



This document is a chapter from the Conservation Action Planning Handbook. The complete Handbook is available online at <http://conserveonline.org/workspaces/cbdgateway/cap/practices>.

The CAP Handbook is intended as a guidance resource to support the implementation of The Nature Conservancy's Conservation Action Planning (CAP) Process - a powerful instrument for helping practitioners get to effective conservation results. The CAP process is a key analytical method that supports Conservation by Design, the Conservancy's strategic framework for mission success.

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For more information on Conservation Action Planning visit [www.conservationgateway.org/cap](http://www.conservationgateway.org/cap).

# CONSERVATION ACTION PLANNING

## Step 2: Define Project Scope & Focal Conservation Targets

As summarized in TNC's [CAP Overview of Basic Practices](#):

With this step you define the extent of your project and select the specific species and natural systems that your project will focus on as being representative of the overall biodiversity of the project area. This step helps your project team come to consensus on the overall goal and scale of the project and your ultimate measures of success. Specific questions that this step answers include:

*“Where is our project?”*

*“What are we trying to conserve or restore?”*

### Expected Outputs

- A brief text description of your project area or scope.
- A basic map of your project area(s) using a computer-based GIS program, existing base map or hand sketch.
- A statement of the overall vision of your project.
- Up to eight ecological systems, ecological communities and/or species that you assume represent the biodiversity of the area for which you are planning.
- An explanation of why these conservation targets were chosen by the team and, if applicable, the nested targets they represent.

## The Importance of Scope and Focal Targets

A project's scope and focal conservation targets define the broad parameters of the project and provide the foundation for all subsequent steps in the CAP process. Defining the scope enables the core project team members to discuss and agree on what the geographic or ecological extent of their project will be. This is especially important when conservation efforts might extend beyond the limits of a designated management area or when the investments transcend single site boundaries.

Focal target selection is perhaps the most critical step to the CAP process. One of the important benefits that a CAP brings to a project is the establishment of a clear biodiversity focus - a focus upon which other planning and monitoring steps are concentrated to ensure that consideration of threats, strategies and monitoring plans, and the prioritization therein, all link directly back to the biodiversity in question. Further, engaging partners in the planning process ensures the interests of those partners are considered and appropriately represented going forward in the process. Then, as planning moves forward, all key stakeholders are beginning with a common vision for the focus of the project.

The value of such a common vision statement can not be overemphasized. The vision should be a source of inspiration and unification among individuals. A vision is a summary statement in general terms that describes the desired state or ultimate condition that you are working to achieve.

## Defining Scope and Selecting Focal Conservation Targets

The project scope is determined based on the biodiversity of interest and can be thought of as the geographic or ecological "frame." The scope of the project usually is depicted by a basic map illustrating the applicable project area and a general text description. In some cases we may be acting outside of a defined geographic scope such as in the case of some wide-ranging species or the implementation of broad-scale strategies. But, for most teams, an initial estimate of the geographic context is a useful step to help define the scope of the planning "unit" for their project. This is particularly important in multi-stakeholder efforts in which the different partners may have different ideas of what they would like to accomplish.

Ultimately the selection of our focal conservation targets will focus and further refine our understanding of the project scope because in fact, the ecological characteristics of the targets are critical to the final project boundary. For example, if you initially define your project area as a watershed, but then identify a forest ecosystem on the ridgetops as a target, you may have to expand your project area to encompass the forest not only in your original watershed, but also over the ridgeline in adjacent watersheds.

Focal conservation targets are a limited suite of species, ecological communities and ecological systems that are chosen to represent and encompass the biodiversity found in your project area. Most projects can be reasonably well-defined by eight or fewer well-chosen focal targets. Experience has shown that eight well-chosen targets can adequately account for the biodiversity at a location. The process gets unnecessarily complex and time consuming when more than eight targets are used.

