographic scope for the foreseeable future. You will also learn about how climate change might affect each target's viability and whether, in light of projected changes, your project's actions can still be effective at maintaining or improving the health of your conservation targets. Once you have analyzed the potential impacts of climate on your conservation targets, we recommend revisiting your targets and goals.

PHOTO: NATURE CONSERVANCY CANADA

Human Well-being Targets

It can also be important to show how your conservation work ultimately affects humans. Indeed, for some teams, human well-being may be an equally important focus. In such cases, teams can add human well-being targets.[5] In the context of a conservation project, human well-being targets focus on those components of human well-being affected by the status of conservation targets and associated ecosystem services. Particularly relevant elements of human well-being may include livelihoods, health, social cohesion, security, and governance, especially as related to established social development goals (Box 3). Human well-being targets can be added as part of the Assess Step - either when identifying conservation targets or when completing your situation analysis (Figure 3 shows a generic example of the relationship between conservation and human well-being targets).

PHOTO: DAVID WILLIAMS / AFRICAN WILDLIFE FOUNDATION

BOX 3: USING SDG TO HELP FRAME HUMAN WELL-BEING LINKAGES

The Sustainable Development Goals (SDGs) are a United Nations-backed set of aims to address global challenges and to ensure a more sustainable future for humanity and the environment. Overall, the SDGs outline 17 goals that consider improving human well-being, reducing environment degradation, and creating the conditions to achieve and balance both. As an agenda to achieve long-term global sustainability, the goals interconnect with one another and can provide insight for thinking about human well-being and biodiversity targets in conservation projects. Teams working on conservation projects that also seek to address human needs and well-being may want to review the list of SDGs to select potential human well-being, and environmental targets and to better understand and clarify project contributions toward these global aims.

5   See previous footnote.

Figure 3.
Generic Situation Model Extract Showing Scope, Vision, and Targets

Conservation scope:
broad parameters of
the project

Ecosystem service:
service that well-
conserved targets
may provide & that
benefit humans

Human well-being scope:
human populations of
interest to the project

Project vision:
ultimate state or
condition the
project is working
to achieve

Conservation targets:
ecosystems or species
a team chooses to
represent the overall
biodiversity of a site or
the focus of a
thematic project

**Conservation
Scope**

Vision

Conservation
Target

Conservation
Target

Ecosystem
Service

Ecosystem
Service

**Human Well-being
Scope** (as affected by
conservation)

Human
Well-being
Target

Human
Well-being
Target

**Human well-being
targets:** components of
human well-being
affected by the status of
conservation targets

OUTPUTS FOR THIS STEP INCLUDE:

♦ Brief description of the project scope, including a map, if appropriate

♦ Vision statement for the project

♦ Selection of conservation targets, including a brief explanation of why they were chosen, and if appropriate, a description and/or map showing each target's location

♦ Description of the viability status of each priority conservation target

♦ If relevant, selection of human well-being targets and identification of ecosystem services, including a brief explanation of why they were chosen

1C. Identify Critical Threats

Once you have settled on your priority conservation targets, you need to use available evidence to identify the underlined direct threats (often called underlined pressures)[6] that influence them (and the actors behind those threats). Direct threats are primarily *human activities* that immediately degrade a conservation target (e.g., unsustainable fishing, unsustainable hunting, oil drilling, construction of roads, industrial wastewater, or introduction of exotic invasive species). Direct threats can also be *natural phenomena* altered by human

activities (e.g., increase in extreme storm events or increased evaporation due to global climate change) or in rare cases, *natural phenomena whose impact is increased* by other human activities (e.g., a potential tsunami that threatens the last remaining population of an Asian rhino). See CMP's Conservation Threats Classification for more examples. Where appropriate, it can be helpful to map the spatial footprint of a threat. Doing so can help you identify key threats, as well as the drivers behind them (see Figure 4 for a simplified example from a chimpanzee project).

Figure 4.
Simplified Spatial Maps Depicting Chimpanzee Targets and Threats
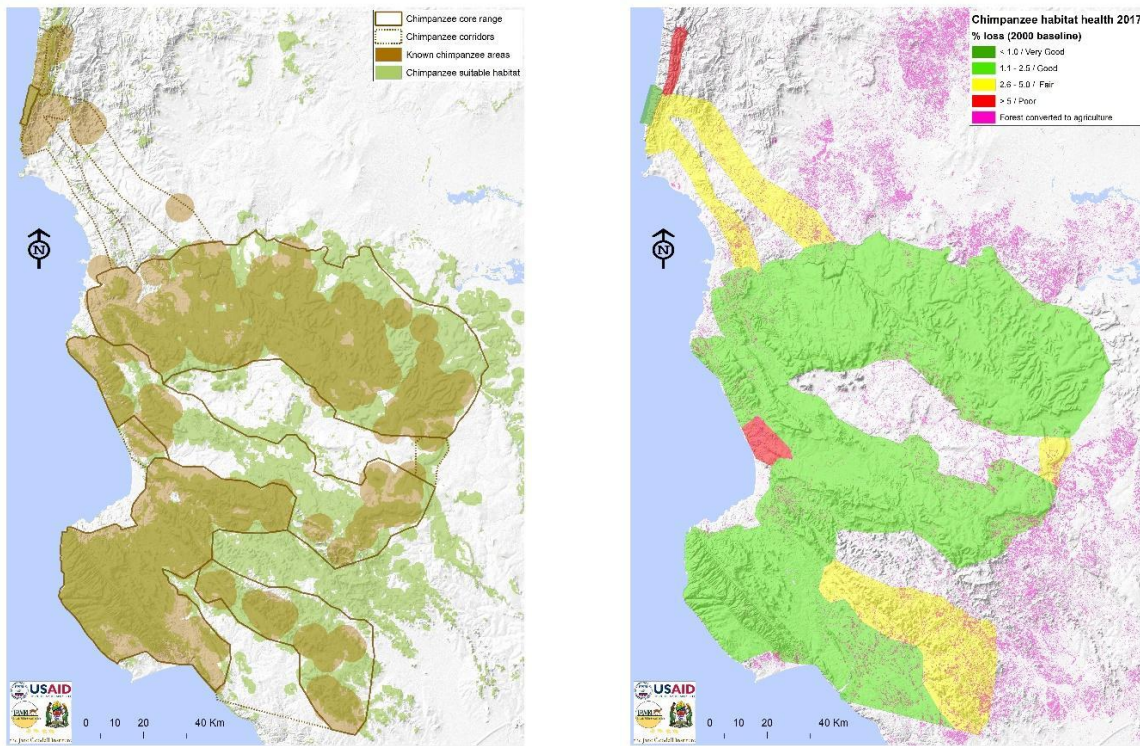
Chimpanzee habitat target

Agricultural conversion threat & habitat loss

Source: Adapted for Conservation Standards *use by Lilian Pintea, Jane Goodall Institute*

In identifying threats, it is important to specify the actors (e.g. illegal fishers, poachers, specific companies). Your team may want to lump or split some threats depending on whether the actors are the same (e.g., you may split "poaching" into "poaching by organized syndicates" and "poaching by villagers").

Being explicit about the actors can assist your team with your stakeholder analysis and strategy development.

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6   The synonym "pressure" may be helpful in cases where the term "threat" may not be well-received by stakeholders (e.g., ranchers or loggers) whose actions or professions might be identified as a "threat." It is also helpful to use adjectives such as "unsustainable" or "illegal" to clarify the nature of the threat (e.g., unsustainable ranching).

As part of your analysis of the project's context, it is important to prioritize the direct threats that affect your conservation targets so that you can concentrate your actions where they are most needed. In particular, you should try to determine your critical threats – the ones that are most important to address. You can use a number of threat rating and ranking tools to help you prioritize. Most tools assess the extent of the threat and the severity of its impacts on the conservation targets. Taken together, these two criteria assess overall threat magnitude. Other frequently used criteria include permanence/irreversibility and urgency. Some common options for prioritizing threats include: an absolute rating of each threat as it affects different conservation targets, a stress-based rating which assesses the effect of stresses (altered key attributes) on targets and the contribution of different threats to the stresses, and a relative ranking which compares different threats to one another. It is important to consider the entire suite of direct threats and not limit your analysis to the threats your team or organization has the expertise or resources to anticipate and address.

CLIMATE CHANGE CONSIDERATION 3
ASSESSING THREATS AND VULNERABILITY

Climate change can present new threats to a target and/or interact with conventional threats. It may also exacerbate an existing threat or stress.

A vulnerability assessment, which analyzes the potential negative effects of climate change, can be a useful tool. The level of detail in a vulnerability assessment can vary widely, depending on the context. While most are quite general, it is useful for a vulnerability assessment to focus on the project targets in question. This assessment involves identifying specific projected changes in climate (e.g., temperature increases, precipitation changes, extreme events like storms and droughts, ocean acidification, and sea level rise) and how they will affect your targets, either directly (e.g., drought increases susceptibility to extreme wildfires) or indirectly (e.g., droughts are becoming more frequent so people want to build dams to store water, which negatively impacts freshwater connectivity). You will want to incorporate this information into your situation model (Step 1D).

Because there is so much uncertainty about how the climate will change, human responses to these changes, and how species and ecosystems will fare, it is good to do at least two climate scenarios (usually derived from using multiple climate models) to understand the range of potential futures.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Identification of direct threats and, if relevant, a map showing the spatial footprint for each threat as they intersect targets

♦ Climate change vulnerability assessment with appropriate level of detail for the context

♦ Rating or ranking of direct threats to identify critical threats

1D. Assess the Conservation Situation

This sub-step builds on work you have already done related to your project context (scope, conservation targets, and direct threats). These are all elements of a situation analysis – a process that will help you and your project team create a common understanding of your project's context, including describing the relationships among the social, economic, political, and institutional systems and associated stakeholders that affect the conservation targets you want to conserve. Depending upon the scale of the project and the resources available to it, a situation analysis can be an in-depth formal review of existing evidence and study of the area/problem or a less formal description based on input from those familiar with the area/problem. This sometimes-overlooked step is one of the most important in the planning process. By understanding the context, you will be better equipped for designing actions that will achieve your conservation goals and objectives.

In this sub-step, you should review available evidence to complete your situation analysis, identifying the key factors that drive the direct threats or maintain poor viability and ultimately influence your conservation targets. These include indirect threats (also known as root causes and drivers), opportunities, and enabling conditions. These factors can range in scale from local to global. To the degree that it is feasible and useful, you should identify the actors behind key factors for clarity and strategic purposes.

Stakeholders include those individuals, groups, or institutions that have a vested interest in or can influence the natural resources of the project area and/or that may be affected by project activities and have something to gain or lose. Having a good understanding of the stakeholders is a crucial part of a situation analysis.

A stakeholder analysis can help clarify and differentiate the key stakeholders, their roles, primary interests, level of influence, and opportunity for engagement. It is important to consider both powerful and influential stakeholders and those that might be disadvantaged or marginalized. In particular, teams should consider how their process might influence the representation and engagement of different stakeholders in decision making and how that might ultimately affect their well-being.

As you review your stakeholders, keep in mind which stakeholders are likely to be important strategic partners for the project (Step 1A). You also want to remember that you and your team are stakeholders and should be included in your stakeholder analysis.

You should use your stakeholder analysis to select target audiences whose behavior you want to affect. Whether you want to influence policymaking, corporate practice, or consumer choices, all involve attitude and/or behavior change. It is not always possible to address the actors directly, especially if they knowingly engage in illegal activities. In these cases, you may need to work with other actors and/or associations that can influence your target audience's behavior. Your stakeholder analysis will be an important starting point for brainstorming strategies (Step 2A).

One way to capture threats, opportunities, and key actors identified in your situation analysis is to construct a situation model (also known as a conceptual model). A situation model is a tool that visually portrays the relationships among the different factors in your situation analysis (see Figure 5 for a generic model and Figure 6 for an example based on a real-world, place-based project). A good model illustrates the main cause-and effect relationships that exist within the project area or theme and, where appropriate, the key actors. It should include the most important details yet be as simple as possible. To this end, a situation model for a large-scale project will need to be at a coarser grain than a model for a smaller-scale project.

Figure 5.
Generic Situation Model Showing Project Context

Factors include direct threats, indirect threats, and opportunities

Dotted lines can help depict uncertainty in relationships

Each factor has one or more stakeholders associated with it

+ signs can help signal an opportunity

+ Opportunity

Indirect Threat

Indirect Threat

Direct Threat

Direct Threat

Project Scope

Vision

Conservation Target

Conservation Target

+ Opportunity

Indirect Threat

Direct Threat

Biophysical Factor

Indirect Threat

Indirect Threat?

Question marks can show uncertainty about the presence of a factor

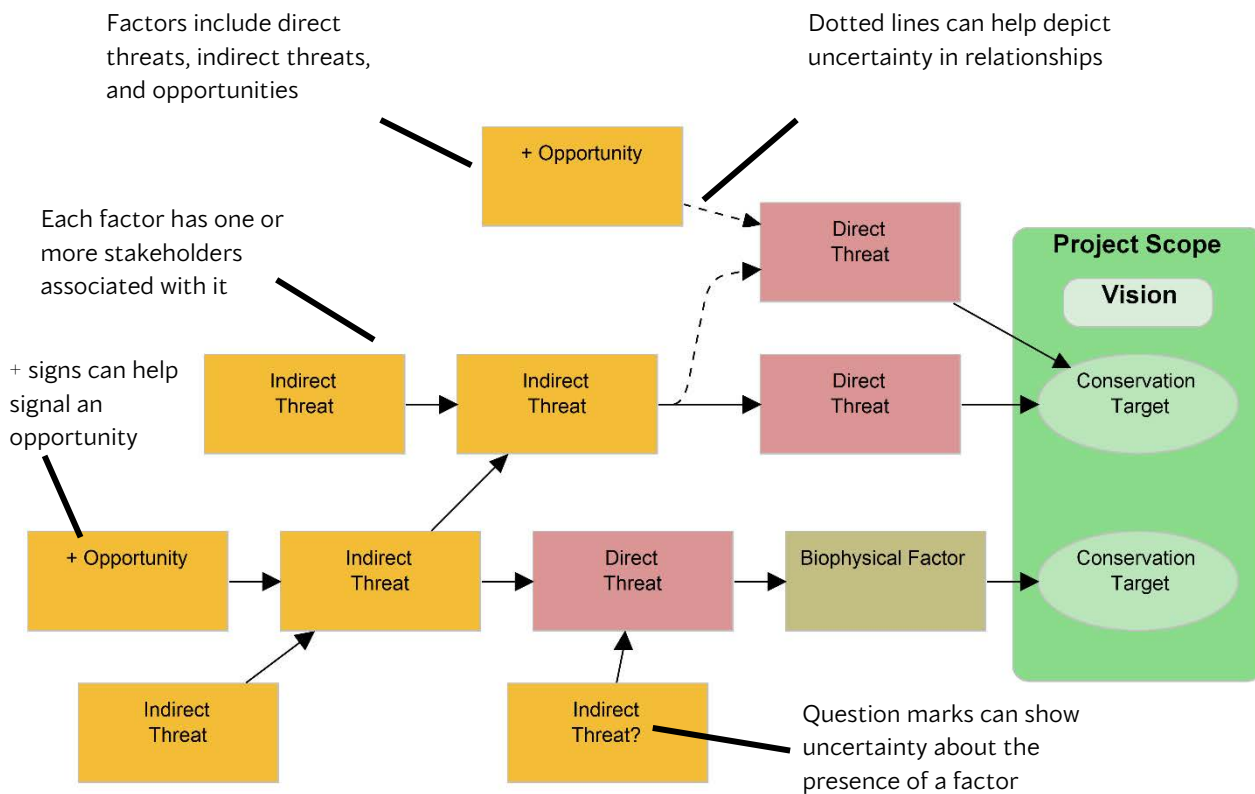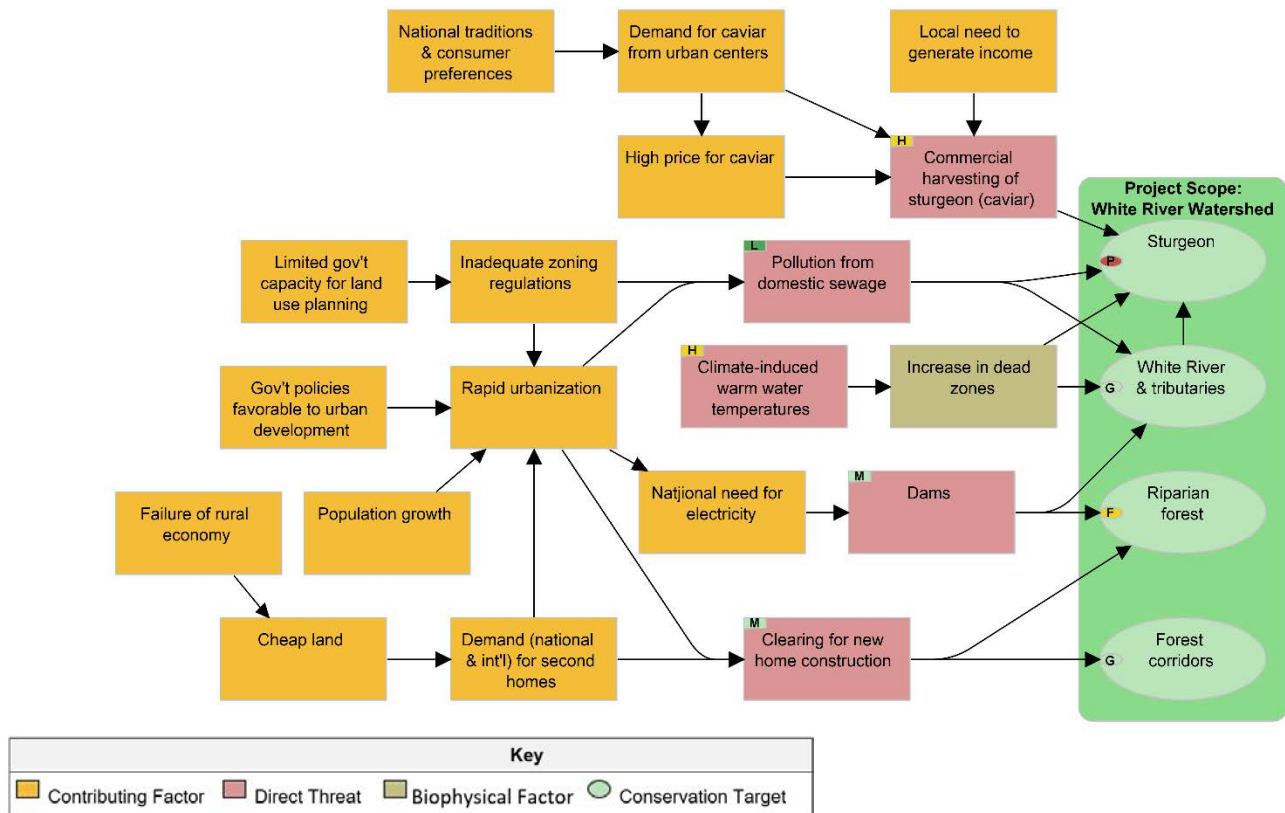PHOTO: TIM RUE / PUGET SOUND PARTNERSHIP

Figure 6.
Example Situation Model for Watershed Site

To make sure that your situation model generally represents your team's understanding of your context, it is good to build it together as a team and base it, as much as possible, on existing evidence. It may also be useful to develop a spatial map of your situation. Likewise, it is ideal to ground truth or field test your situation model and spatial map with key stakeholders and partners inside and outside the project team to make sure that the model and map reflect a shared understanding of the situation.

