Rating Direct Threats in USAID Biodiversity Programming
To reach their concessions, oil and gas concession owners in the Ecuadorian Amazon began to build roads into the forest, making once-isolated areas more accessible. Photo credit: CIFOR.

Cyprien Mvondo (right) charcoal burner and his assistant cooling the charcoal in a forest near Ovangou village, Center Region, Cameroon. Photo credit: Ollivier Girard, CIFOR.

The author’s views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

About Measuring Impact: This work is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of its requisition number REQ-EGAT-I2-000014 (Measuring Impact) implemented by Environmental Incentives, LLC; Foundations of Success; and ICF International. Measuring Impact has been issued under contract number AID-OAA-C-12-00078 and supports the same program objectives as described in RFP number SOL-OAA-000050. Measuring Impact is funded and managed by the USAID Bureau for Economic Growth, Education, and Environment Office of Forestry and Biodiversity.
I. INTRODUCTION

This document provides supplementary, in-depth, but targeted guidance to United States Agency for International Development (USAID) staff and implementing partners as they complete the biodiversity program design process described in USAID's three Biodiversity How-To Guides. These how-to guides are designed to help teams systematically approach biodiversity conservation design, planning, monitoring, evaluation, and learning within USAID's Program Cycle, and in compliance with the Agency's Biodiversity Policy.

This guide supplements Biodiversity How-To Guide 1: Developing Situation Models in USAID Biodiversity Programming. Step 4 in How-To Guide 1 defines direct threats to biodiversity focal interests and demonstrates how to illustrate them in situation models, but it does not provide in-depth guidance on rating direct threats. This supplemental guide provides more detailed, step-by-step guidance to help program design teams rate the different threats affecting their biodiversity focal interests.

Rating threats is an essential step within the Program Cycle because it helps program design teams determine how to allocate scarce resources. The process laid out in the how-to guides encourages teams to use evidence, experience, and local and thematic expertise to make critical decisions to help narrow and clearly define the focus of their biodiversity conservation programs. Rating threats is one of those key decision-making processes.

This supplemental guide outlines the following steps:

1. Review list of direct threats
2. Understand the criteria for threat rating
3. Apply threat rating criteria for each threat-biodiversity focal interest pair
4. Understand and discuss summary ratings
5. Update situation model, as needed

This guide discusses how design teams should use threat ratings for planning and decision making and concludes with a series of tips that will help design teams effectively rate direct threats and use that rating to inform program design (see Tips for Threat Rating in Section V on page 13).

This supplemental guide uses the same fictitious example project – the Grand River project – as used in the three Biodiversity How-To Guides. The Grand River project example's purpose links to a fictitious Country Development Cooperation Strategy component – an Intermediate Result on "Biodiversity conservation for improved well-being of targeted rural communities." Although fictitious, the example is based on real-life conservation contexts.

---

1 USAID's Office of Forestry and Biodiversity developed three Biodiversity How-To Guides to assist USAID staff in implementing the Biodiversity Policy as they program biodiversity funds: 1) Developing Situation Models in USAID Biodiversity Programming; 2) Using Results Chains to Depict Theories of Change in USAID Biodiversity Programming; and 3) Defining Outcomes and Indicators for Monitoring, Evaluation, and Learning in USAID Biodiversity Programming. These how-to guides are based on requirements of the USAID Program Cycle and concepts from The Open Standards for the Practice of Conservation, a set of best practices for adaptive management developed by the Conservation Measures Partnership, of which USAID is a member, and widely used in the conservation community.

2 For the purposes of this document, the terms “program” or “programming” are used as general terms to encompass USAID project and activity levels.

3 The Grand River project example is a teaching example and should not be interpreted as an endorsement of any specific thematic or technical decisions.
II. WHY IS IT IMPORTANT TO PRIORITIZE DIRECT THREATS?