There are three basic types of focal conservation targets:

- **Ecological Systems (or "ecosystems")** - Ecological systems are assemblages of ecological communities that occur together on the landscape and share common ecological processes (e.g., flooding), environmental features (e.g., soils and geology) or environmental gradients (e.g., precipitation). Ecological systems can be terrestrial, freshwater, marine or some combination of these. Examples include Bottomland Hardwood Forest, Glacial Plain Streams, and South Shore Fringing Reef.
- **Ecological Communities** - Ecological communities are groupings of co-occurring species, including natural vegetation associations and alliances. Examples include Atlantic White Cedar Swamp, Native Mussel Assemblages, and Tidal Flat Community. (Note: This level of resolution will not always be available in existing maps or classifications.)

### Terms at a Glance

**Scope or 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. In a few cases, a conservation project may not focus on biodiversity in a specific area but instead will have a project scope that focuses on a population of wide-ranging animals, such as migratory birds.

**Focal Conservation Targets** - A limited suite of species, communities and ecological systems that are chosen to represent and encompass the full array of biodiversity found in a project area. They are the basis for setting goals, carrying out conservation actions, and measuring conservation effectiveness. In theory, conservation of the focal targets will ensure the conservation of all native biodiversity within functional landscapes. Often referred to as "focal targets", "biodiversity features" or "focal biodiversity."

**Nested Targets** - Species, ecological communities, or ecological system targets whose conservation needs are subsumed in one or more focal conservation targets. Often includes targets identified as ecoregional targets.

**Vision** - A general summary of the desired state or ultimate condition of the project area or scope that a project is working to achieve. A good vision statement meets the criteria of being relatively general, visionary and brief. For most biodiversity conservation projects, the vision will describe the desired state of the biodiversity of the project area.

- **Species** - Specific types of species could include:
  - Species of special concern - due to vulnerability, declining trends, disjunct distributions or endemism within the ecoregion
  - Globally imperiled and endangered native species - (e.g., IUCN Red List species, both global and national red lists, or species ranked G1 to G3 by Natural Heritage Programs)
  - Globally significant examples of species aggregations - such as a migratory shorebird stopover area aggregation
  - Major groupings of species - share common natural processes or have similar conservation requirements (e.g., freshwater mussels, forest-interior birds)
  - Other key species - including keystone species, wide-ranging regional species, umbrella species and flagship species

The coarse filter/fine filter approach is a useful framework for selecting focal conservation targets. Coarse filter targets are those ecological systems or community types or occasionally species that, when conserved, also conserve a larger suite of species within the project area. The species and natural communities that would be conserved by protecting a coarse filter target can be described as nested targets. The fine filter is composed of species and communities that are not well captured by coarse filter targets and require individual attention. These targets may be rare, face unique threats or require unique strategies.

There are situations in which teams find it beneficial to address the needs of a non-biodiversity target in their planning process for the project. This may occur because the project area is also very important for the protection of archeological features or cultural values. The CAP process works well for these types of targets as well. For more guidance on this subject see the *Opportunities for Innovation* and the *Resources and Tools* sections below.

## Commonly Used Methods

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The following sections provide basic guidance for defining your project's scope and selecting focal conservation targets. Although these two sub-steps in the CAP process are presented in a linear sequence and follow Step 1. Identify People Involved, in most project situations these steps will be highly iterative - after selecting your conservation targets, you may want to revisit your project scope and even the membership of your project team.

### ***Defining Project Scope and Vision***

Defining your project's scope involves agreeing as a team on the basic parameters of your project:

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

Most project teams will come together with at least a broad idea of what they are supposed to focus on - for example, conservation of biodiversity in a national park or in a specific watershed. In many cases, ecoregional planning or other prioritization exercises will have provided a general description of priority areas. However, the precise "edges" of the project -what is in and what isn't - are requires consideration and refinement. When partners are involved, have participants clearly articulate why they are involved in the planning process. This will provide a place to begin refining the project scope. Further the basic ecological needs of targets can help define the scope of a project. The scope definition and target selection processes will inform each other.

## 2. Outline your project area on the best available map

Most conservation projects will typically focus on biodiversity in a defined project area. In these cases, you should describe this area in a GIS, on a base map, or even by a rough hand-drawn sketch. As shown in Box 1, it is not always obvious where the team should draw the project boundaries - but the choice that the project team makes will have profound consequences for the ongoing structure and functioning of the project - indeed you define your project by the project area you select, rather than vice versa. Note that in many cases, project actions may take place outside of the defined project area - for example political action in a national capital designed to affect a protected area in a remote province. Focal conservation targets, once determined, will help further define the more general project area you may be able to describe at this point.