When formulating your situation model, take note of how much support exists for the connections you make between the different elements. The evidence for these linkages may take different forms – for example, published literature, data from researchers, expert opinion, or assumptions based on the experience of stakeholders. Likewise, the evidence may differ in strength of inference, from certain to unknown. Do not merely focus on what you already understand. As you develop and ground truth your situation model, you should also keep track of what

you do not know (i.e., knowledge gaps or conflicting evidence) and what might require further research or analysis – eventually, these information needs might require a specific strategy or activity to address them. Laying out these relationships and their evidentiary support will help your team identify and prioritize strategies, as well as weak points in your situation model and/or results chains (Step 2A).

If your team includes human well-being targets in your situation model, you should show how these human well-being aspects are influenced by the status of conservation targets and associated ecosystem services (Figure 7 provides a specific example of the right-hand side of the model). Keep in mind that you may need to present the relationship between your conservation targets and human well-being targets in alternative ways in order for your diagram to resonate with different audiences.[7]

7   See CMP (2016) Incorporating Social Aspects and Human Well-being in Biodiversity Conservation Projects for further guidance.

Figure 7.
Example Situation Model Extract with Human Well-being Targets
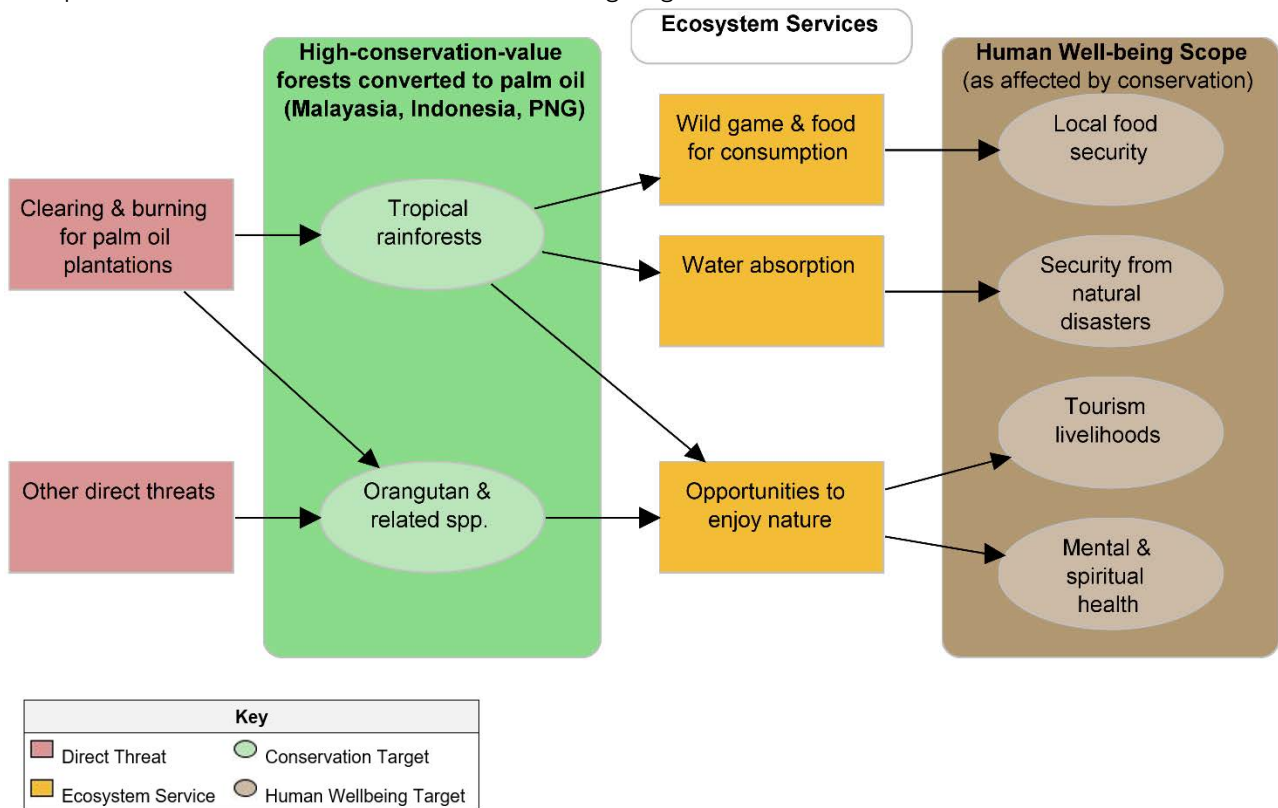
OUTPUTS FOR THIS STEP INCLUDE:

♦ Identification and analysis of indirect threats and opportunities

♦ Assessment of stakeholders and their primary interests

♦ Initial situation model, narrative description, and/or other representation of key cause-and-effect relationships among factors affecting your project context

♦ Ground truthing and revision of your model
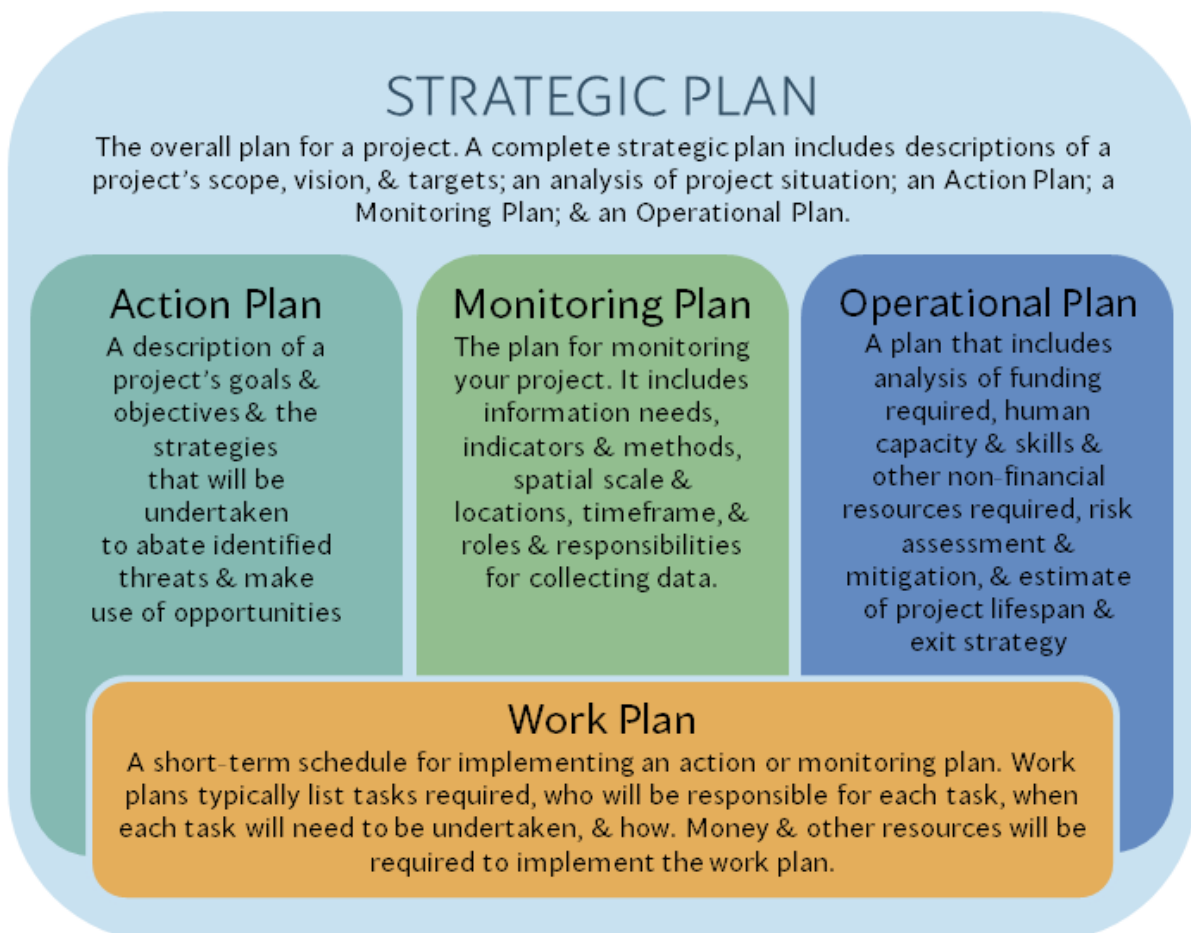
RESOURCES

Resources for Assess Step: http://cmp-openstandards.org/resources/assess/

Real-world Examples of Various *Conservation Standards* Elements: http://cmp-openstandards.org/cs-examples/

2 PLAN

PLAN

This step in the *Conservation Standards* cycle involves defining and developing your project's goals, strategies, and objectives, and identifying your team's assumptions about how you believe your strategies will achieve your project's goals. Together, the project's goals, strategies, objectives, and underlying assumptions comprise your project's action plan. This step also involves developing your monitoring plan, where you will identify how you will monitor progress and address other key information needs, and developing your operational plan, where you consider how various institutional and contextual factors will influence how you can implement your action and monitoring plans. Your action, monitoring, and operational plans, along with your work plan (described under Step 3), form your overall strategic plan (Figure 8).

Figure 8.
Relationship among Different Plans.

STRATEGIC PLAN

The overall plan for a project. A complete strategic plan includes descriptions of a project's scope, vision, & targets; an analysis of project situation; an Action Plan; a Monitoring Plan; & an Operational Plan.

Action Plan
A description of a project's goals & objectives & the strategies that will be undertaken to abate identified threats & make use of opportunities

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

Operational Plan
A plan that includes analysis of funding required, human capacity & skills & other non-financial resources required, risk assessment & mitigation, & estimate of project lifespan & exit strategy

Work Plan
A short-term schedule for implementing an action or monitoring plan. Work plans typically list tasks required, who will be responsible for each task, when each task will need to be undertaken, & how. Money & other resources will be required to implement the work plan.

Source: Adapted from Stewart 2016. Operationalising the Open Standards for the Practice of Conservation

As with many of the *Conservation Standards* steps and sub-steps, much of what you do in this step will be iterative. For example, although you develop an operational plan in Step 2C, you may need to think about sustainability, risks, and exit plans as you are choosing your strategies in Step 2A. These elements may help your team and senior managers determine whether to continue with a specific strategy or even your overall project.

2A. Develop a Formal Action Plan: Goals, Strategies, Assumptions, and Objectives

Goals

Developing a clear idea of what you would like to accomplish is the essential first part of putting together your action plan. Goals are linked to your project's conservation targets and represent the desired status of those targets over the long term. They are formal statements of the ultimate impacts you hope to achieve. A good goal meets "SMART" criteria: *specific, measurable, achievable, results-oriented,* and *time-limited* (see Annex 2 and Box 4).

Ideally, your project goals should fit within and contribute to broader program and/or organizational goals. Indeed, in some cases, what your project is expected to achieve may be specified by your organization and/or statutory requirements. These external obligations may ultimately influence your team's prioritization of actions. Where possible and relevant, your team also should consider the opportunity to align your goals (and objectives – discussed later) with broader national, regional, and/or international efforts (e.g., Sustainable Development Goals, Convention on Biodiversity) and specify how your project intends to contribute to these wider efforts. You should not force this connection but rather look for opportunities where there is overlap and potential for alignment.

If you did a viability assessment in Step 1B, you have already defined the elements of a good goal because you know the key attributes needed for a healthy conservation target, you know by when you hope to achieve the desired status, and you know what you need to measure to assess its health. Developing a goal is just a matter of converting this information into a goal statement. As an example, a SMART goal for the forest corridor conservation target in Figure 6 might

be: By 2030, the width of the forest corridor linking the White River Watershed to Los Grillos is at least 5 km wide and remains unfragmented.

If a project has human well-being targets and, by extension, claims to improve human well-being, it is often appropriate to set goals for them. To do so, the team may want to define key attributes for its human well-being targets. These attributes should be clearly dependent upon the status of the conservation target(s) and/or the ecosystem services they provide. For example, a conservation team would probably not have human well-being goals related to decreasing cholesterol levels, even though this is important for human health. It may, however, have human well-being goals related to access to food sources because the conserved biological targets are improving crop pollination services.

BOX 4. SETTING GOOD GOALS AND OBJECTIVES

Good goals and objectives should meet the following SMART criteria:

Specific – Clearly defined so that all people involved in the project have the same understanding of what the terms in the goal or objective mean

Measurable – Definable in relation to some standard scale (numbers, percentage, fractions, or all/nothing states)

Achievable – Practical and appropriate within the context of the project site and in light of the political, social, and financial context (especially relevant to objectives; goals may be more aspirational)

Results-Oriented – Represents necessary changes in target condition, threat reduction, and/or other key expected results

Time-Limited – Achievable within a specific period of time, generally 1-10 years for an objective and 10-20 years for a goal

CLIMATE CHANGE CONSIDERATION 4
SETTING GOALS

When assessing viability and setting goals, you should ensure your goals are still attainable, given the projected changes in climate that you identified in your situation analysis.

Strategies

Once you determine what you want to accomplish (your goals), you should think about what you need to do (strategies and activities). Good strategic planning involves identifying who you need to influence and determining where and how you will intervene, as well as where you will not. Good strategic planning also factors in the spatial and temporal dimensions of actions.

Selecting Which Factors You Will Influence (Key Intervention Points)

When developing your strategies, you will want to prioritize the factors you need to influence to improve the situation outlined in your situation analysis and/or diagram – these are the key intervention points. To identify key intervention points, you need to evaluate all factors and, using available evidence, identify which ones are likely to impact the target the most and show good leverage opportunities for achieving project goals. Some considerations to evaluate leverage potential include contribution to threat abatement, ability to influence multiple factors in the model, and urgency of addressing the factor (or its downstream factors).

In theory, any factor in a situation model offers an opportunity for intervention. In some cases, the most obvious key intervention point is the direct threat itself (e.g., reducing the introduction of an invasive species) or the conservation target (e.g., ecosystem restoration). But in many other cases, you will get more leverage if you intervene on an indirect threat or opportunity that is part of a chain of factors affecting a direct threat (e.g., influencing policy or promoting good management practices). Figure 9 shows an example of key intervention points.

The processes of determining and prioritizing key intervention points and generating and selecting strategies are very interrelated, and an iterative approach will prove valuable to decision making.