Conservation takes place in the context of a wide variety of threats to biodiversity. A common challenge for biodiversity program design teams is determining which of these threats to try to address. Program design teams often make decisions by applying an implicit set of criteria to evaluate threats. The danger with this approach is the lack of transparency and the subjectivity inherent in different people using different criteria or applying them inconsistently. Moreover, there is often a tendency to focus on threats that teams are more comfortable addressing, rather than tackling the highest priority threats.

Threat rating is a process for making implicit assessments of threats more explicit and objective and for preparing to make more informed decisions about strategic approach selection. It involves determining and defining a set of criteria and then applying those criteria systematically to assess direct threats affecting biodiversity focal interests. The resulting ratings help program design teams direct conservation efforts where they are most needed.

The results of a threat rating can help program design teams narrow the focus of their context (problem) analysis and situation model and reduce some of its complexity. When first identifying direct threats, program design teams often feel that all threats are important and must be shown on their model. Once they do a threat rating, they become more comfortable with the knowledge that not all threats are equally important. They can discuss whether there are some direct threats that they could either eliminate from the model or place to the side without developing the full set of drivers behind the threat.

As with most steps laid out in the Biodiversity How-To Guides, this process is only as good as the information going into it. As such, it is important to have the right people involved and good information available (reports, assessments, articles, and other evidence). At the same time, program design teams should keep in mind that a threat rating is simply a tool to aid decision-making. It will not tell teams the right strategic approaches to use to reduce threats. Rather, teams should closely examine and discuss results from a threat rating and make decisions based on their knowledge of the program scope and context.
To start, the design team should have a list of the main direct threats affecting the biodiversity focal interests within the defined biodiversity program scope. Step 4 in *Biodiversity How-To Guide 1: Developing Situation Models in USAID Biodiversity Programming* explains how to identify direct threats. See Box 1 for a reminder of terminology and definitions related to direct threats and other associated components in a situation model. Also, see Tips for Threat Ratings on page 13 for several useful hints. Best practice is to rate direct threats before adding drivers and completing the rest of the situation model. Doing so will allow the team to keep their situation model simpler by only showing drivers contributing to the most important threats.

**Box 1: Terminology**

Terms commonly confuse direct threats, stresses, and drivers. While the differences may seem minor, they can affect threat ratings and the team’s choice of strategic approaches. Here is some guidance to help use the concepts consistently.

**Direct Threat:** A human action or unsustainable use that immediately degrades one or more biodiversity focal interests. A threat has at least one actor associated with it. Examples: agricultural expansion, hunting.

**Stress:** An altered key ecological attribute of a biodiversity focal interest. In many cases, a stress is the biophysical way in which a direct threat impacts the biodiversity focal interest. A single stress can be caused by multiple threats. Examples: habitat fragmentation, altered population structure.

**Driver:** A constraint, opportunity, or other important variable that positively or negatively influences direct threats. Drivers usually include economic, political, institutional, social, and/or cultural influences. Examples: weak law enforcement, lack of awareness, interest in sustainable products.

---

**Step 1: Review List of Direct Threats**

As a starting point, the program design team should review its list of direct threats to make sure it is complete and that the identified threats are not stresses or drivers (Box 1). This is also a good opportunity to determine whether any direct threats the team has identified are noticeably less significant than the others and can be removed from the list before going through the rating process. This will simplify the process and reduce the team’s workload.

In some cases, a program design team may find it is evaluating both actual and potential threats. In the case of potential threats, it is best to only include them in the rating if they are threats that are realistic and likely to occur within a reasonable time period (10 years, for instance). As an example, a design team might include a road that a local logging company is negotiating with the government as a real potential threat, but it would not include mining as a potential threat if there is no indication that mining will occur in the area within the next 10 years.

