



WCS Climate Adaptation Fund 2022 Applicant Guide

The WCS Climate Adaptation Fund (“the Fund”) strives to advance learning and scale effective adaptation interventions to help wildlife, ecosystems and the people who value and depend on them adapt to climate change.

This Applicant Guide supplements the Fund’s Request for Proposals ([RFP](#)), which contains information about the application process and funding restrictions. Grant requirements and funding priorities are designed to incentivize **Adaptation Implementation** projects that accelerate learning through innovation and monitoring and **Adaptation Mainstreaming** projects that will scale the potential impact of demonstrated adaptation approaches.

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SECTION 1. REQUIREMENTS FOR ALL PROJECTS

Minimum requirements for ALL projects:

- ⇒ Designed with climate adaptation as the core goal of the work.
- ⇒ Focused on the functionality of ecosystems, rather than conserving individual species.
- ⇒ Articulates the co-benefits of the adaptation outcomes.
- ⇒ Appropriately engage communities and partners.

➔ All Projects: Designed with climate adaptation as the core goal of the work

Strong projects will be designed specifically to help wildlife and ecosystems adapt to observed or projected climate change impacts. This is the most important part of the proposal. Project outcomes should be expected to remain effective in an uncertain future. Proposed approaches should support the functionality of systems that are expected to thrive under future climate conditions. Projects that aim to protect ecosystems that are projected to be extremely vulnerable to climate impacts over time must offer compelling reasons why the proposed actions are expected to overcome those vulnerabilities, otherwise they will not be considered.

Depending on your conservation goals and how climate change is impacting them, aspects of your work may need to be approached in new ways or reconsidered entirely. Consult the “5Ws Framework” (What, Where, When, Why, Who) (Figure 1) to articulate the ways in which your work may need to change in order to remain effective in light of climate change, or to justify why current approaches remain the best path to helping conservation targets adapt to climate change.

The 5Ws Rapid Assessment

Step 1—Gather and examine the best-available information on current and projected climate change and its effects on nature and/or people that are the focus of the local planning effort.

Step 2—Consider how changes in climate could impact the effectiveness of traditional actions at meeting goals, and any ways in which those actions and goals may need to be modified to be more effective in a changing climate. Walk through the full suite of questions with respect to what, where, when, why, and who to make actions climate-informed:

- **WHAT** (modifying tactics)—Are there ways that traditional actions need to be modified to be effective at achieving goals under a changing climate? Are there new actions that will be needed to achieve goals, or address new or exacerbated challenges caused by climate change?
- **WHERE** (working in strategic locations)—Are there particularly strategic places or sites to prioritize in implementation, given potential climate change impacts (e.g., work in places that are more or less likely to be impacted, or places where the chances of successful outcomes may be greatest)?
- **WHEN** (shifting the timing and urgency)—Does the effect of changing climate increase the urgency of actions that are already being implemented? Would such climate-informed actions need to occur at different times of the year to be effective as the climate changes?
- **WHY** (embracing forward-looking goals)—Even with modifications in actions, is there a need to adjust the project goals to be more realistic or feasible as the climate change (e.g., focus on different targets, or strive for different objectives)?
- **WHO** (reshaping project leadership, values, and stakeholder involvement)—Who leads design and implementation, and who needs to be involved for actions to be accepted, effective, enduring, and reflective of the needs and diverse values of people and communities? Does climate change affect who benefits or should benefit from actions? Who might be harmed by actions or bear costs?

Step 3—Document any changes to project goals and design. If after asking the above questions you do not feel that modifications to current goals and actions are needed, document the logic on how current actions will be adequate to achieve goals even as the climate changes.

Figure 1: Brief guide to a rapid-assessment approach using the 5Ws to help define project goals, consider climate risks, and brainstorm climate-informed actions. Those applying the 5Ws should query the effectiveness of their work along all five dimensions to decide whether and how to adjust to improve longer-term conservation outcomes. Changes in strategy can occur across one or any combination of the 5Ws. [Access the paper.](#)

To convey your adaptation rationale, identify your conservation targets and how climate change is affecting them. Reference the scientific inputs you considered (e.g., climate change impact studies, climate models, local or regional climate vulnerability assessments, Indigenous knowledge or science, or expert consultation, etc.) to assess how climate change is impacting your conservation target. We explicitly encourage and value the use of diverse forms of knowledge in projects submitted to the Fund. That includes, but is not limited to, Indigenous knowledge and science, other local knowledge, and expert-based opinion. Explain how these inputs helped you to evaluate your goals and select actions.

Describe how your proposed actions are designed to help your conservation targets adapt to the climate change impacts that are affecting them. Consult the “Resistance-Resilience-Transformation

(RRT) Scale” (Figure 2) to describe the strategy your selected actions are designed to achieve. Actions appropriately designed to move a system toward ecological transformation are considered highly innovative by the Fund and meet the innovation requirement for implementation proposals; however, actions across the whole RRT Scale may be considered acceptable when accompanied by well-reasoned explanations for why resistance and/or resilience actions (or any other combination) are the most effective strategy to deliver adaptation benefits to nature (and co-benefits to people) at your site.