## 3. Develop and refine a vision statement for your project

A vision is a general summary of the desired state or ultimate condition you are hoping to achieve within the project area. The following characteristics describe a typical vision statement:

- Relatively General - Broadly defined to encompass all possible 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 describe the vision

### **Example from Mashomak**

**Preserve:** *Maintain and restore high quality coastal ecosystems and keystone species governed by natural ecological processes unencumbered by invasive species and deer in a healthy and viable state for the foreseeable future.*

### **Example from Serria la Laguna:**

*To conserve the biodiversity and the cultural patrimony of the Reserve of the Biosphere Mountain range the Lagoon, by means of the planning, programming and execution of actions coordinated between institutions, key actors and local users*

### **Example from The Gulf Coastal Plain Ecosystem Partnership:**

*To develop a voluntary and cooperative stewardship strategy to sustain the long term viability of native plants and animals, the integrity of ecosystems, the production of commodities and ecosystem services, and the human communities that depend upon them.*

### **Box 1. Defining Your Project Area**

In this case, the project team had a range of options for defining the project area. There is no one right choice, but each choice would mean a very different focus for the project.

**Hudson River  
Estuary  
Watershed  
Proposed  
Project Scope**



### **Scope Options**

Entire watershed?

Estuarine watershed?

Just the river?

As the work of conservation increasingly involves many partners and evolves beyond single site-based management, the plan needs to embrace a diversity of values, including but not exclusively, biodiversity conservation. While this situation is obviously not as straightforward as planning for



biodiversity outcomes alone, the synergy of diverse partners finding shared ways to realize their diverse interests can be powerful, especially in politically charged and complex landscapes. Articulating these different values in a shared vision statement can be a particularly valuable exercise so that all parties understand that their interests are acknowledged and that the members of the team are working to find the best ways to realize this expanded vision of success.

## ***Selecting Focal Conservation Targets***

The basic task in focal target selection is to take the list of hundreds or even thousands of potential targets in your project area and select a limited number (typically eight or less) that adequately represent and encompass the biodiversity at your project area. The following instructions apply for a project team working on their own or in a workshop setting. Throughout this process, remember to consider targets across levels of biological organization; spatial scale; and terrestrial, freshwater and marine systems that may occur within your project area. In doing this work, it is also important to remember that there is no one “right” answer -for most projects, there are many sets of focal targets that can potentially do a good job of representing the biodiversity of the project area. Box 2 shows the results of this process for a few different projects. Box 3 contains a decision tree that summarizes the following procedure.

 The CAP Workbook allows your team to record your selected focal conservation targets and nested targets.

### **1. Determine ecological systems and species groupings in project area**

Pay special attention to coarse-scale systems and systems that have other nested targets. Ecological systems, and some species such as umbrella or keystone species, can provide the “coarse filter” for conserving the representative array of species and natural communities. Species groupings provide a way of aggregating the target species at an area that share common natural processes and have similar conservation requirements (e.g., freshwater mussels).

*Example: The Laguna Madre landscape in Texas and Mexico was divided into five major ecological systems – coastal sandplain matrix, Tamaulipan thornscrub, hypersaline lagoon system, barrier island complex and nearshore marine system.*

### **2. Identify priority ecological communities or species not yet captured**

These priority communities and species should have ecological attributes or conservation requirements not adequately captured within the previously defined ecological systems. These are your “fine filter” targets. Potential community or species targets to consider include:

- Individual species or groups that have special conservation or management requirements due to distinct locations, ecological process or threats.
- “Keystone species” that drive ecological processes.
- Specific species or groups that disperse or use resources across different ecological systems. These species help ensure attention to linkages, connectivity, ecotones and environmental gradients.
- Regional-scale species or groups that have attributes that need to be conserved within the bounds of your project area. Individual conservation areas make important and often unique contributions to the functional network of areas that supports a population of a regional-scale species or grouping of species.

The particular life stage(s) of the regional-scale species that is fulfilled at the landscape may be considered a focal conservation target (e.g., nesting, stopover or wintering grounds for migratory birds; spawning aggregation sites for fish).