This is an important point in the program design process for teams to be sure to draw on the available evidence (such as assessments, evaluation reports, documentation from other projects and activities, and expert opinion and knowledge) to help understand current and potential threats.
Step 2. Understand the Technical Criteria for Threat Rating

The results of any threat rating will depend on the methodology and technical criteria used to rate the threats. This guide describes an absolute threat rating process, but a design team could also use a relative ranking process (see Box 2). The absolute threat rating process in this guide uses the criteria of scope, severity, and irreversibility and a four-point rating scale (Table 1 on page 8). These are widely accepted criteria used by the Conservation Measures Partnership and others in the conservation community. Threat scope refers to the proportion of the biodiversity focal interest that will likely be affected by the threat within 10 years under current circumstances. Severity categorizes the level of damage to the biodiversity focal interest (within the threat scope) expected in the next 10 years. Irreversibility describes the degree to which the effects of a given threat can be undone and the targets affected by the threat restored, if the threat no longer existed.

An alternative to absolute ratings of threats is relative rankings. In a relative ranking, a design team considers all threats and ranks them relative to another. The main advantages of a relative ranking are that they force a spread in the results, and they are quicker and easier to do if teams do not have a lot of information about their biodiversity focal interests. However, they are not as effective in accounting for threats that affect only a limited set of focal interests (e.g., threats such as illegal hunting which may affect only a single species). As with any threat rating or ranking process, design teams must define the criteria to be used. Useful technical criteria include scope, severity, and urgency – although design teams could use or add other technical criteria. Relative rankings involve listing the identified direct threats and rating each threat relative to the others against the pre-determined criteria. For example, if “scope” is one of the criteria and there are seven direct threats, the design team would give the threat that affects the greatest proportion of biodiversity within the overall program scope a “7” score, continuing down to the threat that affected the smallest proportion of biodiversity and assigning that threat a “1.” The design team would follow the same process for each criterion, sum up the ratings for each threat, and then classify the threats into groupings (e.g., low, medium, high, and very high).

Although one could use other rating methods (Box 2) or criteria for the threat rating, many conservation organizations agree that scope and severity are key criteria. These two criteria together give an indication of the magnitude of the threat. The concept of irreversibility or permanence is also common, but not ubiquitous. Other criteria conservation organizations have used include, but are not limited to, urgency, timing, probability (for potential threats), and trend. It is important to remember that the criteria described here are technical criteria to understand the nature of the direct threats identified. The program design team will want to use other criteria (e.g., feasibility, consistency with institutional priorities) when it determines the strategic approaches it will use. It is very important, however, to understand that threat rating and strategic approach rating are two separate processes.

Technical criteria help a design team understand the situation as it is today. For example, imagine that the threat of dam construction to a river system is very high, but, when they eventually consider candidate strategic approaches, a design team decides they are unlikely to work to prevent or alter the dam construction for political reasons and because it is not an institutional priority. It is important that the team understand that the dam construction threat is very high and any action to reduce other threats to the river system may have only minimal impact. If the team were to include a criterion like “institutional fit” when rating direct threats, it would dilute the overall rating to falsely imply that dam construction is less of a threat. Therefore, threat rating criteria should always be technical. Institutional criteria may be relevant when defining the biodiversity program scope, selecting biodiversity focal interest, and/or prioritizing strategic approaches. However, they should not be part of the threat rating and analysis process.

---

4 The four-point scale (also used in Miradi software) is designed to force a decision on whether a rating falls above or below a mid-point. A five-point scale is often used in the social sciences, but there can be a tendency for those rating to choose the mid-point. There are merits in both a four-point and a five-point scale. This guide uses a four-point scale, but a design team could modify the rating scale to use a five-point or other scale.

5 Conservation Measures Partnership has developed a set of best practices for conservation program design, monitoring, evaluation, and learning called The Open Standards for the Practice of Conservation. The Partnership has also developed Miradi Adaptive Management Software (which is approved for use in USAID biodiversity programs) to help teams use the Open Standards.

6 Note that this is different from the biodiversity program scope, which describes the geographic or thematic boundaries of the program. Here, “scope” is defined by the intersection of the threat and the biodiversity focal interest.