Figure 9

Example Situation Model with Key Intervention Points (in bold) and Strategies Identified
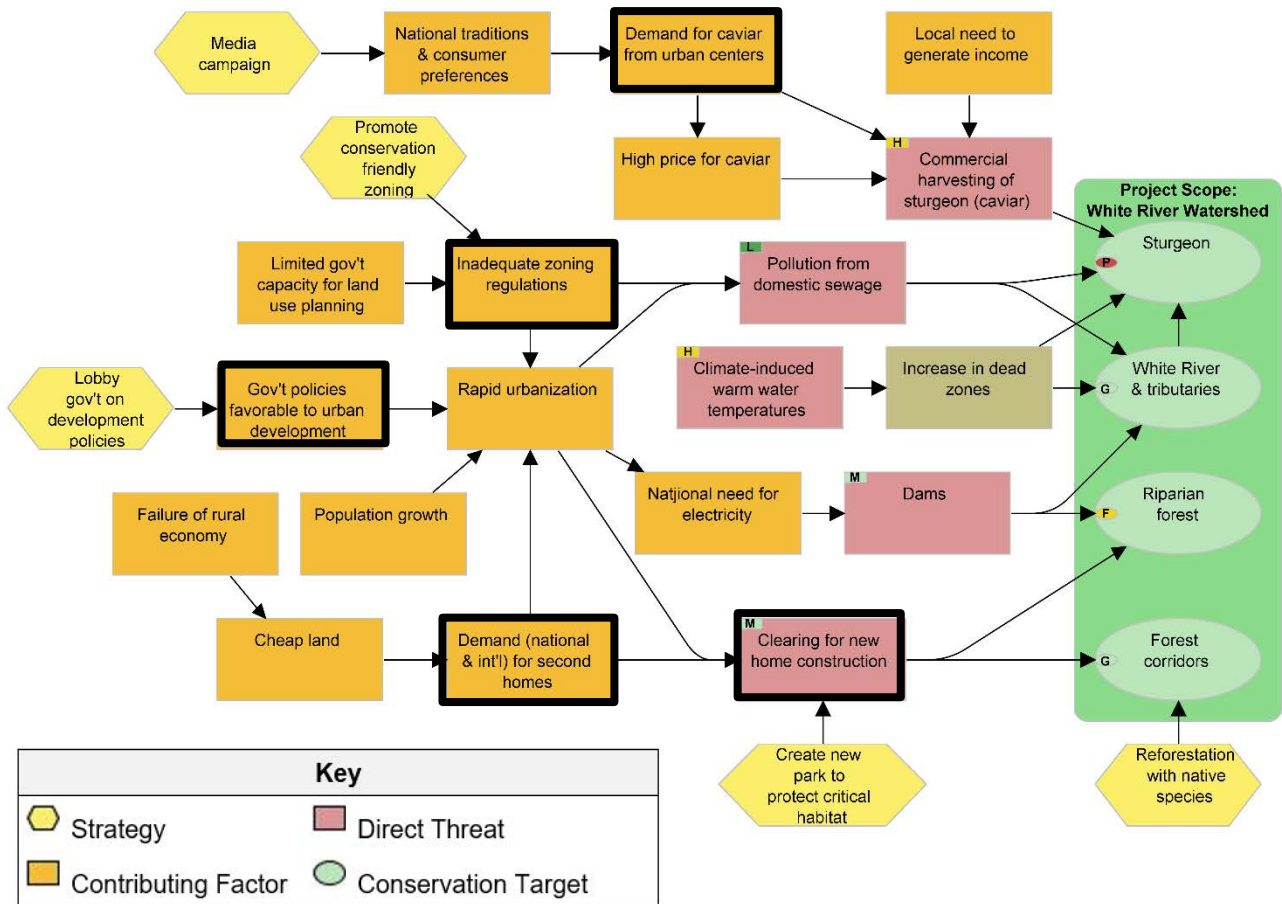
Deciding How and Where You Will Intervene

A strategy is a set of one or more activities with a common focus that work together to achieve specific goals and objectives by targeting key intervention points, integrating opportunities, and limiting constraints. Strategies should meet the following criteria: *linked, focused, feasible,* and *appropriate* (see Annex 2).

Strategies can include a broad array of conservation actions, such as habitat restoration, land protection, policy influencing, or community outreach (see Box 5 and CMP's Conservation Actions Classification for more examples). Working off your situation analysis, you should generate a list of potential strategies and select those with the greatest potential (based on the best available evidence) to achieve your project's goals and objectives (see below for more detail on objectives). Box 5 highlights some common ways of thinking about strategies to influence behaviors.

BOX 5. BEHAVIOR CHANGE STRATEGIES

Many strategies will involve influencing human behavior. In behavior science and economics, strategies to influence behavior can be broadly classified into the following non-mutually exclusive categories:

- Regulation – limit choice by force of law

- Incentives – limit choice by economic cost and rewards

- Information – do not limit freedom of choice but instead inform and persuade

- Nudging – soft influence, maintain freedom of choice but make certain outcomes more likely

The act of generating and selecting strategies is generally a three-part process that includes researching existing strategies, generating new strategies, and selecting optimal strategies based on available evidence. Researching existing strategies involves investigating how others have attempted to intervene in similar situations or with a similar target audience and whether those strategies succeeded or failed and why. Generating new strategies incorporates what a team learned in its situation analysis and strategy research to work creatively to develop a range of potential solutions. The purpose is to identify strategies that can achieve the project's conservation goals, while also considering the opportunities, constraints, and risks that make some strategies more feasible or less feasible. If there is strong evidence indicating a strategy will be effective in a project's context, you can go ahead and implement it at the appropriate scale. If the evidence is more mixed or not available, you may wish to pilot the strategy and use adaptive management to determine its effectiveness for your context. If you do move ahead with strategies that lack sufficient evidence of effectiveness for your context, it would be wise to consider the risks to your project of moving ahead and also make sure you are closely monitoring the strategy.

Your team should take your knowledge regarding potential strategies and narrow down the best set from among the alternatives by applying one or more selection methods (Box 6). Ideally, your team's strategy selection should focus on the best approaches for your context. However, you will need to keep in mind organizational constraints and decision-making processes. Where possible, it is helpful to map strategies to ensure that you are taking action in the right places to influence your targets and threats (Figure 10).

BOX 6. STRATEGY SELECTION

Strategy selection is about making constrained choices. In a world of limited resources, a project team needs to decide and communicate which strategies it will undertake and which it will NOT undertake.

Strategy selection takes place at several steps within the *Conservation Standards* process, as well as at different scales. Early on, you may be trying to quickly evaluate and pare down a long list of brainstormed strategies to address a particular threat in a situation analysis. At this point, you are trying to determine which strategies to carry forward for additional analysis and thus only need to do an initial assessment of each candidate. Later, however, you may be trying to determine your final strategies and may wish to invest in a more intensive and careful comparison of potential strategies.

There are a number of different decision-support tools to help a team assemble a portfolio of strategies from a list of candidate options. Some of the most common approaches include:

- **Descriptive Comparisons** (e.g., pros-cons table) – Describing the strengths and weaknesses of each candidate strategy, often in relation to a situation analysis, some set of criteria or decision nodes, and/or each other.

- **Criteria-Based Comparisons** (e.g., absolute or relative ranking tables, consequences tables) – Rating each candidate across a set of criteria. Typical criteria might include potential impact, riskiness, feasibility (financial, technical, moral), fit, and gap. Your team could apply these criteria using a relative ranking, categorical rating, or cardinal rating. You may choose to weight some criteria more than others.

- **Constrained-Choice Comparisons** (e.g., dot / point-based voting or knock-off tables) – Selecting a portfolio of strategies given a binding constraint, such as total amount of funds or time available.

- **Quantitative Model-Based Comparisons** (e.g., linear programming) – Establishing a set of algorithms that help determine the optimal strategies, given defined parameters and constraints.

Your team should determine the appropriate approach or combination of approaches for your context.
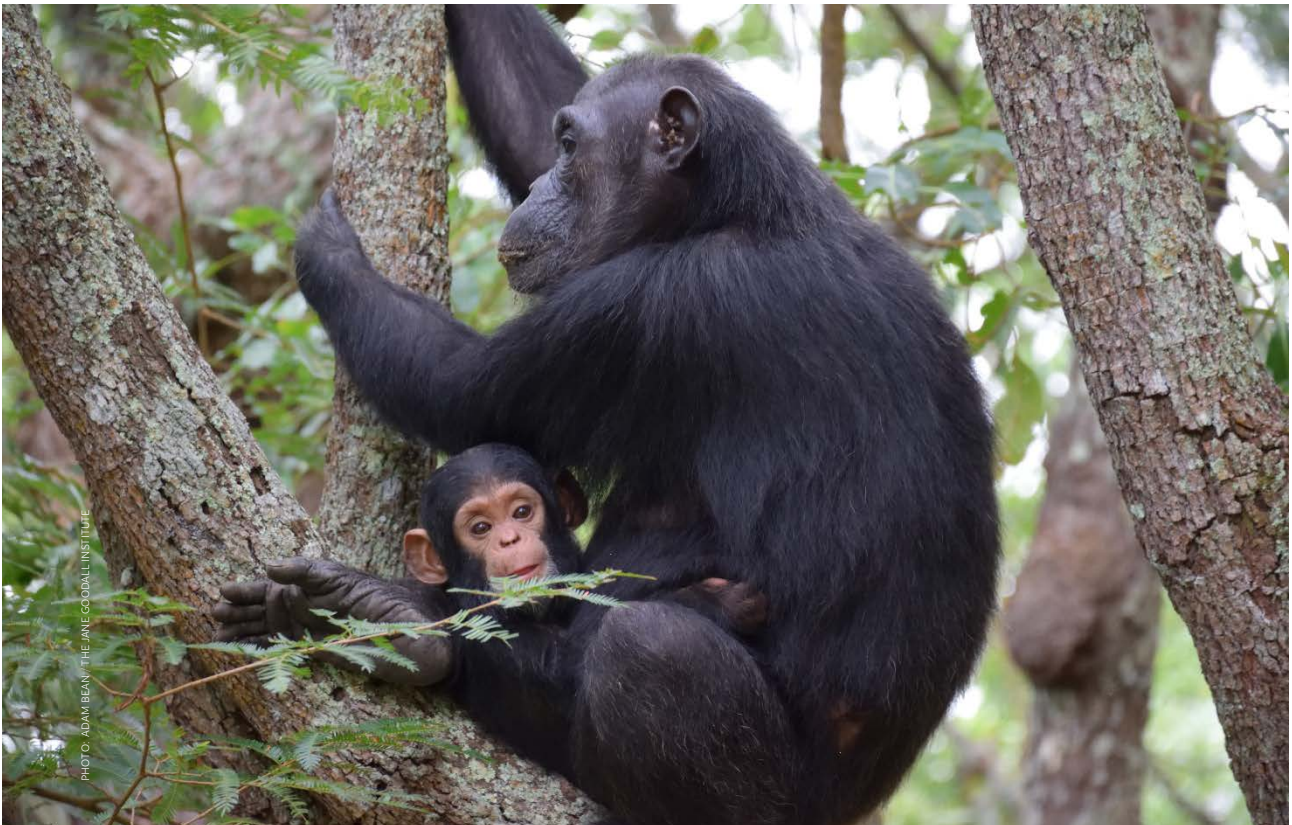
Figure 10
Simplified Spatial Maps Depicting Chimpanzee Protected Area Strategy
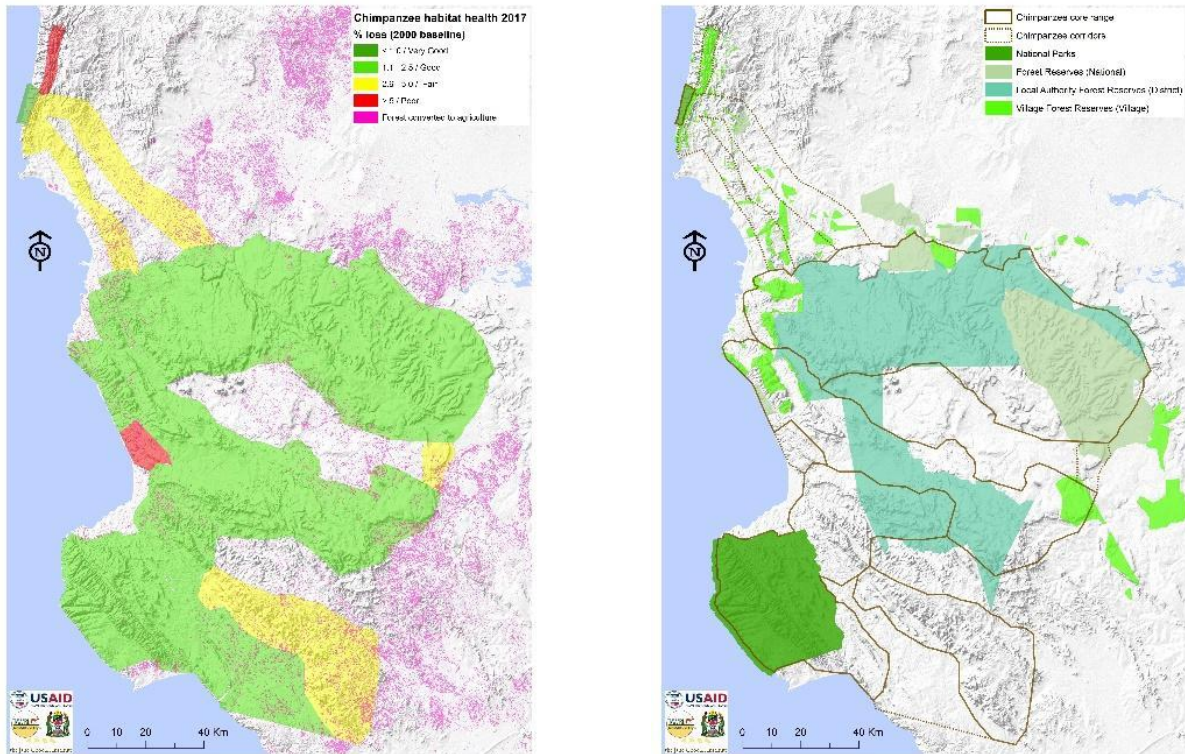
Agricultural conversion threat & habitat loss   Protected area strategy to limit future conversion

Source: Adapted for Conservation Standards *use by Lilian Pintea, Jane Goodall Institute*

A final but important consideration is ensuring that your project has appropriate social and environmental safeguards in place. This involves assessing potential adverse social and environmental effects of your strategies, taking into consideration the dignity, human rights, traditional knowledge, land and resource ownership, and cultural heritage and practices of affected groups, as well as unintended environmental consequences.

While it is useful and prudent to review social and environmental safeguards throughout the project cycle, it is especially important in the strategy design phase, as strategies may need adaptations or considerations to avoid, minimize, or mitigate potential negative effects.

CLIMATE CHANGE CONSIDERATION 5
IDENTIFYING CLIMATE-RELATED STRATEGIES

When brainstorming climate-smart strategies, consider the following ways a strategy might address climate change and its effects:

- **Reduce a climate-related stress** on the target by acting on conventional threats that are also contributing to that stress (e.g., reduce agricultural clearing of riparian trees so that streams remain shaded and more sheltered from temperature increases)

- **Protect climate refugia** by protecting and/or restoring occurrences of the target that may be less exposed to changes in climate (e.g., portions of a stream in which cold groundwater inputs continue to provide habitat for cold water species as other areas become warmer)

- **Maintain or enhance the viability** of a target and increase its capacity to adapt to climate change (e.g., protecting land to allow inland migration of tidal marsh as sea level rises)

- **Restore a target**, including restoration with species that are more resilient to projected changes (e.g., drought-tolerant species)

- **Create artificial habitat** to replace or supplement lost habitat (e.g., sinking old ships to create artificial reefs)

- **Prevent human mal-adaptation** or actions that increase vulnerability (e.g., preventing building of sea walls to address storm surge)

PHOTO: PAULINA ARROYO / GORDON AND BETTY MOORE FOUNDATION

Assumptions / **Theory of Change**

Once your team has selected your strategies, you should clarify assumptions about how you think each strategy will help you achieve both intermediate results and longer-term conservation and human well-being goals. This is your theory of change, which can be expressed in text, diagrammatic, or other forms. A results chain is a diagrammatic tool that depicts a theory of change in a causal ("if-then") progression of expected short- and long-term intermediate results that lead to long-term conservation results.[8] Because of the if-then nature of a results chain, the tool can also show the temporal nature of expected results.

If you portray your situation analysis in a situation model, you can use that as the basis for developing your results chains (Figure 11 shows a generic example, while Figure 12 shows an example based off of Figure 9). Doing so helps you explicitly show how your strategy intends to affect the current state (portrayed in your situation model) to help you achieve the desired state (portrayed in your results chain). Often, your results chains (and, more broadly, your theories of change) will include key activities needed to implement your strategy successfully. Including these activities can help clarify how your project will move from one result to the next.