*Example: At Laguna Madre, seagrass bed community that play a critical role in supporting the entire estuarine food web, the ocelot which utilizes a full gradient of terrestrial-estuarine-barrier island-marine ecosystems, and the globally significant concentration of piping plovers were all added as species targets.*

### 3. Review initial list of targets and “lump” or “split” targets as necessary

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

- co-occur on the landscape,
- share common ecological processes,
- share similar critical threats, and
- therefore require similar conservation strategies.

On the other hand, if an aggregate target contains species or communities that do not meet the above criteria, you may want to think about splitting it. Target lumping and splitting may be refined later in the CAP process as you conduct your viability and threats analyses and/or develop strategies. See Box 3 for a decision tree useful when considering the lumping and splitting of targets.

### 4. Identify the eight or fewer conservation targets

Use list of targets identified through the above steps to select eight or fewer targets, that best meet the criteria below.


- **Represent the biodiversity at the site.** The focal targets should represent or capture the array of ecological systems, communities and species at the project area and the multiple spatial scales at which they occur. A target that complements other focal targets in this respect is more desirable.
- **Reflect ecoregion or other existing conservation goals.** Focal targets should reflect efforts at the regional, national or state level where they exist such as Ecoregional Assessments, State Comprehensive Wildlife Conservation Plans, a protected area gap assessment or a national biodiversity action plan. Focal targets that are grounded in the reasons for the project area's inclusion in existing plans are desirable.
- **Are viable or at least feasibly restorable.** Viability (or integrity) indicates the ability of a conservation target to persist for many generations. If a target is on the threshold of collapse, or conserving a proposed target requires extraordinary human intervention, it may not represent the best use of limited conservation resources.
- **Are highly threatened.** All else being equal, focusing on highly threatened targets will help ensure that critical threats are identified and addressed through conservation actions

An additional criterion for focal target selection that may be considered is the strategic value of a target. Will the target leverage other conservation actions? Will it generate synergies among partner organizations?

Once targets have been selected, consider mapping the distribution of these targets. It will help inform later steps in the CAP process such as threat assessment and may also help refine your project area.



## 5. Capture “nested targets”

Capture important biodiversity targets not identified as focal conservation targets as “nested targets” linked to one or more focal conservation targets. The focal conservation targets were selected to “adequately represent and encompass the biodiversity at your project area.” It is important to describe how other important biodiversity targets known to occur within the project area are captured by the focal conservation targets. If an ecoregional assessment has been completed, identify ecoregional targets occurring within the project area as focal conservation targets or as nested targets under one or more of the focal conservation targets. The  CAP Workbook includes a worksheet to explicitly capture nested targets and link them to the focal conservation targets.