8 See Foundations of Success (2009), page 47.
**Table 1: Threat Rating Criteria and Rating Scale**

<table>
<thead>
<tr>
<th>CRITERIA DEFINITION</th>
<th>LOW</th>
<th>MEDIUM</th>
<th>HIGH</th>
<th>VERY HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong>&lt;br&gt;Proportion of the BFI expected to be affected by the threat within 10 years given the continuation of current circumstances &amp; trends.&lt;br&gt;&lt;br&gt;Very narrow in its scope, affecting the BFI across a small proportion (1-10%) of its occurrence/population&lt;br&gt;&lt;br&gt;40%&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Restricted in its scope, affecting the BFI across some (11-30%) of its occurrence/population&lt;br&gt;&lt;br&gt;40%&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Widespread in its scope, affecting the BFI across much (31-70%) of its occurrence/population&lt;br&gt;&lt;br&gt;40%&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Threat is likely to be pervasive in its scope, affecting the BFI across all or most (71-100%) of its occurrence/population&lt;br&gt;&lt;br&gt;40%&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td></td>
</tr>
<tr>
<td><strong>Severity</strong>&lt;br&gt;Within the threat scope, level of damage to the BFI from the threat that can reasonably be expected given the continuation of current circumstances &amp; trends. For ecosystems &amp; ecological communities, typically measured as the degree of destruction or degradation of the BFI within the scope. For species, usually measured as the degree of reduction of the BFI population within the scope.&lt;br&gt;&lt;br&gt;Within the scope, the threat is likely to only slightly degrade/reduce the BFI or reduce its population by 1-10% within 10 years or three generations&lt;br&gt;&lt;br&gt;1-10%&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Within the scope, the threat is likely to moderately degrade/reduce the BFI or reduce its population by 11-30% within 10 years or three generations&lt;br&gt;&lt;br&gt;11-30%&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Within the scope, the threat is likely to seriously degrade/reduce the BFI or reduce its population by 31-70% within 10 years or three generations&lt;br&gt;&lt;br&gt;31-70%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td>Within the scope, the threat is likely to destroy or eliminate the BFI, or reduce its population by 71-100% within 10 years or three generations&lt;br&gt;&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%&lt;br&gt;71-100%</td>
<td></td>
</tr>
<tr>
<td><strong>Irreversibility</strong>&lt;br&gt;Degree to which the effects of a threat can be reversed &amp; the BFI affected by the threat restored, if the threat no longer existed.&lt;br&gt;&lt;br&gt;Effects of the threat are easily reversible and the BFI can be easily restored at a relatively low cost and/or within 0-5 years (e.g., off-road vehicles trespassing in wetland)&lt;br&gt;&lt;br&gt;0-5 years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years</td>
<td>Effects of the threat can be reversed and the BFI restored with a reasonable commitment of resources and/or within 6-20 years (e.g., ditching and draining of wetland)&lt;br&gt;&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years</td>
<td>Effects of the threat can technically be reversed and the BFI restored, but it is not practically affordable and/or it would take 21-100 years to achieve this (e.g., wetland converted to agriculture)&lt;br&gt;&lt;br&gt;21-100 years&lt;br&gt;100+ years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years</td>
<td>Effects of the threat cannot be reversed and it is very unlikely the BFI can be restored, and/or it would take &gt;100 years to achieve this (e.g., wetlands converted to a shopping center)&lt;br&gt;&lt;br&gt;100+ years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years&lt;br&gt;6-20 years&lt;br&gt;21-100 years&lt;br&gt;100+ years</td>
<td></td>
</tr>
</tbody>
</table>
Step 3: Apply Threat Rating Criteria for Each Threat-Biodiversity Focal Interest Pair

Using the criteria described in Table 1, program design teams should rate each threat as it affects relevant biodiversity focal interests for each criterion. Teams can begin by selecting a threat-biodiversity focal interest pair and then discussing the effect of that threat on the biodiversity focal interest according to scope, severity, and irreversibility. It is important to consider each criterion rating independently (see the discussion of “severity” below).

In the Grand River project example, the example design team assessed the threat “overfishing” as it affects the biodiversity focal interest “river fish populations” as follows:

- **Scope:** The example design team rated overfishing based on the proportion of the biodiversity focal interest (river fish populations) affected. Overfishing is widespread, happening across the entire watershed and affecting over 75% of river fish populations the design team identified as important. Given this context, the design team determined that overfishing has a “very high” scope (see Figure 1).