While the results and assumptions in your theories of change should be based on existing evidence, some assumptions may lack evidence. As such, your team may have considerable uncertainty about whether your expected results can be achieved and if there are potential risks of undesirable outcomes. It is important to identify these evidence gaps as information needs and prioritize them for research, monitoring, evaluation, and learning (e.g., the dotted line in Figure 12 indicates an uncertainty in the team's assumptions).
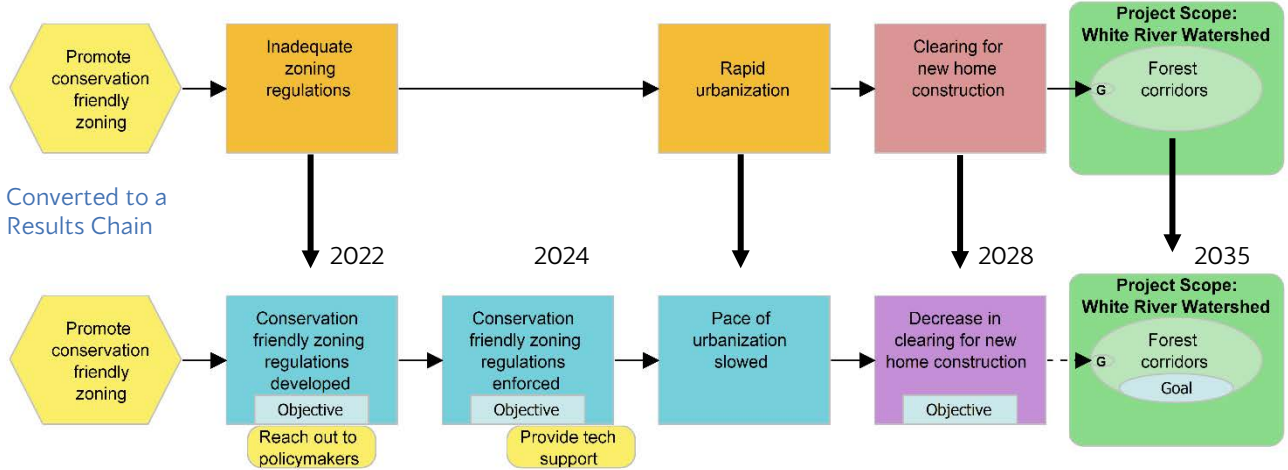
Figure 11
Generic Situation Model "Factors" with Associated Results Chain

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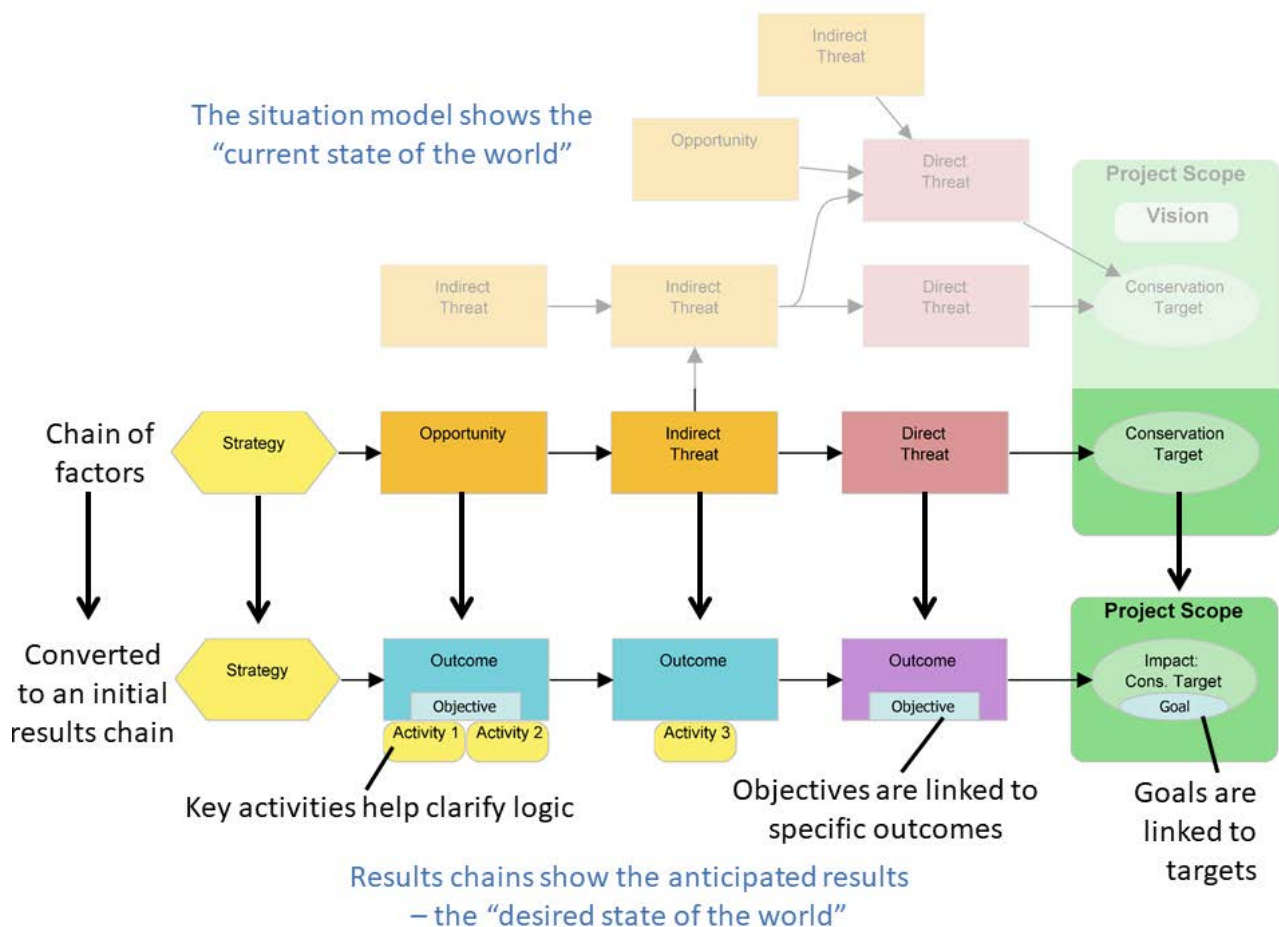
8. While some people think that results chains are the same as logical frameworks (logframes) or logic models, they differ in important ways. Logframes provide a simple way of organizing goals and objectives, but, unlike results chains, they do not explicitly link strategies, objectives, and goals. Logic models are more similar to results chains, but results chains have the flexibility to show more detail and the direct relationship between one result and another.

Figure 12

Example Results Chain for Promoting Conservation-Friendly Zoning in Watershed Site

Chain of Factors

Promote conservation friendly zoning → Inadequate zoning regulations → Rapid urbanization → Clearing for new home construction → **Project Scope: White River Watershed** — Forest corridors

Converted to a Results Chain

2022   2024   2028   2035

Promote conservation friendly zoning → Conservation friendly zoning regulations developed [Objective] [Reach out to policymakers] → Conservation friendly zoning regulations enforced [Objective] [Provide tech support] → Pace of urbanization slowed → Decrease in clearing for new home construction [Objective] → **Project Scope: White River Watershed** — Forest corridors [Goal]

Sample objectives & goal

By the end of 2022, City Council approves zoning regulations that include a moratorium on new building permits in state-listed unique areas

By mid 2024, all new building permits avoid development in state-listed unique areas

By 2028, there is no new home construction being carried out, permitted, or planned in identified state-listed unique areas

By 2035, the width of the forest corridor linking the White River Watershed to Los Grillos is at least 5 km wide and remains unfragmented

If your team identified human well-being targets in your situation model, you can also use results chains (and theories of change more generally) to show how your conservation targets provide ecosystem services that contribute to human well-being (Figure 13 illustrates the right-hand side of a results chain with human well-being targets).

It is useful, however, to be clear about when your conservation actions are contributing to human well-being targets via ecosystem services and when they are contributing more directly via conservation actions. Conservation teams often work on important social issues that have benefits and address interests beyond conservation (e.g., building capacity for good governance or promoting sustainable livelihoods). In such cases, the conservation strategy provides social benefits in service of conservation. Figure 14 provides an example illustrating a team's intent to increase loggers' income as an incentive to implement certified practices and improve forest conservation. The increased income is a direct (and necessary) result of a specific strategy that benefits humans. Note that this figure could also include a human well-being target (e.g., forestry livelihoods) with a link from the increased income result over to that human well-being target.

Figure 13.
Example Results Chain Extract with Ecosystem Services and Human Well-being Targets
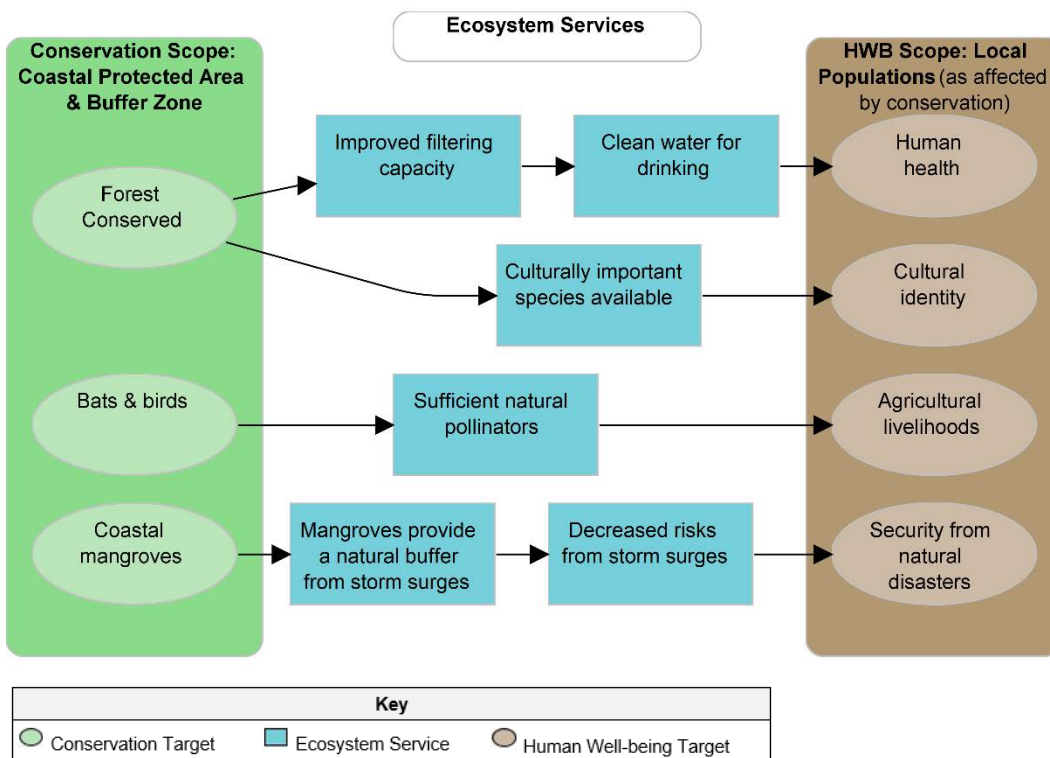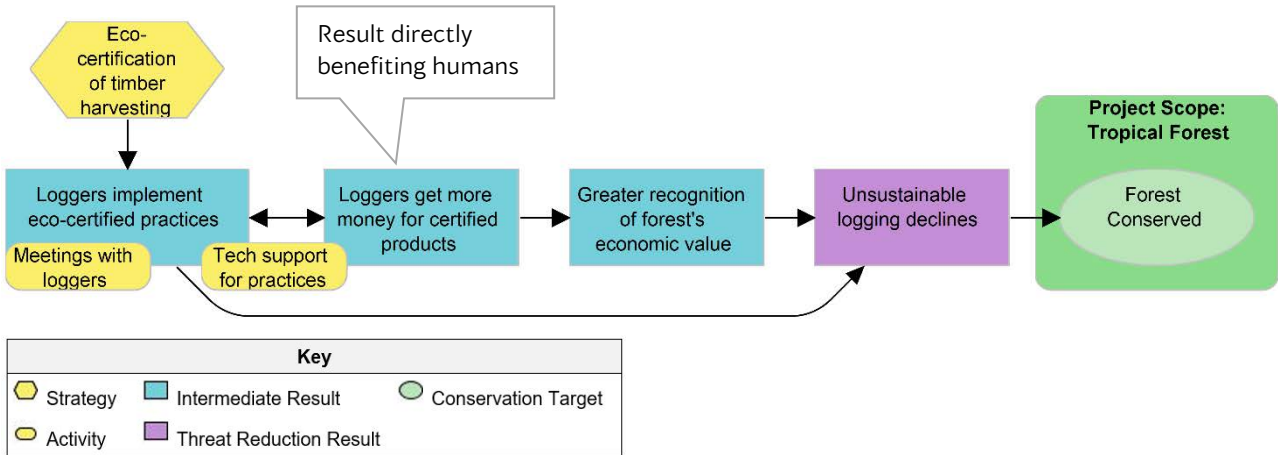
Figure 14.
Example of Conservation Strategy that Directly Benefits Humans

Results chains can be used to show the specific work of the project, as well as longer-term outcomes that may be beyond the manageable interests and/or timeframe of the project. Some projects may hope to achieve improvements in their conservation targets, while others may only intend to get as far as a threat reduction result (e.g., reduced plastic debris in oceans, Figure 15) or even an intermediate result (e.g., policymakers enact laws limiting plastics). In these latter cases, the ultimate threat reduction and/or conservation result may be more implicit than explicit.

Figure 15.
Example of a Project with a Manageable Interest Not Directly Tied to Biodiversity
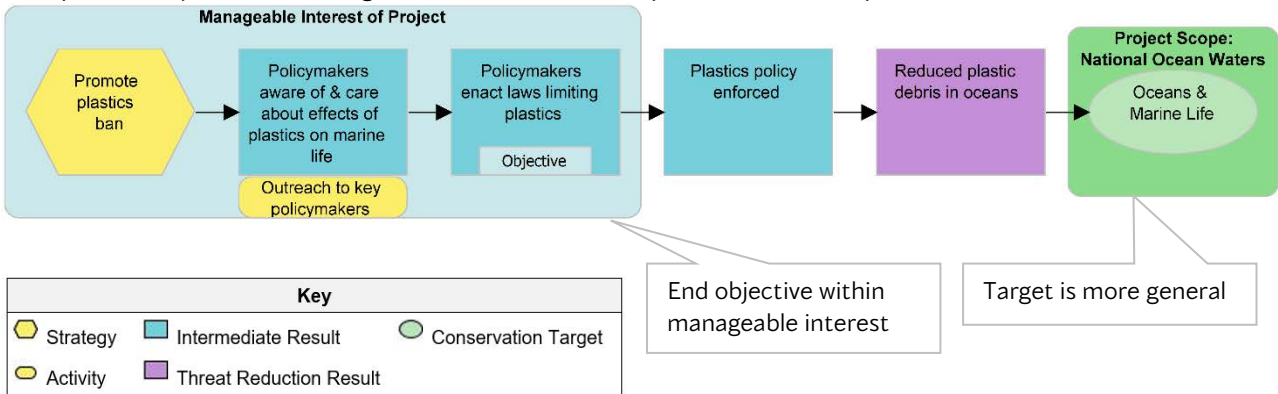
Objectives

Objectives are formal statements of the outcomes (or intermediate results in your results chains) that you believe are necessary to attain your goals. Objectives specify the changes in the factors (direct and indirect threats and opportunities) that your team assumes are necessary to achieve in the short and medium term. Where your outcomes are relevant to or dependent upon specific actors, your associated objectives should be clear about the actors and the desired behaviors. Good objectives (and goals) meet "SMART" criteria: *specific, measurable, achievable, results-oriented,* and *time-limited* (Box 4 under Goals section).

As shown in Figure 12, your objectives are tied to the results that are necessary for your theory of change to hold. It is generally good practice to have an objective for the direct threat (unless this is outside your manageable interest, as illustrated in Figure 15). This direct threat objective (and its desired future value) should be informed by the goal you set for your conservation target. It will be important to work through each objective to define what is appropriate and to ensure that the criteria for good objectives are met. This is often an iterative process that requires revisiting and clarifying objectives over time, as more information becomes available. It also involves refining your strategies to achieve these objectives and/or refining your associated theories of change. Box 7 includes some additional considerations for setting objectives.

The goals and objectives specified in your theories of change represent what you need to accomplish. Together, with your theory of change, they clarify your assumptions about how your strategies will help you reach those accomplishments and how you will gauge the progress of your project.

You should capture your situation analysis, goals, strategies, results chains, and objectives in your formal action plan (refer back to Figure 8 to see how the different plans relate to one another).

BOX 7. OTHER CONSIDERATIONS IN SETTING OBJECTIVES

Some important considerations in objective setting (beyond SMART criteria) include:

- Use existing information to develop your objectives. Where available, it is helpful to understand current or baseline conditions to determine how much change is needed.

- Where appropriate and available, use theoretical models, expert input, and other available evidence to set the numeric value in your objectives (and goals).

- Clarify how much change you need to achieve to see conservation results. Ideally, you should challenge yourself to work backwards from your goal and/or intermediate results to determine how much of each preceding objective you need to keep the chain progressing.

- Understand the connection and influence of other objectives and strategies. Your objectives in a single chain should flow logically from one another. Also, keep in mind that other strategies (reflected in different chains) might be contributing to shared results. Thus, an objective may need to reflect the influence of multiple strategies.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Goals for each conservation target and, if appropriate, human well-being target

♦ Identification of key intervention points and draft strategies

♦ Prioritization of draft strategies

♦ Theories of change that clarify team assumptions and main activities for key strategies

♦ Objectives for key intermediate results

♦ Finalized action plan

2B. Develop a Formal Monitoring, Evaluation, and Learning Plan

This sub-step includes developing a monitoring, evaluation, and learning plan (monitoring plan). Your monitoring plan will help you track progress toward stated goals and objectives, evaluate progress along and key assumptions associated with your theory of change, and address information needs related to uncertainties in your situation analysis, strategy selection, and/or theories of change. The monitoring plan will also be helpful in identifying the resources needed for implementation, developing a timeline for data collection and analysis, and reflecting on potential risks to consider. The level of rigor and the type of monitoring you do will depend upon your confidence in your key assumptions (i.e., Is there sufficient evidence to support your assumptions?), the consequences of being wrong, the stage of your project, and available resources.

Audiences and Information Needs

To start developing your monitoring plan, you should specify your audiences and their information needs. Effective monitoring uses the minimum amount of financial and human resources to provide you with the information needed to address key uncertainties and/or determine if your project is on track and achieving stated objectives.

As a first step, you should determine for whom you are doing the monitoring, what they need to know for decision-making, when they need the information, and what level of rigor is required to meet their needs. For example, one audience might be your project's funders who need to know you are spending their money appropriately. Another audience might be local stakeholders who want to know whether their interests are being addressed. Perhaps the most important audience, however, is your own project team. Monitoring is essential to help your team track the implementation of actions and achievement of goals and objectives, test assumptions in your theories of change, reduce uncertainties, learn from information collected, and improve current and future programming. The following table lists some common audiences and their general information needs.

Table 3.
Common Monitoring Audiences and Their Information Needs

AUDIENCE	TYPICAL INFORMATION NEEDS/INTERESTS
Project team and partners	Is your team implementing the activities as expected? Is your team achieving its objectives in the expected time frames, and are assumptions valid? What is working, what is not, and why? How can your team improve your strategies?
Donors	Is your team implementing the activities as expected? Is the project achieving objectives in the expected time frames? Are the assumptions behind this project valid?
Communities or stakeholders affected	Is your team implementing the activities as expected? How will the project affect them?
Conservation community	What worked, what did not, and why? What may be generalizable from the project to other contexts?
Academics and students	What worked, what did not, and why?
Auditors and certifying entities	Is the project complying with laws and regulations? Is it following best practices?