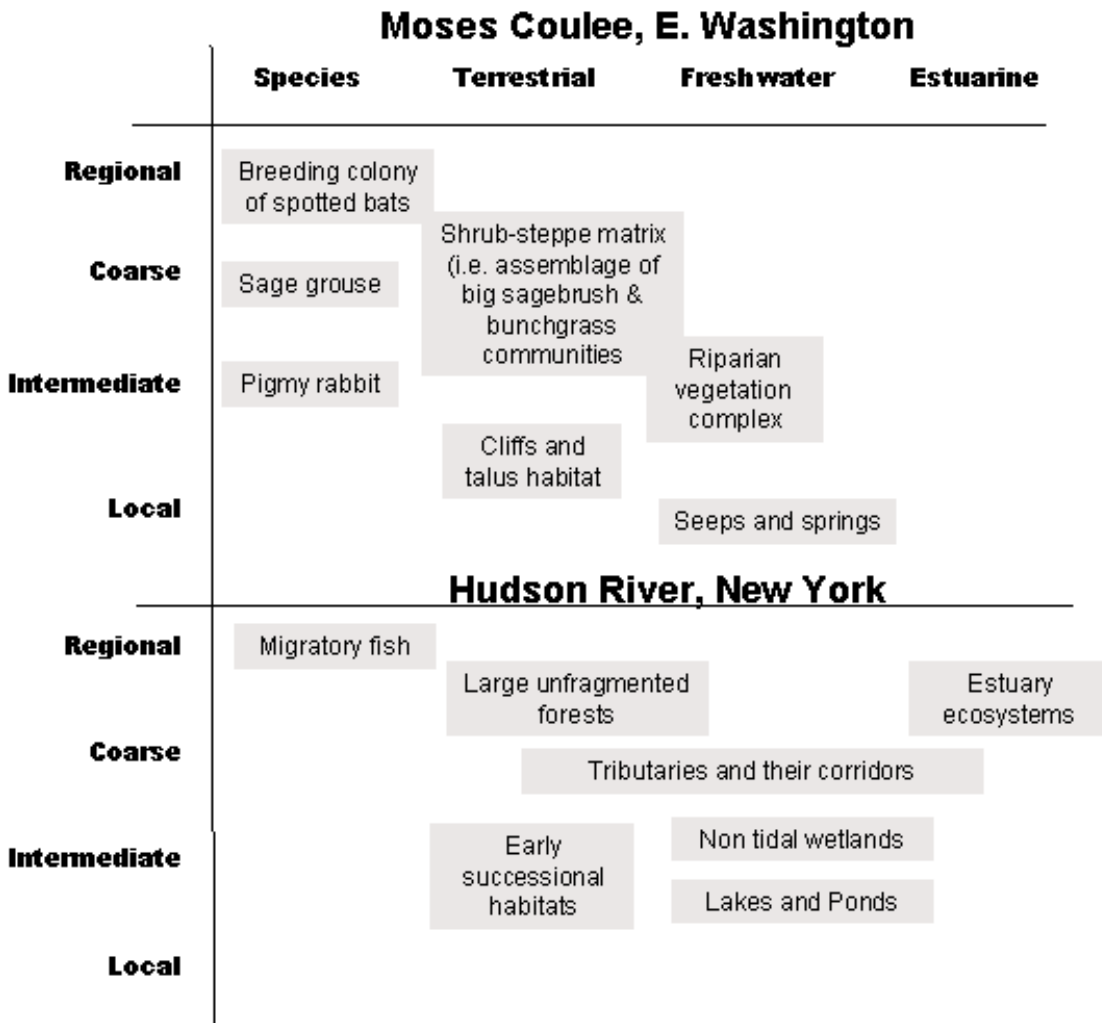
*Example: The Lake Wales Ridge Conservation Project in Florida includes 55 ecoregional conservation target occurrences. The project team identified six focal conservation targets and captured all 55 ecoregional targets within their nested targets table.*

## 6. Revisit project team composition, project scope and definition of project area

In many cases, your choice of targets will compel you to revisit your project area/scope. For example, you may want to alter the scope to ensure that the project area contains a viable occurrence of a matrix forest target or to ensure you have captured the critical watershed of a lake that may extend beyond the original boundary you had first drafted. In general, a project's targets define the project area as least as much as the project area defines the targets. Also the choice of targets may require a team to alter the team composition, invite others to participate in the planning process, and/or reach out to others for advice on topics where the team may lack expertise.