- **Severity:** The example design team then looked at the level of damage overfishing would cause to river fish populations. They determined that the severity of overfishing is “very high” because, where it happens, it decimates fish populations. Note, however, that a “very high” scope does not mean a “very high” severity. Suppose that one threat in the Grand River project example was pollution from a paper mill on a tributary, affecting only a small proportion of all river fish populations. In this case, the scope might be “low” (narrow), but for affected fish populations, the severity could be “high” or “very high.”

- **Irreversibility:** The example design team then looked at the extent to which the effects of overfishing could be undone and the river fish populations restored. They rated the irreversibility as “medium” because, if the threat of overfishing were removed, the river fish populations could recover within 10 years with a minimal commitment of resources.

![Figure 1: Grand River Project Example – Threat Rating for the Effect of Overfishing on River Fish Populations](image)

As illustrated in Figure 1, once a program design team has defined the ratings for scope, severity, and irreversibility, it can combine those ratings to establish a summary rating of the impact of a specific threat on a biodiversity focal interest. All figures in this supplemental guide were generated using Miradi software, which uses an algorithm for combining ratings to give a summary rating. In the example, overfishing was rated as very high threat to river fish populations.

Figure 2 on page 10 illustrates a complete threat rating matrix for the Grand River project example — showing ratings within a threat-biodiversity focal interest pair; across a threat as it affects multiple focal interests; and across a focal interest as it is affected by multiple threats.

---

9 See Foundations of Success (2009) Appendix B for Miradi’s threat rating algorithms. While Miradi can be a useful tool for doing threat ratings, program design teams could choose to develop their own threat rating matrix in Excel or a similar spreadsheet tool. If working outside of Miradi, the team would have to consider how it will combine ratings within a single threat-biodiversity focal interest cell, as well as across rows and columns. If working within Miradi, the team may want to spend time understanding the threat rating algorithms.
Step 4: Understand and Discuss Summary Ratings

It is important to understand how each direct threat affects the biodiversity within the overall program scope (not just a specific biodiversity focal interest) and the magnitude of damage to each biodiversity focal interest. After a program design team has completed the ratings for each threat-biodiversity focal interest combination, it should review the summary threat ratings and summary biodiversity focal interest ratings (Figure 3). At this point, it is useful to ask the broad question of whether any of the final summary ratings come as a surprise. In general, the summary ratings are what design teams will use for deciding where to direct resources. If the design team is surprised by any of the summary ratings, it should revisit the individual threat-biodiversity focal interest pair ratings to confirm that the ratings were accurate. Sometimes teams will adjust how they are applying the ratings as they become more comfortable with the process, so it can be useful to go back to early ratings and make sure the team was consistent in its ratings across all pairs. The example in Figure 3 is simplified for teaching purposes and does not show as much variation among summary ratings as a team would find in reality. If using an algorithm like that in Miradi software, it is common for most biodiversity focal interests to have “high” or “very high” summary ratings, as they tend to be affected by several threats. Miradi’s algorithm leads those biodiversity focal interests with many threats to have higher summary ratings.

A design team should also be open to learning that a threat they always considered high might be lower than they thought. In the Grand River project example, the design team started the threat rating exercise believing that excessive hunting/retaliatory killing was a major threat to jaguars and one they should work to reduce. This could be because images of dead jaguars are vivid and evoke emotion. Systematically applying the threat rating criteria, however, helped the design team realize that the true threat to jaguars in the scope of the Grand River project is small-scale commercial agriculture which is fragmenting lowland forest habitat. In this case, if programming resources are limited, the program would probably be most effective working to reduce the impact of small-scale commercial agriculture.