By focusing your monitoring efforts squarely on the core assumptions you have made (illustrated in your situation model and results chains) and the key uncertainties you have identified, you are more likely to collect only the information that will be useful for addressing specific information needs (e.g., status of threats, achievement of results, areas of uncertainty).

If your monitoring is designed to help understand why actions are working or not, you should be sure to monitor not just specific results, objectives, or goals, but also key factors that may contribute to or detract from your ability to achieve your desired results. When prioritizing information needs, it is useful to think about the risks to your project of not having this information, how you will use the information for management decisions, and whether it is feasible to address the information need within the confines of your project's resources and timeline. Remembering this is an iterative process, these are considerations you should also have in mind when identifying and prioritizing your strategies.

CLIMATE CHANGE CONSIDERATION 6
MONITORING CLIMATE CHANGE EFFECTS AND STRATEGIES

There is considerable uncertainty involved with climate change impacts – for example, there are questions as to what is happening or may happen with the climate, what people will do in response, how species and ecosystems will be affected, and how effective our strategies will be.

Because there is so much uncertainty, it is important to consider whether any special monitoring is warranted. This could include establishing remote weather stations to monitor climate and/or monitoring particular species and ecosystems to see how they react to changes. In addition, you may want to include measures to identify a trigger or threshold that will help you determine when it is appropriate to consider more drastic or expensive strategies.

Indicators

With your audiences and information needs identified, the next step is to define the specific indicators and/or data you should collect to address your information needs. Good indicators meet the criteria of being *measurable, precise, consistent,* and *sensitive* and should be tied to key factors, results, or assumptions in your situation model or results chains (see Annex 2). Note that some indicators may be qualitative, while others may be quantitative. Moreover, as discussed

below, there are a variety of methods to measure any one indicator.

Through your situation models, results chains, and goals and objectives, you have prioritized your information needs. This will help you narrow down a nearly infinite set of potential indicators to a more manageable list. Figure 16 provides an example of how theories of change can help you focus your indicators. You should aim to collect the minimum data required to meet your critical information needs. As mentioned,


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critical information needs could include addressing gaps in your situation model, testing assumptions in your situation model and results chains, and demonstrating progress towards achieving stated objectives. As you monitor progress along your theory of change, keep in mind that there may be important factors that are outside the control of your strategy but that could have an important influence on the success of your strategy (e.g., political situation or market forces). In these cases, you may want to monitor these factors with a limited set of indicators to help you interpret whether you are achieving your expected results (and why or why not).

Figure 16
Conservation-Friendly Zoning Results Chain with Potential Indicators

Dotted line depicts uncertainty in relationships
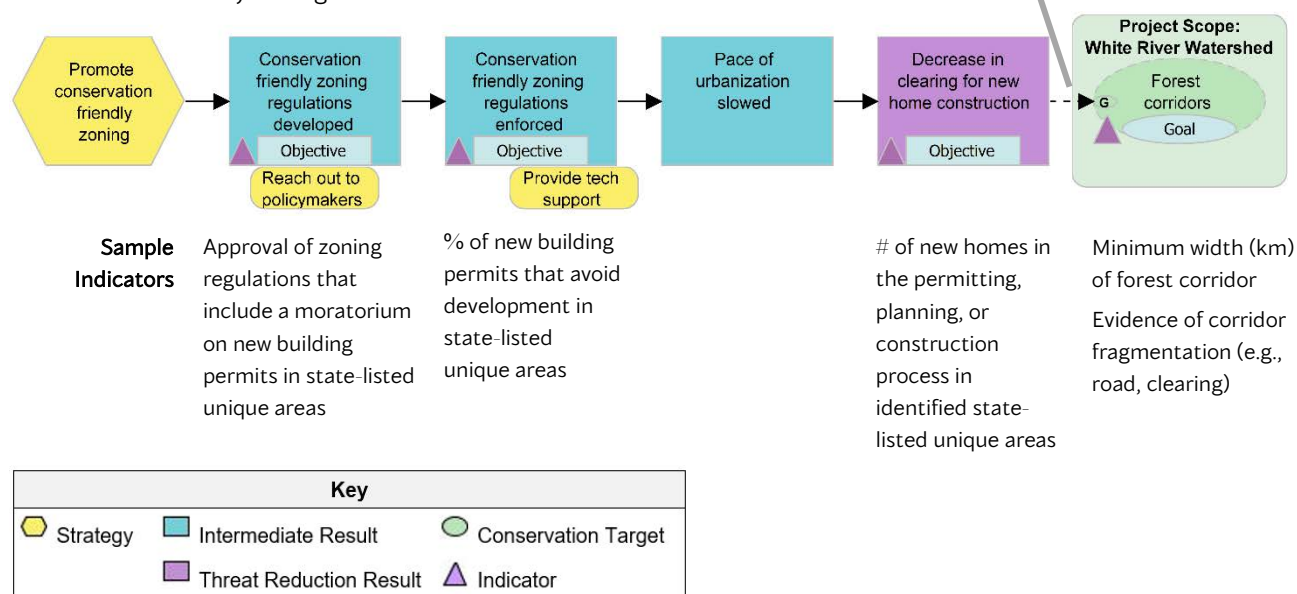
Methods

As you develop your indicators and identify key information needs, you will need to think about *how* you will measure them (i.e., the methods you will use). Examples of methods could range from conducting wildlife survey transects to downloading satellite imagery on land use patterns to conducting key informant interviews to get at stakeholder attitudes and practices. Methods should meet the criteria of *accurate, reliable, cost-effective, feasible,* and *appropriate* (see Annex 2).

There is generally a tradeoff between a method's cost and its accuracy and reliability. The key is to select the most cost-effective method that will give you data accurate and reliable enough to meet your management needs. For many information needs, you may not have to collect primary data specific to the project. For example, one method for getting data about a given fish population would be to download harvest records posted by a government agency on the Internet. In some instances, however, primary data collection will be required.

Often, your team may be responsible for collecting and assembling your data (whether it is primary or secondary). In some cases, you may hire someone to conduct an external evaluation of your project. Regardless, your situation model and results chains provide a solid framework for guiding data collection and analysis.

It is also helpful to document the specific protocols you use to implement your methods. Documenting protocols will help in data interpretation, as well as future monitoring of the same indicators to detect patterns over time. Ideally, your team should test and adjust indicators and methods before using them. For example, you should pilot test survey instruments to ensure they give you the data you need and are not subject to misinterpretation. Likewise, collecting baseline data early on could help you test your methods. If you cannot establish baselines within the first few months of a project, then most likely you need to review the methods or the indicators.

Pulling It All Together

Your audiences, information needs, indicators, and methods are all part of your monitoring plan. Your plan should also specify roughly when, where, and by whom data will be collected (see Table 4 for an example monitoring plan). Finally, and in preparation for Steps 3 (Implement) and 4 (Analyze & Adapt), your team should consider protocols for how you will store, manage, and access data and how you anticipate analyzing and using data to meet the information needs of your key audiences. As part of your work planning and budgeting (Step 3), your team should include time and financial resources to support monitoring activities and data management.

Table 4
Extract of a Monitoring Plan

INFORMATION NEED	INDICATORS / VARIABLES	MONITORING ACTIVITY	WHO	TIMEFRAME
OBJ LUP1. 🔲 By the end of 2022 the City Council approves zoning regulations that include a moratorium on new building permits in state-listed unique areas	Approval of zoning regulations that include a moratorium on new building permits in state-listed unique areas	Review City Council minutes ⬭ Review published regulation updates ⬭	LS	Q4, 2022
OBJ LUP2. 🔲 By mid 2024, all new building permits avoid development in state-listed unique areas	% of new building permits that avoid development in state-listed unique areas	Consult with county land planner ⬭	LS	2023, 2024 Mid year
OBJ LUP3. 🔲 By 2028, there is no new home construction being carried out, permitted, or planned in identified state-listed unique areas	# of new homes in the permitting, planning, or construction process in identified state-listed unique areas	Consult with county land planner ⬭ Site visits ⬭	LS	2025, 2028
GOAL. ⬭ By 2035, the width of the forest corridor linking the White River Watershed to Los Grillos is at least 5 km wide and remains unfragmented	Evidence of corridor fragmentation Minimum width (km) of forest corridor	Analyze satellite imagery ⬭	AM, JB	2020-2040 Every five years
UNCERTAINTY. ❓ Will the termination of new home construction in state-listed unique areas be sufficient to maintain an unfragmented corridor of at least 5 km width? Are there any other major threats we are unaware of?	Indicators from OBJ LUP3 and GOAL Identification of other major causes of deforestation	Consult with county land planner ⬭ Site visits ⬭ Analyze satellite imagery ⬭	LS, AM, JB	2021

OUTPUTS FOR THIS STEP INCLUDE:

♦ Audiences and their information needs and preferred communication modes clearly defined

♦ Indicators and methods defined

♦ Finalized monitoring, evaluation, & learning plan

2C. Develop an Operational Plan

Conservation projects are ultimately implemented by people and institutions. Even the best action and monitoring plans are of little utility if you cannot put them into operation. With this in mind, this sub-step involves developing an operational plan for your project. Key components of an operational plan include analyses of:

- **Funding** required to implement your project and an accounting of your current and potential sources of these funds. To identify the funding required, your team should develop broad estimates of the likely costs required to execute your strategies and to implement the associated monitoring and share results more broadly. Your theories of change and the main implementation and monitoring activities you identified in them can provide you with a good framework for making those broad estimates.

- **Human capacity, skills, and other non-financial resources** required to implement your project and what you need to do to develop those resources, including cultivating partnerships. Again, you can use your theories of change and activities to develop high-level time estimates and to identify the skills required to implement your strategies and the associated monitoring. You may also want to refer back to your early work on identifying your team and the key skills and skill gaps within your team.

- **Risk factors** of concern for your project and how they can be addressed. A risk factor is an uncertain event or condition which, if it occurs, has a negative effect on at least one project element (e.g., time, cost, scope, or quality). Risk can be sub-divided into programmatic risks that affect your situation (e.g., political instability, drought) and operational risks that affect your ability to implement the project (e.g., change in organizational leadership, limited capacity of partners). A risk assessment should rate both the probability of the risk factor occurring and the impact or severity of the risk factor if it does occur. The purpose of a risk assessment is to identify issues that could negatively impact the project's ability to implement key strategies effectively and/or achieve conservation goals, and to identify additional strategies necessary to mitigate or avoid those risks. As such, a risk assesment is an important input for strategy selection (Step 2A). A risk assessment template (defined by your organization, if relevant) is useful to document and rate your risks and thus prioritize your efforts and re-rate the risks as your project evolves.

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- **Exit strategy** to clarify how long your project will last and how you will ensure the sustainability of your project's achievements beyond your team's involvement. While we include this element under the operational plan sub-step, it is important to consider sustainability and exit options at the start of your project. Doing so helps ensure that associated actions are included in your work plans and can be adapted as your project evolves. Ignoring these factors can lead to unrealistic expectations among the project team and stakeholders, which can become increasingly difficult to manage over time.

The first two components of an operational plan technically form the basis for a (high-level) work plan and budget, both of which are covered more thoroughly under Step 3. The level of detail and formality of your operational plan will vary, depending on the size and level of complexity of your project. Small projects may only briefly touch on each of these topics, whereas large, complex ones might have an extensive and formal treatment of each.

OUTPUTS FOR THIS STEP INCLUDE:

- ♦ Assessment of human, financial, and other resources

- ♦ Risk assessment and mitigation actions

- ♦ Estimate of project lifespan and exit strategy

At the conclusion of the Plan Step, you will now have all the products of a strategic plan (Figure 8). Depending on your needs, you may want to compile this information into a formal plan. Or, if you are using software like Miradi, you can maintain this information in the software and produce the relevant plans and documentation as needed. This creates a "living" plan that can be updated easily as your project evolves. It also enables linkage of data, such as budgets, with other organizational systems.

RESOURCES

Resources for Plan Step: http://cmp-openstandards.org/resources/plan/

Real-world Examples of Various *Conservation Standards* Elements: https://cmp-openstandards.org/cs-examples/

3 **IMPLEMENT**

IMPLEMENT

In many respects, this is the most important step in the entire conservation process. It is where you put all of the planning efforts you conducted in the previous steps into action. This step involves developing and implementing specific work plans while ensuring sufficient resources, capacity, and partners. All of this work should be done within the context of the implementing organization's policies and procedures and decision-making processes for approving work plans and budgets.

Sometimes, those implementing a project may not have been involved in all steps of the planning process. If you have documented all of your decisions clearly, it will be easier to bring on new team members. As your team implements your project, you will pass through Step 3 (and all steps) multiple times, going around the loop to adapt your plans and continue implementation. In addition to adapting your conservation actions, you should consider reviewing and adapting associated analyses (e.g., your situation analysis, risk assessments, stakeholder assessments). Doing so may help you realize, for example, that you need to add new activities to your work plan to manage new risks or to engage with new stakeholders.

3A. Develop a Detailed Short-Term Work Plan and Timeline

In the previous steps of the *Conservation Standards* cycle, your team developed your strategic plan, which includes your action, monitoring, and operational plans (Figure 8). In this phase of the cycle, you need to turn these general plans into more specific ones and then implement them on an ongoing basis.

The first part of this step is, with your project team and partners, to work from your strategic plan to develop a more specific short-term work plan covering the next few months or, at most, year. This work plan should include:

- What specific activities and tasks are required to implement the strategies laid out in your strategic plan. Make sure to include activities associated with monitoring progress and/or key uncertainties, as well as activities related to operational functions (e.g., attending weekly staff meetings);

- Who will be responsible and who will be accountable for completing each activity and task;

- When each task will be undertaken and what will be the sequence of linked activities and tasks; and

- Where each activity and task will be implemented.

Your organization might have guidance for the timeframe to be covered by your work plans, but generally, you should develop detailed work plans for the next 3-12 months, with higher-level information for the longer term. As time moves on, you can take your higher-level estimates and refine them into more specific estimates.

Your detailed work plan will provide you with the basis for developing a project timeline or calendar. It is important to develop your timeline so that all project team members budget their time according to the project needs. Your work plan will also help you identify which team members might have time and which are overbooked. This information will also be important for developing your project budget.

As your project moves along, you should revisit the project assumptions and update the work plan, again focusing on the more detailed activities for the next few months or so. Figure 17 shows an example of a table with people assigned to work on the project's actions and monitoring activities. You can record your work plan in Miradi, a table, a Gantt chart, and/or a project calendar.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Work plan detailing the tasks, activities, and responsibilities associated with your action plan, monitoring plan, and operational plan

♦ Project timeline or calendar

Figure 17.
Work Plan Extract for a Marine Site, Showing Assignment of People and Work Units

ITEM	JAN	FEB	MAR	Q1
CAMPAIGN TO STOP SHARK FIN SOUP ⬡	**7**	**3.5**	**24**	**34.5**
SHARK 1. Plan campaign with CAI ⬡	7	1.5	1	9.5
AT: Anna Thomas	5	1	1	7
EM: Elena Martin	2	0.5	–	2.5
SHARK 2. Implement outreach campaign ⬡	–	–	15	15
AT: Anna Thomas	–	–	10	10
EM: Elena Martin	–	–	5	5
SHARK M1. Review campaign records ⬭	–	–	2	2
AT: Anna Thomas	–	–	2	2
SHARK M2. Download / analyze FAO records ⬭	–	–	1	1
AT: Anna Thomas	–	–	1	1
SHARK M3. Train & support local observers ⬭	–	2	5	7
EM: Elena Martin	–	2	5	7
POLICY TO MANDATE RAT BARRIERS ON VISITING BOATS ⬡	**4**	**2**	**1**	**7**

KEY

⬡ Strategy

⬡ Activity

⬭ Monitoring

3B. Develop and Refine Your Project Budget

Once you know more clearly which tasks and activities you need to undertake, you will be better able to determine the resources you need. You should work off of your initial analysis of funding required that you developed in your operational plan (Step 2C). This, along with your strategic plan and your work plan, will help you develop a more refined estimate of costs for specific activities and the broader strategies into which those feed.

It is important to work closely with the finance or accounting staff in your organization to develop your project budget. For many projects, your most expensive resource needs will be staff time. In addition, you should consider what other major expenses (e.g., physical infrastructure, vehicles, boats or machinery) are needed. You will also want to consider the related functions or additional resources the project might require, ranging from monitoring and management expenses to administrative or logistical support.

Figure 18 shows the work plan from Figure 17, now expanded to include the expenses necessary to implement the project's actions and monitoring activities. The costs of these expenses are combined with the cost of time for the assigned people to create the total budget for each item. In this example, staff and expenses roll up to show the costs for an activity, all activity costs associated with a strategy, and all strategies within a project. The project budget also includes general operating costs and overhead not directly associated with implementing a specific strategy or activity. These are important costs to make sure your team includes.