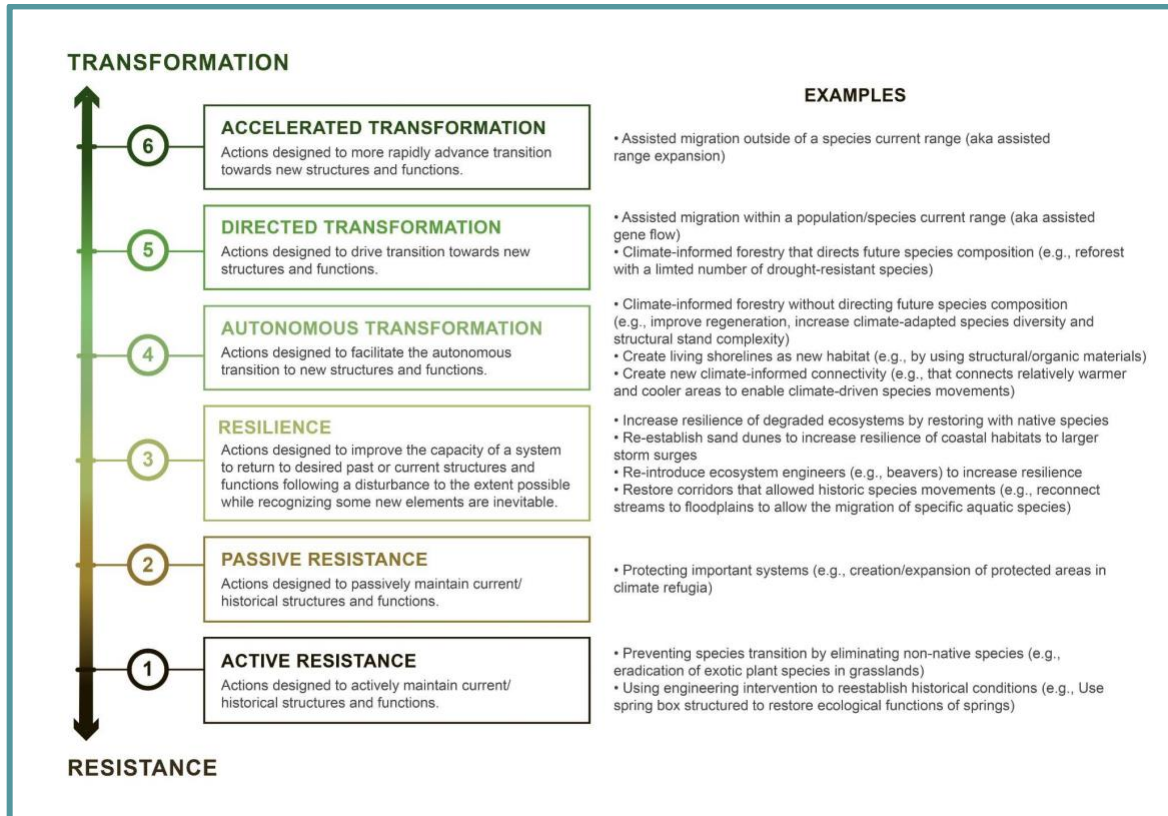


Figure 2. The Resistance-Resilience-Transformation (RRT) Scale. A more detailed description of the RRT Scale can be found [here](#). Please use one or any of the three core terms within this six point scale in your proposal: 1) Resistance, 2) Resilience, 3) Transformation. [Access the paper](#).

➡ All Projects: Focused on the functionality of ecosystems, rather than conserving individual species

The Fund is focused on projects that aim to sustain dynamic ecological processes, landscape functionality, and species assemblages, as opposed to single-species or historical conditions that may not be possible to maintain in a changing climate.

➡ All Projects: Articulate the co-benefits of the adaptation actions

All projects supported by the Fund must be designed to achieve adaptation outcomes for wildlife and

ecosystems. However, we require all applicants to *articulate* what additional benefits the project could provide to people -- for example co-benefits to human wellbeing, safety or livelihoods, climate mitigation benefits, biocultural, or other co-benefits. The Fund recognizes that many communities of color and historically excluded communities are often disproportionately affected by climate change impacts. We therefore encourage, but do not require, applications to discuss ways that these communities will be meaningfully involved in and benefit from proposed adaptation work. Applicants that are White-led organizations and plan to engage or partner with historically excluded communities should consult the [Jemez Principles](#) and the Climate Science Alliance's guide for [Meaningful Engagement](#).

We encourage adaptation projects that are intentionally designed to offer climate mitigation co-benefits to apply as a **Joint Mitigation and Adaptation (JMA)** project. JMA approaches meet the Fund's innovation requirement for implementation projects. Applicants proposing a JMA project must attempt to quantify mitigation benefits. If your work might result in tradeoffs between mitigation, adaptation, and biodiversity benefits, please describe those in your application. For guidance on the Fund's standards for JMA applications, refer to Appendix A and the [JMA FAQ Document](#).