Figure 3: Grand River Project Example – Annotated Threat Rating Matrix
Step 5: Add Threat Ratings to Situation Model

Once a team has completed its threat rating, it is useful to add the summary ratings to the direct threats in the situation model. Miradi does this automatically as shown in Figure 4, but teams can also add notations manually if working outside of Miradi. Having threat ratings visually displayed on the situation model will help the program design team keep in mind the impact of different threats when constructing the rest of their situation model and then thinking about where they might develop strategic approaches. The visual indication on the situation model can also help the design team focus the development of the rest of the model, as it may not be necessary to build out the full model for lower-rated threats.

In the Grand River project example, the team might eliminate or put to the side the threat of illegal selective logging because it is a low threat to tropical lowland forests. They might also decide to eliminate or put to the side “excessive hunting and revenge killing.” Alternatively, they could decide to keep it because there is some indication that this might be a growing threat, and they do not want to lose track of it. Again, there is no “right” approach; the team’s knowledge of the context will be essential to developing the situation model and refining it over time as the team learns more.
IV. USING THREAT RATING RESULTS

Design teams should come back to their threat rating later, once they have developed their full situation model and are considering strategic approaches. Using a threat rating helps design teams determine what to address and what not to address—an often-difficult decision when working in complex areas that have multiple threats and multiple biodiversity focal interests. There is no absolutely right decision about which threats the design team should propose the program addresses. In general, however, teams should focus efforts on higher-rated threats because they have the greatest impact on biodiversity within the program scope. However, there are some valid, real-world reasons to focus programming resources on lower-rated threats, including:

- The threat is a “high” or “very high” threat to a specific biodiversity focal interest but has little or no effect on other biodiversity focal interests. A summary rating across the entire scope could mask the importance of that threat.
- Not all biodiversity focal interests are equally important, and there are compelling social, political, and/or ecological reasons to focus more energy on one particular biodiversity focal interest and the threats affecting it.
- The team has identified a lower-rated threat where a relatively small amount of programming investment now can prevent it from becoming a bigger threat in the future.
- There are institutional or host country priorities that are focused on a lower-rated threat.

Design team should use their ratings and discuss their context—documenting their decisions and reasoning for which threats will be the focus of their program design and the eventual development of their strategic approaches. The design team should understand whether working on lower-rated threats can lead to meaningful impact. If it cannot, then doing so would waste valuable conservation resources.

One of the most important values of a threat rating process is that it helps design teams have informed discussions and make explicit decisions about priorities. At the same time, design teams should always keep in mind the data and evidence that went into the threat rating process and interpret the summary ratings accordingly. Indeed, a threat rating is a key decision-support tool for teams—but it is not a decision-making tool. Teams will have to use their own understanding of the situation to determine how to use the ratings.
V. TIPS FOR THREAT RATINGS

Threat ratings can be time-consuming, but the process is fairly straightforward and one that design team members and stakeholders tend to grasp quickly. This section provides some tips that can be useful to help program design teams avoid common problems and produce the best threat ratings given the available evidence.

TIP 1: CONSIDER EACH CRITERION SEPARATELY

A very common error in completing a threat rating is for people to do manual calculations in their heads and start to combine criteria. Consider, for example, the construction of a visitor center in a montane protected area. The scope of the visitor center construction (the threat) on the montane forest (the biodiversity focal interest) is “low,” and the team might also conclude that the severity is also “low.” However, “severity” should be considered within the area affected. It is useful to say, “Where the visitor center is constructed, how severe is the impact to the montane forest?” In this case, it should be “very high” because a building has replaced the forest – within the visitor center footprint, the visitor center will destroy the montane forest.

Similarly, teams should take care not to confuse “severity” and “irreversibility.” Some threats cause quite a bit of damage (medium or high severity), but they do not have lasting impacts on the biodiversity focal interests they affect once the threat is removed. For example, oil exploitation (direct threat) and the associated potential oil spills could kill many seabirds and thus seriously degrade this biodiversity focal interest (high severity). However, once the oil spill is cleaned up, the bird populations could recuperate on their own or with low-cost restoration efforts, within five years (low irreversibility). For species, the irreversibility of a threat depends, in part, on the reproductive rate of the species. A widespread threat to species like giant pandas or spiny dogfish sharks, for example, is likely to have a higher irreversibility because these species have low reproductive rates.

