



## The Climate Adaptation Fund 2015 Grants Program Applicant Guidance Document

This Applicant Guidance Document is designed to assist potential applicants in both understanding the programmatic priorities of the WCS Climate Adaptation Fund and determining the key elements of a strong proposal. The Applicant Guidance Document serves as a supplement to the Climate Adaptation Fund Request for Proposals (RFP), which contains additional information about the application process.

**A strong proposal to the Climate Adaptation Fund will feature a wildlife conservation project with the following characteristics:**

1. **Designed with climate adaptation as a core goal or outcome of the work;**
2. **Conducts on-the-ground implementation, not research or planning;**
3. **Focuses on the functionality of ecosystems, rather than conserving individual species;**
4. **Proposes conservation goals and actions that are grounded in the best available science;**
5. **Designed for long-term conservation impact;**
6. **Creates the potential for impact at a landscape scale; and**
7. **Serves as a model and communicates learning to other conservation practitioners.**

Below we provide further explanation for each element of a strong proposal.

### **1. The proposal demonstrates that a project is designed with climate adaptation as a core goal or outcome of the work.**

The Climate Adaptation Fund seeks projects designed specifically to address climate change and its impact on wildlife and ecosystems, while working to achieve specific adaptation objectives. Consistent with this focus on project design, the Climate Adaptation Fund seeks projects that are developing or advancing the implementation of management techniques directly informed by climate change science. The application requires all applicants to explain exactly how their project is different from general conservation efforts due to its focus on climate adaptation. Differences might be in **WHAT** actions you're taking, **WHY** you have chosen a particular set of actions, **WHERE** those actions will take place, **HOW MUCH** of any intervention will take place, or how you have changed your **PRIORITIES** to take certain actions over others.

For all of these projects it will be critical to show your work by providing the scientific basis and adaptation rationale of the project design. In other words, what are the science inputs (e.g., vulnerability assessments, downscaled climate models, local expert-driven impact assessments) you considered, and how did you use these inputs to evaluate your goals and decide upon actions? It is very important to show how you connect the dots between climate change impacts of concern, the actions you are proposing, and what near- and long-term adaptation outcomes you anticipate will result from the proposed project (e.g., see Table 1 for examples).

**Table 1.** Two examples of how to connect the dots between climate change impacts and proposed adaptation actions and outcomes.

Climate change impacts	Proposed adaptation actions	Expected long-term adaptation outcomes (10-50 years)
Projections of larger, more frequent floods and subsequent increases in erosion, likely to result in negative impacts on aquatic species and habitat via riverbank destabilization and negative effects on riparian vegetation that currently help shade streams and reduce summer temperatures.	<ul style="list-style-type: none"> <li>• Replace non-native scots pines on riverbank with native species that are better riverbank stabilizers and are expected to fare well in future climate.</li> <li>• Rebuild un-vegetated riverbanks with local debris, dirt and native plant species that are good bank stabilizers and expected to fare well in future climate.</li> </ul>	As large floods become more frequent as climate changes, native vegetation that is well suited to future climate conditions will better stabilize the riverbanks, reduce the amount of sediment that enters the stream, and retain shading from riparian vegetation, all of which will benefit a number of aquatic species.

Climate change impacts	Proposed adaptation actions	Expected long-term adaptation outcomes (10-50 years)
<p>Sea-level rise projections of 2m threaten conserved shrub bogs close to the coast; wildlife populations will have to move inland to persist.</p> <p>Warmer temperatures and variable precipitation (i.e., more extreme rainfall events and potentially more droughts) likely to result in lower soil moisture and longer, more severe wildfire seasons, which threaten drained bog ecosystems.</p>	<ul style="list-style-type: none"> <li>• Re-establish seasonally saturated conditions for 1,325 acres of drained bogs further inland using berms and water control structures.</li> <li>• Monitor groundwater levels to measure success of actions at achieving desired saturation levels, and adaptively manage water control structures to achieve restoration goals under variable precipitation levels.</li> </ul>	Re-saturating drained bogs will reduce and reverse patterns of subsidence and carbon loss due to drying and catastrophic wildfire. As bogs at lower elevations and closer to the coast degrade with salt water intrusion and flooding, bog habitat further inland/upslope will be available to support the unique vegetation and wildlife communities associated with these shrub bog ecosystems.