Figure 18.
Workplan Extract Example, Expanded to Include Expense Details and Other Costs

ITEM	WORK UNITS				PROJECT EXPENSES				BUDGET TOTAL
	2017	2018	2019	TOTAL	2017	2018	2019	TOTAL	TOTAL
CAMPAIGN TO STOP SHARK FIN SOUP	**36.5**	**14**	**9**	**59.5**	**5,000**	**1,250**	**1,250**	**8,100**	**13,625**
SHARK 1. Plan campaign with CAI	11.5	-	-	11.5	5,000	-	-	5,000	5,925
AT: Anna Thomas	8	-	-	8	-	-	-	-	400
EM: Elena Martin	3.5	-	-	3.5					525
Travel expenses for meeting	-	-	-	-	5,000	-	-	5,000	5,000
SHARK 2. Implement outreach campaign	15	5	-	20	-	-	-	-	1,700
AT: Anna Thomas	10	3	-	13	-	-	-	-	650
EM: Elena Martin	-5	2	-	7	-	-	-	-	1,050
SHARK M1. Review campaign records	2	4	4	10	-	-	-	-	500
AT: Anna Thomas	2	4	4	10					500
SHARK M2. Download / analyze FAO records	1	1	1	3	-	-	-	600	750
AT: Anna Thomas	1	1	1	3					150
Report purchase	-	-	-	-	-	-	-	600	600
SHARK M3. Train & support local observers	7	4	4	15	-	1,250	1,250	2,500	4,750
EM: Elena Martin	7	4	4	15	-	-	-	-	2,250
Travel costs to sites to collect data	-	-	-	-	-	1,250	1,250	2,500	2,500
OTHER COSTS	-	-	-	-	55,000	25,000	20,000	100,000	100,000
EQUIPMENT	-	-	-	-	20,000	5,000	-	25,000	25,000
Computers						5,000		5,000	5,000
Vehicle	-	-	-	-	20,000	-	-	20,000	20,000
OPERATING COSTS					35,000	20,000	20,000	75,000	75,000
Overhead	-	-	-	-	35,000	20,000	20,000	75,000	75,000

Once you have developed your project budget, you will likely need to identify potential funding sources and develop and submit proposals to those potential donors. The information collated in your strategic plan should be used to develop robust funding proposals. Most projects will require several years of financial resources, so fundraising will often be an ongoing process as you move through different iterations of the project cycle. In addition to using the strategic plan to inform funding proposals, you can incorporate ongoing results and learning gained into your proposals and reports to show progress, learning, and adaptation to donors. This also provides an opportunity to help donors understand the value of supporting efforts that use a *Conservation Standards* approach – from the strategic decision making that informs the design and planning to the critical thinking and reflection that go into the monitoring, analysis, and adaptation.

Ideally, you would seek and acquire funding for your highest priority strategies from the start. In reality, you may need to adjust to opportunities and constraints and may find that your initial funding focuses on some medium- or lower-priority strategies. That's fine, as long as you do not lose sight of your high-priority strategies, and you work to implement them as soon as is feasible.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Project budget

♦ Potential funding sources identified

♦ Funding proposals developed and submitted

♦ Financial resources obtained

PHOTO: TIM LAMAN / WWF

3C. Implement Your Plans

The next and most important part of Step 3 is to implement your strategic plan and your more detailed work plan according to schedule and within budget. This includes implementing both your actions and your monitoring.

To move into the implementation phase, it is beneficial to have an inception or kick-off meeting for the project team (especially if there are new staff persons). This is an opportunity for team building and to ensure all team members are familiar with the project design, budget allocations, donor contractual conditions,

internal policies, and other relevant details. You should aim to directly engage your implementation team from the start and repeat these team meetings at regular intervals during project implementation. Doing so helps your team to regularly monitor progress, stay connected, and support one another.

To monitor your implementation, it can be useful to use progress tracking tools. Creating short, regular progress reports about implementation will allow more detailed reflections in the later steps, as well as assist with reporting to donors and supporters. On an annual basis (or more frequently), it is important to look at your progress in the context of your theory of change and results chain (Step 4B provides more detail). Figures 19 and 20 provide different formats for reporting progress on actions that may resonate with different audiences.

Figure 19.
Example Action Progress Report in Table Format

ITEM	PROGRESS	PROGRESS DETAIL
CAMPAIGN TO STOP SHARK FIN SOUP 🟡	**On-Track**	–
SHARK 1. Plan campaign with CAI 🟡	**Completed**	Campaign Planning now completed
SHARK 2. Implement outreach campaign 🟡	**On-Track**	Now starting up but needs push
SHARK M1. Review campaign records 🟣	**Minor Issues**	Still having difficulty setting up reliable data collection process
SHARK M2. Download / analyze FAO records 🟣	**Minor Issues**	Last quarter's data not yet collected
SHARK M3. Train & support local observers 🟣	**Scheduled**	–
RAT ELIMINATION	**Major Issues**	Trapping strategy moving forward but not clear if rat barriers are preventing re-introduction.
2A. TRAP RATS IN KEY ISLANDS 🟡	**On-Track**	–
2B. POLICY TO MANDATE RAT BARRIER ON VISITING BOATS 🟡	**On-Track**	–
RAT 1-1. Research rat barrier technology to inform policy 🟡	**Completed**	Research rat barrier technology to inform policy
RAT 1-2. Educate ministry officials 🟡	**On-Track**	Companies are not responding to our phone calls
RAT 1-3. Raise awareness with tourists (if needed) 🟡	**On-Track**	Work just gearing up

KEY

🟡 Strategy
🟡 Activity
🟣 Monitoring

Figure 20.

Example Action Progress Report in Results Chains Diagram
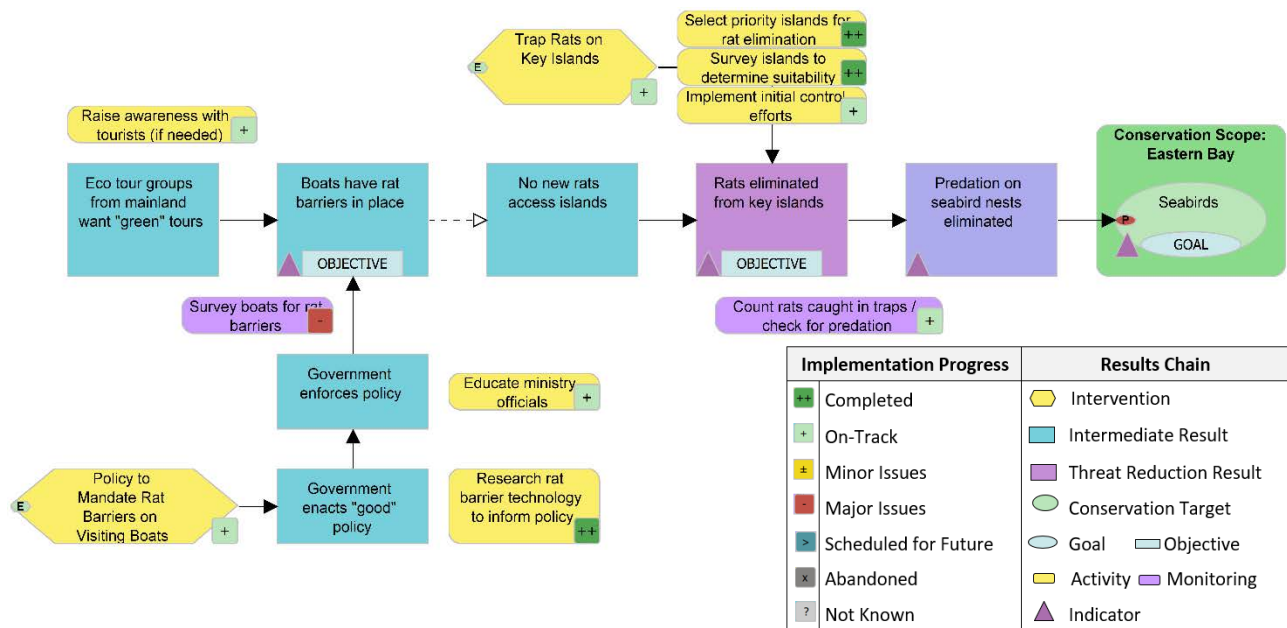
Throughout implementation you (and/or an evaluation team) will be collecting monitoring data. An important part of this is setting up the systems for data collection, storage, and access for future analyses. For very small projects, a simple paper-based system may be adequate. For projects involving multiple people or running over longer periods of time, this will likely involve working with other departments or divisions within your organization to ensure the data systems you use will successfully interact with existing systems and to identify any adjustments that may be needed.

It may be appropriate to include some time and resources in your work plan and budget for setting up these systems. Prior to moving onto Step 4 (Analyze & Adapt) you also will need to ensure your data are collated and checked for completeness and accuracy. Figure 21 shows monitoring data synthesized in Miradi.

Step 3 (Implement) is likely to continue while you periodically work through Steps 4 and 5 to analyze your progress and adapt your project. As with all steps, this is an iterative process.

Figure 21.
Example of Monitoring Data

ITEM	DETAILS	MEASUREMENT DATA	MEASUREMENT VALUE	TREND	SOURCE
2. RAT ELIMINATION	Monitoring by university researchers shows that the rats are currently attacking nesting seabirds on key islands	-	-	-	-
E. HEALTHY NESTING SEABIRD POPULATION	By 2025, there are at least 750 breeding pairs of ruby-crested puffings on the isands of Eastern Bay	-	-	-	-
E1. Number of breeding pairs of ruby-crested puffins		2016-03-19	210	Strong Decrease	Intensive Assessment
		2008-03-02	1200	Flat	Intensive Assessment
RAT 1. BOATS HAVE RAT BARRIERS IN PLACE	By June 2018, all tour boats visiting the Eastern bay Islands have state-of-the-art rat barriers in place	-	-	-	-
Rat 1. Percentage of tour boats with rat barriers in place	Percent of all tour boats that visit the Islands that have state-of-the-art rat barriers	2016-06-30	0	Not Specified	Rough Guess
RAT 2. RATS ELIMINATED FROM KEY ISANDS	By June 2019, rats have been completely eliminated from all breeding Islands				
Rat 2a. Number of rats caught in traps	The total number of rats caught in traps set out for one week for each island. We assume that we need three weeks of having no rats to be certain we have eliminated the population.	2018-03-31	Dozens	Mild Decrease	Rapid Assessment

OUTPUTS FOR THIS STEP INCLUDE:

♦ Implementation of strategic plan (action, monitoring, and operational plans) and work plan, keeping in mind your project budget and schedule

♦ Development of systems for storing and accessing data

♦ Progress reports to your organization, funders, and other project stakeholders

♦ Monitoring data captured in systems

RESOURCES

Resources for Implement Step: http://cmp-openstandards.org/resources/implement/

Real-world Examples of Various *Conservation Standards* Elements: https://cmp-openstandards.org/cs-examples/
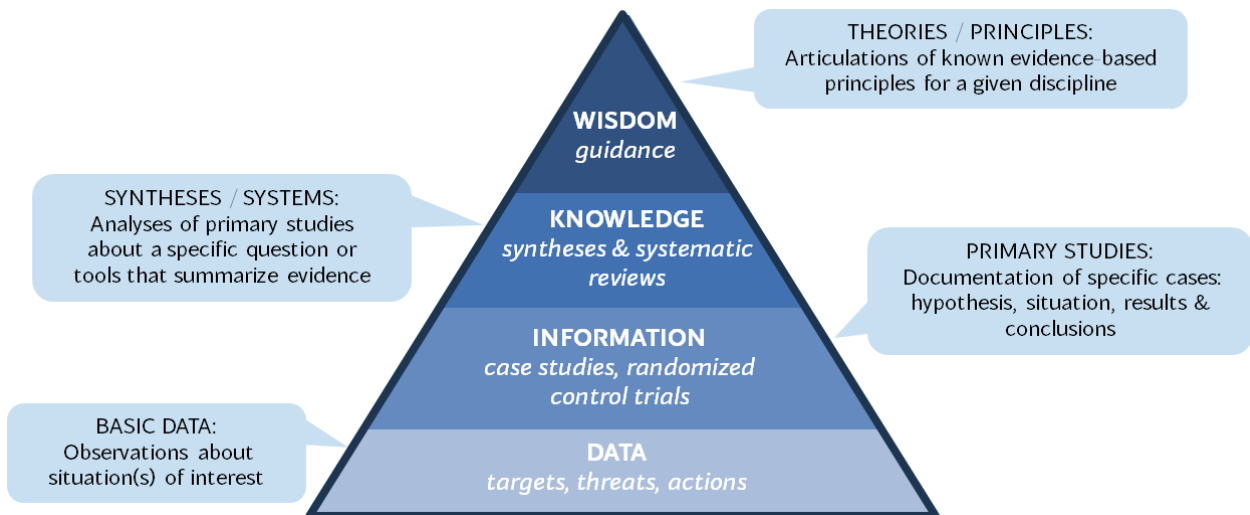
4 **ANALYZE & ADAPT**

ANALYZE & ADAPT

This step of the *Conservation Standards* involves managing your data as they come in and regularly analyzing them to convert them into useful information and knowledge (Figure 22). In particular, you need to analyze your project's results, core assumptions, key uncertainties, and relevant operational and financial data, and then adapt your work plan as necessary. Project managers often underestimate the time needed to complete this step and end up with lots of data that they have not analyzed or used.

THEORIES / PRINCIPLES:
Articulations of known evidence-based principles for a given discipline

WISDOM
guidance

SYNTHESES / SYSTEMS:
Analyses of primary studies about a specific question or tools that summarize evidence

KNOWLEDGE
syntheses & systematic reviews

PRIMARY STUDIES:
Documentation of specific cases: hypothesis, situation, results & conclusions

INFORMATION
case studies, randomized control trials

BASIC DATA:
Observations about situation(s) of interest

DATA
targets, threats, actions

Source: Adapted from Salafsky et al. 2019. Defining and Using Evidence in Conservation Practice

The levels of complexity in analysis range from very simple and fast to extremely time-intensive and complex. As with the selection of monitoring methods, you should make sure that your level of analysis matches the level of evidence required by your situation and your audiences' information needs.

4A. Prepare Your Data for Analysis

Analysis is a process of transforming raw data into useful information. Analysis should not happen at only one point in the life of the project. To continuously understand what is happening with your project and to be able to change things in a timely fashion, it is essential to capture and analyze your monitoring data as part of routine project work, using the data management systems that you put in place in Step 3.

Preparing your data for analysis is really a continuum between Steps 3 and 4. Your team should regularly record, store, process, and back up all your data, including programmatic, operational, and financial data. This work will be much easier if you systematically check, clean, and code your raw data as you collect them. Ideally, your systems should manage and present your data to easily meet the key information needs laid out in your strategic plan. For example, if you are collecting data on how many new building permits are issued for state-listed unique areas (refer back to Figures 12 and 16), your systems should allow you to easily verify your objective (By mid 2024, all new building permits avoid development in state-listed unique areas).

OUTPUTS FOR THIS STEP INCLUDE:

♦ Key project data recorded, stored, processed, and backed up on a regular basis

4B. Analyze and Reflect on Results

An important aspect of good conservation practice (as laid out in the *Conservation Standards*) is systematically assessing on a regular basis whether you are on track to achieve your stated goals and objectives. Your monitoring data should help you fill knowledge gaps, determine whether you have achieved your expected intermediate results, and assess whether you are on track to achieve long-term success. In addition to your monitoring data, your team should consider data and results from any project evaluations. Analyzing your monitoring data (and evaluation data or results) can help you determine whether the core assumptions you laid out in the planning steps (especially in your situation analysis or theories of change) hold true in reality. This knowledge can help your team understand why certain actions have succeeded or failed. By testing and reflecting on your core assumptions, you are in a better position to adapt and change your project actions accordingly. You also gain knowledge and experience that can contribute to a broader evidence base to help inform other conservation efforts.

To ensure your team is using your plan and monitoring data to learn and adapt, you should regularly (approximately every 6–12 months) review and reflect on your project. In these reviews, you and your team should use your analysis to address the following points:

- Are you on track with implementing your actions? If not, why not? What adjustments should you make? (refer back to Figures 19 and 20)

- Are you achieving the results you expected to achieve and the associated goals and objectives tied to key results? If not, why not? Are there other contextual variables that are influencing your project's results? What adjustments should you make? (Figure 23)

- Have you addressed other priority information needs (including key uncertainties and changes in your context – as illustrated by dotted lines and question marks in situation model and results chains diagrams)? If so, what does this tell you about your project and any adjustments you may need to make? If you have not addressed those information needs, are they still priorities? And if so, how will you address them in the future?