TIP 2: CONSIDER WHAT IS LIKELY TO HAPPEN OVER A 10-YEAR TIMEFRAME

The criteria outlined in Table 1 are defined with the clause, “…can reasonably be expected given the continuation of current circumstances and trends,” and both the scope and severity criteria ask program design teams to consider the trends over the next 10 years. These qualifiers are helpful reminders that a design team should consider not just the current status of a threat, but rather how it is likely to change over the course of a program and even beyond. Keeping this in mind will help program design teams make sound decisions that are more likely to be relevant into the future. It is also helpful for teams that are considering potential threats (e.g., construction of a road or dam). These may not be current threats, but the team should determine how likely they are to be real threats in the coming years and whether they need to plan for them (e.g., help ensure they are done in an environmentally thoughtful way).

TIP 3: DO NOT GET STUCK – COMPLETE AS MUCH AS POSSIBLE AND NOTE DATA GAPS

Even if a program design team is drawing on available evidence and expertise, the team may be uncertain about some ratings. It is important that teams do not get stuck because they do not have enough information about specific threats. Teams should take their best guess and note the need and process to gather more information. This will allow the team to make progress on planning, while it fills information gaps.
TIP 4: RECORD ASSUMPTIONS AND DISCUSSIONS
Program design teams make many assumptions and have important discussions that inform their threat rating. It is important that teams clearly document discussions, assumptions, decisions, and justifications in a place that is easily accessible to all team members and anyone else involved in the planning process. Doing so will help clarify the program design team’s rationale to those who were not directly involved in the threat rating and to anyone who is new to the program. Even those who were part of the discussion are likely to forget some important details, so it is useful to have this record. While formal documentation is essential, a team should not be reluctant to revisit decisions and modify assumptions and ratings as more information becomes available or as conditions change. This is part of the adaptive management process.

TIP 5: WORK IN SMALL GROUPS, VET WITH A FOCUS ON SUMMARY RATINGS
While doing a threat rating is a critical step in designing a program, it can be tedious. A program design team may find it most efficient to work with a small group to complete a draft rating that can be shared and vetted more broadly. The small group should include “experts” with strong knowledge of the area, threat, and/or biodiversity focal interest. Some of these experts may participate in only part of the rating that is most relevant to their expertise. The program design team may find it useful to vet the draft rating with a wider group of stakeholders and/or experts. If this is the case, the team should coach reviewers to focus on the summary threat ratings rather than getting into the “weeds” of individual threat-biodiversity focal interest pair ratings. The rationale is that the team will make most decisions related to action based on the overall impact of the threat. The details are important to get a rating for that overall impact, but they are often less important when planning for the broader program. However, reviewers should dive into details when summary ratings do not make sense.

TIP 6: REMEMBER A THREAT RATING IS ONLY A TOOL
A threat rating is only as good as the information that goes into it. If the program design team did a good job of using and documenting the best available information and evidence in their threat rating, the results will be credible. However, the results will not tell a team what they should do. A threat rating is a decision-support tool that teams should use and discuss as they try to determine where, when, and how they should act to have the greatest impact.
THREAT CLASSIFICATION


ABSOLUTE THREAT RATING


RELATIVE THREAT RATING
This Supplemental Guide uses Miradi to demonstrate how program design teams can rate threats. However, teams may choose to use a threat rating matrix in Excel or Google Sheets. The interactive threat rating worksheet (see link below) can facilitate this approach. This worksheet supports teams in discussing and documenting threats and applying ratings for each threat-biodiversity focal interest pair. The worksheet automatically calculates ratings for each threat-biodiversity focal interest pair and summary ratings for each threat and biodiversity focal interest using Miradi's threat rating algorithms.

https://rmportal.net/biodiversityconservation-gateway/resources/projects/measuring-impact/mi-project-resources/threat-rating-worksheet/view