***Hypothetical example of a project designed with climate adaptation in mind:***

*A project focused on wildlife adaptation in the Northern Rockies is using climate-informed connectivity models, data on impacts of recent climate changes on high elevation habitats, and expert opinion to project future movement patterns for a suite of carnivore species. Based on those analyses, conservation practitioners decided to switch their focus from protecting higher-elevation habitats that will be highly vulnerable to negative impacts of climate change to restoring low-elevation riparian habitats expected to be increasingly important as species are forced to move in and between those low-elevation habitats in search of shifting resources.*

**2. The proposal demonstrates that a project conducts on-the-ground implementation, not research or planning**

The Climate Adaptation Fund is designed to support a limited set of conservation projects – those developed specifically to demonstrate tangible, on-the-ground solutions to climate-driven problems. Applications for funds to support conservation-planning activities will not be considered.

Conservation and adaptation planning processes that have identified what actions are necessary and where to take them should be completed before the project start date. Also, due to this singular focus on applied, “shovel ready” projects, the Fund is unable to support applications for projects whose primary purpose is to undertake scientific research, data analyses, or vulnerability assessments.

The Climate Adaptation Fund does, however, place a high value on monitoring activities in an adaptive management framework that help inform the efficacy of a climate adaptation project. Grant funds will support data collection as part of monitoring activities to track progress and determine the ecological effectiveness of conservation interventions. The Fund will also support activities to document the processes, tools, methods, and results of the project to share with others (as long as these activities are part of a grant for an applied project, not a stand-alone endeavor). See section 7 below for more information.

### **3. The proposal is focused on the functionality of ecosystems, rather than conserving individual species**

The Climate Adaptation Fund is focused on projects designed to promote ecosystem functionality across landscapes, rather than those designed to protect or conserve individual species. Protecting and enhancing ecosystem functions will help conserve the processes and conditions necessary to support current and/or future suites of species. Within this context, the Fund seeks projects focused on accommodating, rather than resisting, climatic changes, and facilitating system transitions to future climate change-induced conditions.

### **4. The proposal demonstrates that proposed conservation goals and actions are grounded in the latest science**

A strong proposal to the Climate Adaptation Fund clearly links proposed conservation activities to climate impacts. These goals, strategies and actions should be supported by explicit scientific rationale. Applicants will be asked to identify and provide literature citations for the specific sources of empirical research, modeling, vulnerability analyses, or other rationale that informs the project’s implementation activities. Many organizations work with partners to help identify and apply relevant climate science to their own particular project site or landscape.

In writing your proposal, you should address the following:

- Be clear about the specific climatic changes that your project addresses. For example, rather than referring generally to “climate change”, the proposal should reference specific elements of climate change that are relevant to the design of the project. This can include direct climate influences, such as the consequences of changing precipitation patterns, rising temperatures, or changes in the length of the growing season; or it may include more indirect pressures related to changes in human land use or behaviors resulting from climate change.
- Clarify what is known about future projections for those impacts. If there is uncertainty in those projections, describe how those uncertainties might affect the outcomes of the proposed project activities (i.e., how might proposed project activities fare across a range of possible future conditions?).
- Describe how climate change impacts might play out within your project area, given the local context (e.g., current condition of an ecosystem, current and historical management influences, presence of other non-climate stressors, etc.).

- Describe how the available science has informed the conservation goals and actions prescribed by the project, and any ways that your consideration of climate change has altered project goals or actions.

***A special note on science for projects working to address sea-level rise:***

*The Climate Adaptation Fund does support projects focused on sea-level rise, but requires additional scientific information to justify project rationale and assumptions. The Fund requires all applicants submitting sea-level rise projects to include spatially-explicit maps demonstrating the long-term sustainability of a project given both 1m and 2m sea-level rise scenarios. Applicants should explain how proposed project sites and construction activities are designed to remain resilient to expected climate-driven storm surge events, as well.*

## **5. The proposal demonstrates that the project is designed for long-term conservation impact**

The Climate Adaptation Fund seeks to support conservation projects with outcomes expected to remain effective even in an uncertain future. The Fund prioritizes projects addressing functionality of systems likely to persist as climate changes rather than projects aimed at protecting ecosystems that are projected to be highly vulnerable to climate impacts over time. These projects should address adaptation needs now without requiring repeated long-term investments of management resources to maintain habitat conditions, such as through unceasing efforts to prevent encroachment of invasive species or rising sea-levels (see special note above).