PHOTO: FINELLA BLAIR / DURRELL WILDLIFE CONSERVATION TRUST

Figure 23.
Example Results Chain with Results Progress Indicator Lights
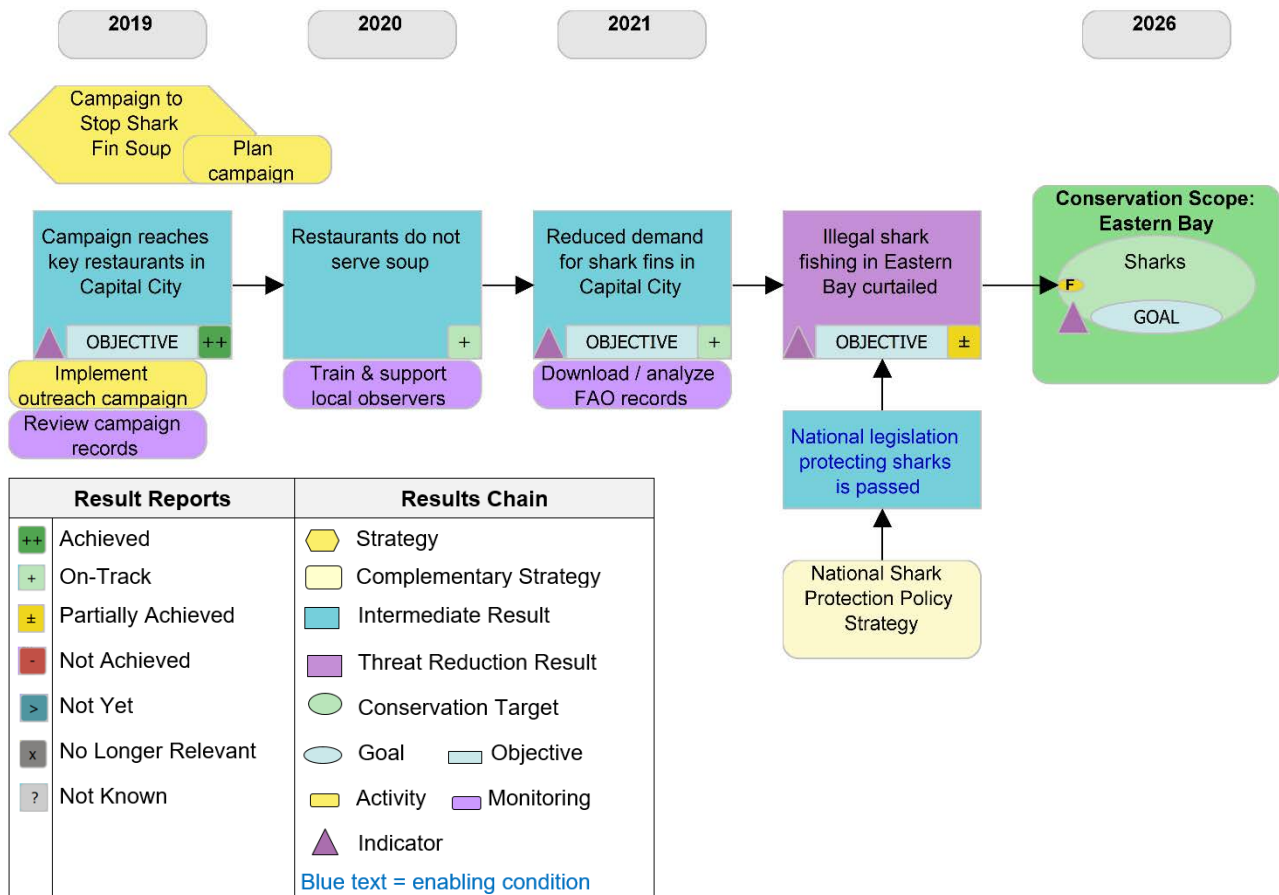
It is also important to consider whether the operational processes supporting your project are functioning properly. You may have a project that uses the perfect strategies to address the threats and opportunities affecting your conservation targets, but maybe your team is not operating efficiently or does not have the administrative or financial support it needs to do its job well. Your analysis might explore the extent to which:

- You have sufficient resources (e.g., financial, human, administrative, political) to carry out your project;

- You have the right skills among your team members to implement your project well;

- You have the physical infrastructure and equipment (e.g., office space, vehicles, computers) you need to do your job; and/or

- Your project team operates smoothly (e.g., communications, delegation of responsibilities).

For learning and effective communication, it is important to involve the right people in the analyses and/or to share preliminary analyses with them. As a general rule, analyses should involve members of the project team, as they will have the deepest understanding of the project and overall situation. Depending on the context and where appropriate, team members may be conducting the analyses themselves, or they could help review and interpret analyses. However, teams should take care not to influence the findings unjustifiably. While team involvement is important, input from your stakeholders, outside experts, or those with other perspectives is also valuable and can help provide a balanced interpretation of monitoring results.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Analyses of project results and assumptions

♦ Analyses of operational and financial data

♦ Documentation of discussions and decisions

PHOTO: GREG ARMFIELD / WWF-UK

4C. Adapt Your Strategic Plan

Collecting and analyzing data as part of routine monitoring activities allow you to determine how effective your interventions are and what adjustments you need to reach your goals and objectives more efficiently. As the final part of this step, you should use what you learned during the analyses and discussions to, as needed, modify and optimize your portfolio of strategies and activities. This is the essence of good conservation practice.

All the planning that you did earlier was not meant to be a one-time event, never to be revisited or used again. Instead, in order to learn over time and to continue to improve the effectiveness of your project, you should revisit and, as needed, adjust your project parameters and core assumptions, action plan, monitoring plan, operational plan, work plan and budget. Therefore, you may need to update many or all sections of your strategic plan to reflect what you have learned. Learning and ideas for improvement may come from internal discussions with your team, findings from formal evaluations or audits, feedback from external stakeholders familiar with your work, and/or research findings relevant to your context.

As you make changes, you should also document the rationale and/or evidence behind them so that others will understand what you learned and why you made these changes. This will also be an important input to Step 5 (Share). As a final note, keep in mind that you may learn that some of what you are doing is working well and no adjustments are needed. The important thing is to leave time for that reflection and analysis so you can understand where you do need to adapt.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Revised project documents, including your action plan, monitoring plan, operational plan, work plan, and budget

♦ Documentation of evidence, discussions, and decisions

RESOURCES

Resources for Analyze & Adapt Step: https://cmp-openstandards.org/resources/analyze-adapt/

Real-world Examples of Various *Conservation Standards* Elements: https://cmp-openstandards.org/cs-examples/

PHOTO: MATT MUIR / US FISH AND WILDLIFE SERVICE

5 **SHARE**

SHARE

This final step in the *Conservation Standards* cycle involves sharing lessons and formal products with key internal and external audiences. It also involves giving and receiving feedback and promoting a learning culture. It is important to foster learning within your project team and with your partners and stakeholders since lessons from the work you have done will be important inputs for each step in your next pass through the project cycle. It is also important to promote learning at an institutional level and, more generally, across the conservation community. With this in mind, the *Conservation Standards* include practices that your project and your organization could adopt to help foster learning and sharing.

5A. Document What You Learn

As you go through the process described in the *Conservation Standards*, you should document the results you achieved and the knowledge your team gained on a regular basis and contribute them to the appropriate evidence base. To a large degree, you will have already generated many results and lessons in Step 4, based on the information needs you defined in Step 2B. Here, you should make sure that you document those lessons and track unanswered information needs in a manner that suits your team so that they are available in the future to your team, your organization, and the conservation community as a whole.

You could capture these results and knowledge in a peer-reviewed publication, online data systems, or an informal handwritten log. One simple option for your team is to use online documents and spreadsheets to store a running list of lessons learned that all project team members can access and edit over time. This documentation is often challenging to do in the face of daily work pressures and deadlines. As such, it is important that your team or organization provides both time and incentives to do this work.

> ## OUTPUTS FOR THIS STEP INCLUDE:
>
> ♦ Documentation of key results and knowledge

5B. Share What You Learn

If you document the evidence you generated and your lessons learned, you will be able to better remember from year to year what you have done, what worked what didn't work, and what you plan to do in the future. This will help your current project team over the long term and will ensure that new project staff will have a record of what you did and what you learned. Importantly, it will also help the team avoid repeating past mistakes. If you use project management software like Miradi and Miradi Share, you can record those comments in the relevant steps of the process and ensure that the comments become part of the historical record for that project file.

Formal, targeted communications products will help you share your findings with practitioners around the world. Documenting and sharing what you have learned will help practitioners working under similar conditions or using similar tools to benefit from your experience, avoid problems you have encountered, and,ultimately, more effectively achieve conservation goals. There are a range of options for sharing your findings more broadly, including contributing to evidence libraries, publishing in scientific journals, posting lessons on your website, sharing learning via social media, and telling your stories at workshops and conferences.

Although we present communications as the final step in the cycle, you should prepare to communicate your results and other relevant project information much earlier. For example, in Step 2B, you should have identified your audiences for your monitoring results and their information needs. To effectively reach these audiences, you need a clear communications and dissemination strategy. This involves deciding what evidence and which lessons you wish to communicate to these priority audiences (based on their interests), determining the best format to reach each key audience, and then developing and distributing your communications products. For instance, you may use informal communications means (e.g., email, phone calls) to regularly share lessons with your internal audiences (e.g., project staff and partners). When sharing lessons, you should provide:

- Clear management recommendations (based on your analysis) to the right people;

- Necessary details to help support your recommendations and interpret results; and

- Alternatives and contingencies based on the results

For communicating and sharing lessons with your external audiences (e.g., donors, other practitioners, broader public), you will probably use more formal communications means, such as dashboards, reports, presentations, videos, academic papers. It is important to evaluate each product to determine if it effectively communicates your messages and to learn how you might improve your communications. Again, monitoring, learning, and adapting happen at all stages of the project cycle.

As a reminder, you should also look to others in the conservation community as sources of information and learning for your project. Some of the best sources of lessons are the experiences of others.

PHOTO: PHYLLIS RACHLER / WWF INTERNATIONAL

OUTPUTS FOR THIS STEP INCLUDE:

♦ Refinement, as needed, of key audiences and their information needs and preferred communication modes

♦ Regular communication to project team members and key stakeholders

♦ Contribution to evidence base

♦ Development and distribution of appropriate communication products

5C. Foster a Learning Environment

This last sub-step in good conservation practice involves fostering a performance and learning culture within your project team, across your organization and partners, and among conservation practitioners around the world. A performance and learning culture at these levels is important to ensure that all parties learn and benefit from your team's experience. Although this is listed as the last step, it really is something you and your organization need to cultivate right from the start (you may recall that we also identified this concept as an overarching principle upfront). To effectively apply the *Conservation Standards*, you need to work in a project environment that promotes evidence-based conservation and adaptive management. This means that you, your team, and your organization should be regularly reflecting, seeking feedback, and providing feedback. That feedback could be formal or informal and might come from your team members or other staff members in your organization. Alternatively, it might come from external mechanisms, such as evaluations, which assess a project against its own stated goals and objectives, and audits, which assess a project against a set of process standards, such as the ones outlined in this document. In creating a learning environment, it is important to be open to outside opinions that can give you fresh and insightful perspectives.

Fostering a learning environment is not easy. It requires leaders and donors who understand the need to reallocate scarce resources from immediate action to the long-term work of evidence-based conservation and adaptive management. It often involves enabling practitioners to take some chances and question the conventional wisdom related to specific conservation tools and strategies. It entails providing project teams with the institutional security that innovation and questioning assumptions are valued in their organizations. And it requires a commitment to share both successes and failures with other practitioners around the world – to create true communities of practice. With this in mind, the *Conservation Standards* community itself would benefit from sharing with one another our own experiences, challenges, and successes in applying the *Conservation Standards* within our organizations and agencies. Doing so would help us learn how to better institutionalize, improve, and adapt the *Conservation Standards* themselves.

OUTPUTS FOR THIS STEP INCLUDE:

♦ Regular feedback shared formally or informally

♦ Audits, as appropriate, to assess adherence to good conservation practice

♦ Demonstrated commitment from leaders and staff to learning and innovation

♦ A safe environment for encouraging experimentation and questioning the status quo

♦ A commitment to share successes and failures with practitioners around the world

RESOURCES

Resources for Share Step: http://cmp-openstandards.org/resources/share/

Real-world Examples of Various *Conservation Standards* Elements: https://cmp-openstandards.org/cs-examples/

CLOSE THE LOOP

CLOSE THE LOOP

In this document, we present the *Conservation Standards* as a cycle where teams might enter at the step that is most appropriate for their situation. A project team starting up a new project might go through Steps 1 and 2 fairly quickly (perhaps over a 4–5 day workshop) to sketch out the basic strategic plan for their project. They may then circle back and fill in the details over the next few months for Steps 1 and 2 while they are also beginning the implementation work in Step 3. The team might then conduct its first analyses in Step 4 after 6-12 months and use this work to develop their first communication products in Step 5. Many teams, however, may enter the cycle at a later stage (e.g., the Analyze and Adapt Step, where they want to understand whether what they have been doing is working). Over time, they may go back to earlier steps and revisit decisions and assumptions and make them more explicit.

As shown in the *Conservation Standards* cycle, once you complete Step 5, you return to Step 1. The intent behind this cycle is not to put you and your project team in an endless loop of work. Rather, it is to remind you that evidence-based conservation and adaptive management are dynamic processes that require you to constantly learn and improve over time. For example, you should try to answer questions such as: Based on your analysis of your data and the overall evidence base, should you revisit your vision and conservation targets? Are there new factors or relationships that you had not previously considered that you believe should be incorporated into your situation model or addressed by a specific goal or objective? Has your audiences or their information needs changed? Do you need to change your monitoring plan? Do you need to adapt your operational plan, including any plans to exit a project and build the sustainability of its results? Closing the loop is about repeatedly going through the steps in the project cycle to determine if you need to augment or further develop associated products or processes over time. It is the essence of transforming ordinary management into true evidence-based conservation and adaptive management.

ANNEXES

ANNEX 1. GLOSSARY

There is an endless debate among planners as to the meaning of technical terms such as goals, objectives, activities, targets, milestones, outputs, and results. It seems that every organization, agency, project, and individual has its own preferred set of terms. There is no right answer – the most important thing is that the members of your project team and the people with whom you work have a clear and common understanding of whatever terms you choose to use. Nevertheless, there are advantages to having a standard glossary. To this end, technical terms in this document were carefully selected, underlined when first used, consistently used thereafter, and defined in this glossary.

Action – A general term used to refer to the work of conservation teams. This includes strategies, activities, and tasks.

Action Plan – A description of a project's goals, objectives, and strategies to abate identified threats and make use of opportunities.

Activity – A specific action or set of tasks undertaken by project staff and/or partners to reach one or more objectives. Sometimes called an action, response, or strategic action. (See relationship to strategies.)

Adaptive Management – The incorporation of deliberate learning into professional practice to reduce uncertainty in decision making. Specifically, it is the integration of design, management, and monitoring to enable practitioners to systematically and efficiently test key assumptions, evaluate the results, adjust management decisions, and generate learning. The *Conservation Standards* explicitly bring adaptive management principles into conservation practice.

Assumption – An explicit statement of what a team assumes is true. The logical sequences linking project strategies to one or more targets as reflected in a theory of change. Assumptions may also include a team's expression of how they anticipate external variables may influence the achievement of results (see also risk factor). Assumptions are also present in situation models linking presumed influencing factors to other factors.

Audience – Those individuals or groups a project team is trying to reach, be it for communication purposes or to influence a particular behavior.

Audit – An assessment of a project or program 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 with evaluation.)

Biodiversity Target – A synonym for 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 synonym for situation model.

Conservation Focus – A synonym for conservation target.

Conservation Practice – A process that involves a defined group of practitioners agreeing on desired outcomes for a given situation and then taking action(s) designed to achieve these outcomes. The *Conservation Standards* provide a common framework and set of "best" practices that explicitly incorporate principles of collaboration, evidence-based conservation, and adaptive management. More broadly, a discipline that encompasses the collective people, institutions, and body of knowledge of the global conservation community.

Conservation Target – An element of biodiversity (species, habitat, or ecological system) at a project site on which a project has chosen to focus. All targets should collectively represent the biodiversity of concern at the site. (Synonymous with biodiversity target, conservation focus, or conservation value.)

Conservation Value – A synonym for conservation target.

Critical Threat – Direct threats prioritized as the most important to address.

Direct Threats – Primarily human actions that immediately degrade one or more conservation targets (e.g., illegal logging or unsustainable fishing). They can also be natural phenomena altered by human activities (e.g., increase in extreme storm events due to climate change). Typically tied to one or more stakeholders. (Sometimes referred to as a pressure or source of stress. Compare with indirect threat.)

Driver – A synonym for indirect threat.

Ecosystem Service - Services that intact, functioning ecosystems, species, and habitats provide and that can benefit people.

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 program in relation to its own previously stated goals and objectives. (See monitoring and compare to audit.)

Evidence – Relevant information (data, studies, syntheses, or theory) used to assess one or more assumptions (hypotheses) related to a question of interest.

Evidence Base – The body of all information (data, studies, syntheses, and theory) used to assess a particular set of assumptions.

Evidence-Based (or -Informed) Conservation – The explicit use and generation of relevant information in all steps of conservation practice. Specifically, practitioners make decisions and take actions informed by systematic analyses of both their own and the world's previous experiences. Practitioners also document their results and contribute their findings back to the evidence base. The *Conservation Standards* explicitly bring evidence-based conservation principles into conservation practice.

Factor – A generic term for an element of a situation model, including direct and indirect threats, and opportunities. It is often advantageous to use this generic term since many factors – for example, tourism – could be both a threat and an opportunity. (See also root causes or drivers).

Goal – A formal statement detailing a project's desired impact, such as the desired future status of a target. A good goal meets the criteria of being *specific, measurable, achievable, results-oriented,* and *time-limited* (SMART).

Human Well-being Target - In the context of a conservation project, human well-being targets are those components of human well-being affected by the status of conservation targets. All human well-being targets at a site should collectively represent the array of human well-being needs dependent on the conservation targets.

Impact – The desired future state of a conservation target. A goal is a formal statement of the desired impact.

Indicator – A measurable entity related to a specific information need, such as the status of a target, change in a threat, progress toward an objective, or association between one or more variables. 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 result that a project is working to achieve en route to accomplishing a final goal or objective ("intermediate" typically refers to a temporal dimension).

Intervention – A synonym for a specific or targeted strategy.

Key Attribute – Aspects of a target's biology or ecology that, if present, define a healthy target and, if missing or altered, would lead to the outright loss or extreme degradation of that target over time. (Also known as key ecological attribute).

Key Ecological Attribute (KEA)– Synonym for key attribute.

Key Intervention Point – Priority factors (threats, opportunities, or targets) within a situation model on which a team should take action.

Learning - The process of filling an information need.

Logical Framework (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.

Monitoring – The periodic collection and evaluation of data relative to stated project goals and objectives. (Also referred to as monitoring and evaluation (M&E) or monitoring, evaluation and learning (MEL).)