**Box 2. Examples of Targets Selected By Various Projects**

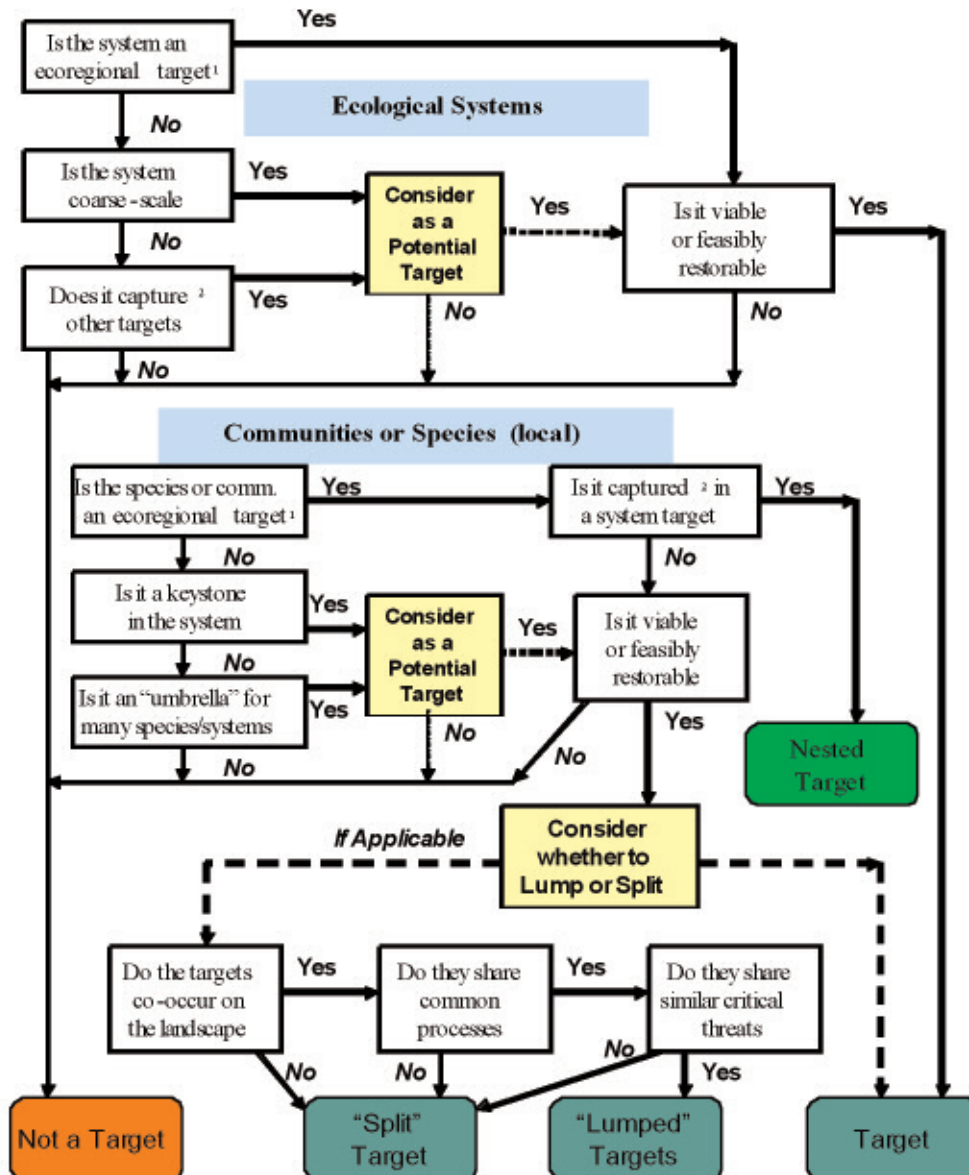
The targets in these examples are stratified by spatial scale as well as whether they are species or various kinds of ecosystem targets.



### Box 3: Focal Conservation Target Selection Tool

A common challenge among planning teams is identifying a limited number of targets. When considering a large number of possible targets, teams need to determine when a number of targets can be aggregated because of similarities in their location in the landscape, the ecological processes that define them and the threats impacting them. This decision tree can be used for determining: (1) if a system, community or species should be a focal target or not and (2) if targets should be lumped or split.

#### Focal Conservation Target Selection Tool



Notes: <sup>1</sup> Or is the system, community, or species likely to be a target in a new or revised ecoregional plan?