***Example of a project with the potential for long-term impact:***

*A non-profit watershed organization is working with state and federal agencies to restore previously degraded habitat for a variety of species that rely on mid-elevation mountain habitats of the Sierra Nevada range in California. Temperatures are expected to increase within the project landscape and species are expected to migrate upslope as their current habitat deteriorates and becomes unsuitable. Climate science suggests that suitable conditions for those species will persist further upslope in the long-term. Restoration activities are therefore targeted for those upslope forest lands to serve as potential future climate refugia for those species.*

## **6. The proposal demonstrates that the project creates the potential for impact at a landscape scale**

The Climate Adaptation Fund seeks projects that make a difference at the landscape level, either through landscape-scale efforts, or place-based efforts that directly support broader landscape conservation goals. These are essentially two types of projects. The first type is conducted at a scale that impacts an entire landscape. A project might create land-use designation changes over a large area, connect management practices on private lands to large adjacent public lands, tie together core habitat areas to create a larger connected landscape, include many collaborators, and leverage significant funding resources to take the project to scale. The second project type is a smaller, site-based effort, which implements critical pieces of a larger landscape-wide conservation plan or has the potential to impact the broader landscape through replication of similar practices. These smaller projects may lend themselves to replicability through activities aimed at gaining stakeholder buy-in across a landscape, communicating project success to other conservation practitioners, and gaining

public policy support to catalyze similar actions. Please see section 7 below for more on communications activities.

***Example of a project with the potential for impact at a landscape scale:***

*In partnership with the Idaho Department of Fish and Game and the U.S. Forest Service, a non-profit conservation organization plans to re-introduce beavers on public and private lands in southeastern Idaho. Beavers will be introduced to eight stream segments identified by a recent climate study as likely to benefit from increased water storage to ensure summer flows for a number of freshwater fish species vulnerable to climate impacts. The study identified an additional 56 stream segments as potential beaver re-introduction sites. Project partners are working to raise additional funding to replicate this project and introduce beavers to additional stream segments across the landscape in future years.*

**7. The proposal demonstrates how the climate adaptation project will serve as a model and communicates learning to other conservation practitioners**

The ultimate goal of the Climate Adaptation Fund is to increase the incorporation of climate change science and adaptation principles into the implementation of wildlife conservation actions. For this reason, the Climate Adaptation Fund seeks projects that can relate a compelling story to other conservation practitioners about the development and implementation of a project that addresses climate adaptation solutions for particular geographies, habitat types, and conservation outcomes. Taken as a whole, these projects serve to build a common knowledge base and a common language amongst the conservation community to support future science, planning and on-the-ground activities.

***Example of a project engaged in strong communications activities:***

*A non-profit working to maintain forest ecosystems in predicted warmer, drier conditions due to climate change shifted traditional forest regeneration practices. Their work was demonstrating the growth and survival of native species less abundant in the forest today, but that the science says will be more resilient against future climate uncertainties. They first established the simple, clear message of this work: by replanting using a slightly different species list, they are taking a small, but critical first step to ensure the ecosystem function of the future forest. With this they were able to generate content for their website, specific messaging for science conferences and pitches for popular press. This novel thinking and solutions-oriented approach was appealing to the press and served to inspire other conservation practitioners to take similar actions.*

Communications are an important part of any conservation project and should contribute knowledge to help build the adaptation field, publicize working models for applied adaptation actions, convene practitioners for shared learning opportunities, and reach stakeholders who are key to your project's long-term success. We ask applicants to outline their communications strategy, to write communications-related outcomes into their proposal, and to indicate how these outcomes are expected to influence the adoption of adaptation practices beyond the boundaries of their project area.

We allow each applicant to allocate up to \$25,000 of their grant request to communications activities. These funds can be used to support a variety of strategic communications efforts aimed at informing other conservation practitioners. These activities should be designed to increase the chances of replicating and broadening adaptation impacts across a region or landscape. Funds can be used to support communication consulting services and partner organizations that specialize in strategic communications.

## APPENDIX

### A quick guide to sources of science and information on climate adaptation

#### General adaptation knowledge and tools

The Yale Mapping Framework offers a menu of approaches appropriate for ecological assessments that support conservation planning in a changing climate. It provides guidance on appropriate strategies for climate-smart ecological assessments and the tools to implement them.

<http://www.databasin.org/yale>

The Climate Adaptation Knowledge Exchange (CAKE) is a clearinghouse for a wide variety of information about climate adaptation.

<http://www.cakex.org/>

Databasin houses numerous databases related to climate change vulnerability and impact assessment, and adaptation.

<http://www.databasin.org>

The Nature Conservancy provides datasets, analyses, and spatial mapping for the resilience of terrestrial landscapes in the Northeast, Mid-Atlantic, Southeast, and Pacific Northwest, as well as other important science and information on climate change and resilience:

<https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/resilience/Pages/default.aspx>

AdaptWest is a spatial database and synthesis of methods for conservation planning aimed at enhancing resilience and adaptation potential of natural systems under climate change, for Western North America.

<http://adaptwest.databasin.org/>

The U.S. National Climate Assessment summarizes the impacts of climate change on the United States.

<http://nca2014.globalchange.gov/>

#### Selected literature

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