Monitoring Plan – The plan for monitoring your project. It includes information needs, indicators, and methods, timeframe, and roles and responsibilities for collecting data.

Method – A specific technique used to collect data to measure an indicator. A good method should meet the criteria of being *accurate, reliable, cost-effective, feasible,* and *appropriate*.

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 *specific, measurable, achievable, results-oriented,* and *time-limited* (SMART). If the project is well-conceptualized and -designed, the realization of a project's objectives should lead to the fulfillment of the project's goals and ultimately its vision. Compare to vision and goal.

Operational Plan – A plan that includes analyses of funding required, human capacity and skills, and other non-financial resources required, risk assessment and mitigation, and estimate of project lifespan and exit strategy.

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 a threat.)

Outcome – The desired future state of a threat or opportunity factor. An objective is a formal statement of the desired outcome. (Synonym for result.)

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

Pressure – Synonym for direct threat.

Primary Interests – What stakeholders ultimately care about or value. Depending on the type of stakeholder, these could be conservation targets or contributing factors (indirect threats and opportunities) in a situation model.

Program – 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 programs 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 program.)

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, researchers, operations staff, and other key implementers or stakeholders.

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

Results Chain – A visual diagram of a project's theory of change. A results chain includes core assumptions and the logical sequence linking project strategoes to one or more targets. In scientific terms, it lays out hypothesized relationships or theories of change.

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.

Root Cause – A synonym for indirect threat.

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

Situation Analysis – A process that will help you and your project team create a common understanding of your project's context – including describing the relationships among the biological environment and the social, economic, political, and institutional systems and associated stakeholders that affect the conservation targets you want to conserve. Depending upon the scale of the project and the resources available to it, a situation analysis can be an in-depth formal review of existing evidence and study of the area/problem or a less formal description based on input of those familiar with the area/problem.

Situation Model – A visual diagram of a situation analysis. A situation model (diagram) represents relationships between key factors identified in a situation analysis believed to impact or lead to one or more conservation targets. A good model should link the conservation targets to threats, opportunities, stakeholders, and key intervention points. (See also conceptual model.)

Stakeholder – Any individual, group, or institution that has a vested interest in or can influence the natural resources of the project area and/or that potentially will be affected by project activities and has 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, vision, and targets; an analysis of project situation, an action plan, a monitoring plan, and an operational plan.

Strategy – A set of activities with a common focus that work together to achieve specific goals and objectives by targeting key intervention points, optimizing opportunities, and limiting constraints. A good strategy meets the criteria of being: *linked, focused, feasible,* and *appropriate.* (See also intervention.)

Stress – An impaired aspect of a conservation target that results directly or indirectly from human activities. For example, low population size, reduced river flows, increased sedimentation, and lowered groundwater table level. Generally equivalent to a degraded key attribute (e.g., habitat loss).

Target – Shorthand for conservation target.

Target Audience – A specific group of individuals a project is seeking to influence or inform. A target audience may be those causing or contributing to direct threats (e.g., illegal fishers, commercial farmers, policy makers) and/or they may be those supporting or contributing to a project (e.g., partners, donors, general public).

Task – A specific action in a work plan required to implement activities, a monitoring plan, or other components of a strategic plan.

Theory of Change – A series of causally linked assumptions about how a team thinks its actions will help it achieve both intermediate results and longer-term conservation and human well-being goals. A theory of change can be expressed in text, diagrammatic (e.g., results chains), or other forms.

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.

Work plan – A short-term schedule for implementing an action or monitoring plan. Work plans typically list activities and/or tasks required, responsible individuals, and timing of the activity or task. They often link to budgets showing the money and resources required to implement the work plan.

ANNEX 2. DEFINITIONS OF AND CRITERIA FOR KEY TERMS

Vision Statement: A general statement of the desired state or ultimate condition that a project is working to achieve

- *Relatively General* – Broadly defined to encompass all 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 that all project participants can remember it

Goal: A formal statement detailing a desired impact of a project such as the desired future status of a target

Objective: A formal statement detailing a desired outcome of a project

Good goals and objectives should meet the following SMART criteria:

- *Specific* – Clearly defined so that all people involved in the project have the same understanding of what the terms in the goal or objective mean

- *Measurable* – Definable in relation to some standard scale (numbers, percentage, fractions, or all/nothing states)

- *Achievable* – Practical and appropriate within the context of the project site, and in light of the political, social, and financial context (especially relevant to objectives, goals may be more aspirational)

- *Results-Oriented* – Represents necessary changes in target condition, threat reduction, and/or other key expected results

- *Time Limited* – Achievable within a specific period of time, generally 1-10 years for an objective and 10–20 years for a goal

Strategy: A set of activities with a common focus that work together to achieve specific goals and objectives by targeting key intervention points, optimizing opportunities, and limiting constraints

- *Linked* – Directly affects one or more critical factors in a situation analysis (or model)

- *Focused* – Outlines specific courses of action that need to be carried out

- *Feasible* – Accomplishable in light of the project's resources and constraints

- *Appropriate* – Acceptable to and fitting within site-specific cultural, social, and biological norms (includes attention to social and environmental safeguards)

Indicator: A measurable entity related to a specific information need, such as the status of a target, change in a threat, progress toward an objective, or association between one or more variables

- *Measurable* – Able to be recorded and analyzed in quantitative and qualitative terms

- *Precise* – Defined the same way by all people

- *Consistent* – Not changing over time so that it always measures the same thing

- *Sensitive* – Changes proportionately in response to the actual changes in the condition being measured

Method: A specific technique used to collect data to measure an indicator

- *Accurate* – The data collection method has little or no margin of error.

- *Reliable* – The results are consistently repeatable - each time that the method is used it produces the same result.

- *Cost-Effective* – The method does not cost too much in relation to the data it produces and the resources the project has.

- *Feasible* – The method can be implemented by people on the project team.

- *Appropriate* – Acceptable to and fitting within site-specific cultural, social, and biological norms

ANNEX 3. GENERAL PRINCIPLES AND CONSIDERATIONS

There are some essential principles that apply to all steps in the *Conservation Standards*. Instead of listing them for each step, we describe them here.

General Principles

- **Collaborate with partners** – One conservation organization will probably not have sufficient expertise or internal resources to do all the necessary work of a given project. Furthermore, it is often important to ensure that the work started in a project continues after the initial project ends. Thus, you should identify and collaborate with key partners to implement your project by having individuals from partner organizations serve on your project team and/or by developing formal or informal relationships with these organizations. The *Conservation Standards* explicitly provide a common, transparent framework that enables effective information sharing and collaboration across a wide-range of partners.

- **Involve stakeholders** – It is similarly important to define and, at every step, involve the appropriate stakeholders for your project's context. Stakeholders are individuals, groups, or institutions that have an interest in, will be affected by, can provide evidence for, and/or may influence your project's activities and results. In addition to the immediate members of your project team, stakeholders can include those whose behavior you would like to influence, those from whom you need support, those who might oppose your work, and those who may be affected by your strategies. Moreover, there may be key decision makers who can influence the strategic direction and/or financial resources available to your project. Stakeholder roles might change over the course of the project. Project teams should communicate with and engage appropriate stakeholders in project design, implementation, and decision making to ensure representation of and buy-in from key stakeholder groups (see Step 1D for more details on stakeholder analysis). Tools for effective engagement will vary by stakeholder groups but could include spatial maps, detailed analyses, dashboard reports, videos, and social media.

- **Appropriately use and contribute to the evidence base** – Wherever appropriate, you should make use of all available local and global evidence to answer key questions about your project's situation and actions. This evidence could range from local indigenous knowledge about the breeding grounds for a specific species to a global systematic review about the effectiveness of a proposed conservation action. As you learn more about your project, you should also contribute your evidence back to the broader community so that others can benefit from your experiences (see CMP's guidance on Defining and Using Evidence in Conservation Practice for more detail).

- **Use adaptive management in the face of uncertainty** – Although ideally you want to base your situation analyses and actions on available evidence, in many cases you may have to urgently take action without having complete information. In these cases, it is important to state the assumptions you are making and then systematically (but efficiently) collect and assess the information needed to test them so that you can adapt and learn.

- **Document your decisions** – A key principle of both evidence-based conservation and adaptive management is to appropriately document the rationale and evidence supporting your decisions at each step. Not only does this documentation help you analyze why things worked or did not, but it also provides the basis for others to understand, vet, and provide input on the logic of your choices. Documenting decisions and providing evidence to sustain your assumptions also add transparency and accountability to your work. However, you do not want to spend so much time documenting every last detail that your team gets overwhelmed. As a general principle, focus on the least amount of documentation that will help your team appropriately evaluate and learn from your work, as well as share with others.

- **Foster a learning environment** – Another key principle of both evidence-based conservation and adaptive management is to learn from your results so you can improve over time. To this end, it is critical to embrace learning, recognize and admit mistakes, identify successes, and work to understand why some actions succeeded while others did not. A project and an organizational culture that values learning will help foster a safe learning environment. Creating this culture will likely require work and commitment from both lower and higher levels of each partner organization involved in the project.

Considerations

As you review and implement the *Conservation Standards*, keep in mind the following considerations:

- **These standards apply to projects at any spatial and/or temporal scale** – Projects can range from the management of small-scale sites to large-scale ecoregions, landscapes, or corridors. They also may involve simultaneous management of small-scale sites to achieve large-scale impact. Projects can take place over time scales ranging from days to decades. Likewise, they may be more thematic in nature, including, for example, policy-based threat reduction or species-focused initiatives. These standards are relevant for all of these situations. Moreover, they also can be used to design funding programs and clarify the relationship between programmatic goals and individual grants.

- **These standards will change over time** – These standards are not written to be the last word on how to do effective conservation. Instead, they are meant to capture the prevailing wisdom on what it takes to do conservation well under a variety of conditions. As such, CMP, with input from the broader community, periodically refines the *Conservation Standards* as they are applied and tested in the field and as our knowledge increases about what works and what does not. To participate in future updates, please email us at CMPinfo@conservationmeasures.org.

- **These standards represent the "ideal"** – The *Conservation Standards* are meant to provide a comprehensive view of what comprises good practice in project design, management and monitoring. It is important to acknowledge that it may not be feasible – for a variety of reasons – to address every component of the *Conservation Standards*. What is important, however, is that you use a systematic and logical process for applying them. For example, you should not identify your indicators (Step 2B) before you clarify what you want to conserve (Step 1B). Likewise, if you are not able to address a particular component, you should be clear about how this will influence the rest of your work.

- **Some priority-setting has already taken place** – The choice of where to work or the broader themes to address is often a higher-level decision taken outside of a typical project planning process. These standards thus assume that you and/or your organization have undertaken some priority setting exercise to define (at least roughly) where, or on what issue, your team will work. Learning achieved during the application of the *Conservation Standards* can inform future priority setting exercises.

- **Few projects will start applying the *Conservation Standards* at the beginning of their planning efforts** – If you are just beginning to think about initiating a new project, the *Conservation Standards* can help you be comprehensive in your approach from the start. However, many projects that will benefit from the *Conservation Standards* are already underway. You can apply these standards to your project retroactively to help identify gaps you need to address to improve your project.

- **Each project is different and thus needs to customize their use of the *Conservation Standards*** – We have written the *Conservation Standards* in general terms to provide teams the flexibility they need to adapt and modify them to their conditions. As such, the steps described in this document generally apply to all conservation projects, but each team should go into a level of detail commensurate with the levels of complexity and investment in its project. Also, some project teams may find that certain steps don't work for them and may need to adapt these steps.

- **The *Conservation Standards* focus on conservation as the main aim but can be adapted** – These standards were developed by and for organizations and agencies whose ultimate aim is biodiversity or natural resource conservation. However, many teams are also working to contribute to human well-being, and in some cases, human well-being is an equal or higher aim. The *Conservation Standards* are neutral about a team's primary aim. This is a management decision teams should clarify in the initial steps of the process. However, several *Conservation Standards* processes and tools can support explicit discussions about potential trade-offs and consequences of prioritizing different aims throughout the project cycle.

- **These standards can be implemented using a variety of tools and guidance** – The *Conservation Standards* are meant to represent the state-of-the-art in the conservation community's collective knowledge of the process for designing, managing, and monitoring conservation projects, while promoting a learning culture. They provide guidance on how to do conservation. The *Conservation Standards* do refer to specific tools that have proven useful in implementing this approach. However, teams may wish to supplement typical *Conservation Standards* tools with other context-appropriate tools (e.g., spatial prioritization tools, such as MARXAN, scenario planning, and consequence tables).

- **These standards seek to clearly define and consistently use terminology** – There are endless debates among planners as to the relative meaning of technical terms such as goals, objectives, strategies, activities, targets, milestones, outputs, and results. Every office, project, and even individual has their own preferred set of terms. There is no right answer. The *Conservation Standards*, however, maintain that it is very important that the members of your project team and the people with whom you work have a clear and common definition of the terms you choose to use. With this in mind, the technical terms in this document were carefully selected, underlined when first described, consistently used thereafter, and defined in the glossary at the end. The selection of specific terms for a given concept and the definitions for these terms are based on current usage of words by professionals from various disciplines working in planning, monitoring, and evaluation. As the *Conservation Standards* evolve, we may find some terms that need updating to improve communication and adoption of key principles and steps (see Table 1 for updates for this current version).

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ANNEX 4. SUMMARY OF STANDARDS OF PRACTICE AND OUTPUTS

Numbers denote steps and sub-steps, and diamond bullets (◊) denote outputs. Not all standards or outputs are appropriate under all conditions or for all projects, so you should adapt as needed.

1. Assess

1a. Define Purpose & Identify Project Team

◊ Identification of purpose, decision makers, & decisions that this work will support
◊ Selection of initial project team, including project leader, core members, & advisory members
◊ Identification of existing skills among team members & key gaps you should fill
◊ Designation of roles & responsibilities

1b. Define Scope, Vision, & Conservation Targets

◊ Brief description of the project scope, including a map, if appropriate
◊ Vision statement for the project
◊ Selection of conservation targets, including a brief explanation of why they were chosen, & if appropriate, a description &/or map showing each target's location
◊ Description of the viability status of each priority conservation target
◊ If relevant, selection of human well-being targets & identification of ecosystem services, including a brief explanation of why they were chosen

1c. Identify Critical Threats

◊ Identification of direct threats &, if relevant, a map showing the spatial footprint for each threat as they intersect targets
◊ Climate change vulnerability assessment with appropriate level of detail for the context
◊ Rating or ranking of direct threats to identify critical threats

1d. Assess the Conservation Situation

◊ Identification & analysis of indirect threats & opportunities
◊ Assessment of stakeholders & their primary interests
◊ Initial situation model, narrative description, &/or other representation of key cause-and-effect relationships among factors affecting your project context
◊ Ground-truthing & revision of your model

2. Plan

2a. Develop a Formal Action Plan: Goals, Strategies, Assumptions, & Objectives

◊ Goals for each conservation target and, if appropriate, human well-being target
◊ Identification of key intervention points & draft strategies
◊ Prioritization of draft strategies
◊ Theories of change that clarify team assumptions & main activities for key strategies
◊ Objectives for key intermediate results
◊ Finalized Action Plan

2b. Develop a Formal Monitoring, Evaluation, & Learning Plan

◊ Audiences & their information needs & preferred communication modes clearly defined
◊ Indicators & methods defined
◊ Finalized Monitoring, Evaluation, & Learning Plan

2c. Develop an Operational Plan

◊ Assessment of human, financial, & other resources
◊ Risk assessment & mitigation actions
◊ Estimate of project lifespan & exit strategy

3. Implement

3a. Develop a Detailed Short-Term Work Plan & Timeline

◊ Work plan detailing the tasks, activities, & responsibilities associated with your Action Plan, Monitoring Plan, & Operational Plan
◊ Project timeline or calendar

3b. Develop & Refine Your Project Budget

◊ Project budget
◊ Potential funding sources identified
◊ Funding proposals developed & submitted
◊ Financial resources obtained

3c. Implement Your Plans

◊ Implementation of strategic plan (action, monitoring, & operational plans) & work plan, keeping in mind your project budget & schedule
◊ Development of systems for storing & accessing data
◊ Progress reports to your organization, funders & other project stakeholders
◊ Monitoring data captured into system

4. Analyze & Adapt

4a. Prepare Your Data for Analysis

◊ Key project data recorded, stored, processed, & backed up on a regular basis

4b. Analyze & Reflect on Results

◊ Analyses of project results & assumptions
◊ Analyses of operational & financial data
◊ Documentation of discussions & decisions

4c. Adapt Your Strategic Plan

◊ Revised project documents, including your action plan (e.g., target viability, threat ratings, situation analysis, results chains), monitoring plan, operational plan, work plan, & budget
◊ Documentation of evidence, discussions, & decisions

5. Share

5a. Document What You Learn

◊ Documentation of key results & knowledge

5b. Share What You Learn

◊ Refinement, as needed, of key audiences & their information needs & preferred communication modes
◊ Regular communication to project team members & key stakeholders
◊ Contribution to evidence base
◊ Development & distribution of appropriate communication products

5c. Foster a Learning Environment

◊ Regular feedback shared formally or informally
◊ Audits, as appropriate, to assess adherence to good conservation practice
◊ Demonstrated commitment from leaders & staff to learning & innovation
◊ A safe environment for encouraging experimentation & questioning the status quo
◊ A commitment to share success & failures with practitioners around the world

Close the Loop

The Open Standards for the Practice of Conservation (developed and maintained by the Conservation Measures Partnership) bring together common concepts, approaches, and terminology to help make conservation efforts more effective.

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