## Opportunities for Innovation

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- **Representing All Biodiversity in Extremely Biodiversity Rich and/or Complex Project Areas** - Although most conservation projects can be represented with eight or fewer focal conservation targets, in some extremely complex situations more targets may be required. One way to deal with this issue might be to divide the overall complex project into more manageable sub-projects. For example, for the Greater Yellowstone Ecosystem, the project team developed seven CAP sub-projects (workbooks): one each for six traditional landscape areas and one for the wide-ranging mammals that transcended the individual landscapes. When is this appropriate? What are the more common circumstances under which sub-projects/workbooks are a reasonable solution? When complex projects have developed multiple CAP Workbooks, they can summarize that information within TNC's Conservation Project Database (ConPro, <http://conpro.tnc.org> ). Answers to such questions would be useful to the CAP community.
- **Determining the Relationship Between Projects, Sub-Projects, Targets, Nested Targets, and Key Ecological Attributes** - Members of a given project team have a great deal of latitude as to how they choose to define their project. For example, in the Greater Yellowstone Ecosystem example described in the previous paragraph, a wide ranging mammal, such as the grizzly bear, could be the scope of an entire project or sub-project, a target within a project, a nested target within a given ecosystem, or even a key ecological attribute (a critical defining characteristic) for an ecosystem target. The “right” answer clearly depends on how the project team chooses to define the problem on which they want to focus their efforts. That said, it would be good to explore ways teams are configuring complex projects to determine if any “rules-of-thumb” can be discerned through application. Then develop some more specific guidance on how to configure more complex projects.
- **Applying CAP to Non-Biodiversity Targets and Projects** - In many places around the world, cultural and archeological relicts have been a strong if not the strongest impetus for protecting a given site. In these cases, often it is the cultural and archeological values that inspire partners to want to undertake a conservation planning process. Where these values occur in tandem with significant biodiversity values, teams may want to consider applying a parallel and compatible planning process that uses the basic “thinking” of CAP that was pioneered for this purpose. By cooperatively planning in this manner, teams are finding ways to benefit both cultural and biodiversity targets and, in effect, inclusion of both becomes a strategy to promote conservation of each. For more information please see Conservation Area Planning for Tangible Cultural Resources ([http://conserveonline.org/docs/2004/03/CAP\\_Cultural\\_Summary\\_JRrev.pdf](http://conserveonline.org/docs/2004/03/CAP_Cultural_Summary_JRrev.pdf) ) for a report summarizing the application of CAP for cultural conservation targets. The Motagua Guatemala CAP provides an example of a completed CAP Workbook, in English and Spanish addressing the conservation of cultural targets (<http://conserveonline.org/workspaces/cbdgateway/cap/resources/additional>).

## Resources and Tools

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**Basic guidance and examples for selecting focal conservation targets can be found in the following sources:**

Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. Ecological Systems of the United States: A Working Classification of U.S. Terrestrial Systems. NatureServe, Arlington, Virginia.  
[http://conserveonline.org/docs/2003/05/US\\_Ecological\\_Systems.PDF](http://conserveonline.org/docs/2003/05/US_Ecological_Systems.PDF)

Groves, C. (2003). Drafting a conservation blueprint: A practitioner's guide to planning for biodiversity. Washington, The Nature Conservancy. Island Press.

Groves, et al. 2000. Geography of Hope, Second Edition. Volume 1 (.pdf, 2.3 MB). The Nature Conservancy.  
<http://conserveonline.org/docs/2000/11/GOH2-v1.pdf>

Groves, et. al. 2000. Geography of Hope, Second Edition. Volume 2 (.pdf, 5.4 MB). The Nature Conservancy.  
<http://conserveonline.org/docs/2000/11/GOH2-v2.pdf>

Poiani, K and B. Richter. 2000. Functional Landscapes and the Conservation of Biodiversity. Working Papers in Conservation Science #1. The Nature Conservancy.  
<http://conserveonline.org/docs/2000/11/WP1.pdf>

Poiani, K., B. Richter, M. Anderson, and H. Richter. 2000. Biodiversity conservation at multiple scales. BioScience. 50(2).133-146.

Solano, Clara, et al. 2006. Estrategia de Desarrollo Sostenible, Corredor de Conservación, Guantiva-La Rusia-Iguaque, Boyaca Santander, Colombia. Fundación Natura y TNC.  
<http://www.natura.org.co/>

The Nature Conservancy. 2003. Conservation Area Planning for Tangible Cultural Resources. Guatemala. Working document.  
[http://conserveonline.org/docs/2004/03/CAP\\_Cultural\\_Summary\\_JRrev.pdf](http://conserveonline.org/docs/2004/03/CAP_Cultural_Summary_JRrev.pdf)

The Nature Conservancy ENY. 2005. Conservation of Biodiversity in the Hudson River Estuary - The Process. A Report on a Multi-Stakeholder Workshop Series Using a Modified Version of TNC's CAP process.  
<http://conserveonline.org/workspaces/hrew.conserve/HREW%20workshops%20%20process%20report.pdf>