All Projects: Appropriately engage communities and partners

If invited to a Full proposal, applicants will be required to list and describe their partners and their plan to share results and communicate lessons learned. Applicants should survey the landscape for underrepresented or historically excluded groups who are relevant to the proposed work in terms of knowledge, land tenure, residency, potential impact from the work (positive or negative). Competitive proposals will include and consult these groups if applicable to your work and the site. Competitive proposals will determine whether there are other communities and organizations that have been investing in this work or leading in the management of the land where work is planned and communicate with such entities to determine when partnership, consultancy, or acknowledgement is merited and at what stage of the project: goal setting, planning, implementation, and/or monitoring. When working with local communities, consider partnership agreements, consultancy fees or participation stipends when their expertise, perspective and experience will improve the results of the proposed work.

Be sure to appropriately differentiate between partners and target audiences. The Fund defines a target audience as a stakeholder or group of stakeholders who have the ability to amplify the impact of your adaptation work. Strategic communications tactics and results sharing approaches are intended to influence target audiences to take the action needed to amplify your work e.g. updating restoration guidance, standards or management approaches at their agency, supporting relevant policy or regulation, making more funding accessible for the work proposed, etc. and expand the impact of the work beyond the physical site. A partner is a stakeholder or group whose involvement in the project will increase the chance of success, effectiveness, and sustainability of the outcomes at the project site.

SECTION 2. REQUIREMENTS FOR ADAPTATION IMPLEMENTATION PROJECTS

Requirements for Adaptation Implementation projects:

- ⇒ Cultivate innovation in climate adaptation.
- ⇒ Conduct on-the-ground implementation.
- ⇒ Include a monitoring plan to inform adaptive management decisions and evaluate progress towards project goals.

➔ Implementation Projects: Cultivate innovation in climate adaptation.

As part of the Fund’s new strategy to increase the pace and scale of learning and impact, Adaptation Implementation projects are required to include a component of their work that is innovative. We define innovation broadly, as introducing: new techniques, tools, concepts, or partnerships that advance climate adaptation benefits and increase the pace of learning. Proposals with innovative or novel actions that have not been well-tested are required to address potential risks in addition to the expected benefits of those actions. A transparent discussion of the inherent tradeoffs and your team’s plan to manage them will increase the likelihood of support for novel or less tested approaches. Below are examples of ways in which a project could be considered innovative. This list is not exhaustive. We encourage creative solutions to meeting adaptation needs and learning, and look forward to new perspectives on what might make a proposed project innovative.

Projects may be considered innovative by their **actions, goals, design, or beneficiaries**.



- Actions implemented are notably different from standard practice or status quo conservation.
- Actions are implemented in new, strategic, climate-informed locations or in ecosystems where they have not yet been widely applied.

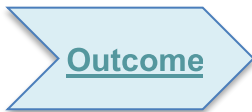


- Projects designed to facilitate climate-driven ecological transformation.
- Projects implementing Joint Mitigation Adaptation (JMA) approach(es). See page Appendix A for more details on JMA projects.
- Projects that include a compelling or innovative plan to amplify the impact of the work through strategic communications and/or results sharing.



Design

- Build new or less traditional partnerships (e.g., led by or partnering with BIPOC-led organizations, cross-sectoral partners outside the conservation field such as Departments of Transportation, city planning commissions, etc.).
- Incorporate Indigenous or other traditional or local knowledge into goal setting, action selection, monitoring, etc.
- Gather evidence, monitor, evaluate outcomes, or enable learning in a novel way.



Outcome

- Benefit biocultural resources.
- Provide co-benefits for people, especially in historically excluded communities.
- Benefit urban wildlife and ecosystems.
- Compelling or unique strategic communications or results sharing goals.



Implementation Projects: Conduct on-the-ground implementation.

Applications for funds to support planning activities will not be considered. Scientific analyses and adaptation planning processes to identify what actions are necessary and where to take them should be completed before submitting a proposal. The results of such processes are essential components of a competitive proposal; but projects must be shovel-ready and implementation must make up the majority of the work during the grant timeline.

Optional Technical Assistance Opportunity for Eligible Applicants

WCS recognizes that internal capacity to meet the Fund’s monitoring and evaluation requirements varies across applicant organizations. In order to support a range of applicant organizations of varying sizes, internal capacities, and compositions, WCS is offering 1:1 coaching with an M&E expert to organizations that express interest in the pre-proposal with preference given to organizations with an annual budget below \$2.5M and or are BIPOC-led. This M&E coaching will be funded by WCS separately from the grant awards. Applicants should express interest in the pre-proposal application. If invited to submit a Full Proposal, eligible applicants who express interest will have the opportunity to work one-on-one with an M&E expert to meet the monitoring requirements for the Full Proposal, described below. Depending on the number of qualified and interested applicants, coaching support may continue after grant awards are made and the project begins. An honorarium will be provided to cover the time of one project staff member to participate in the coaching sessions to prepare the monitoring section of the Full Proposal.

Implementation Projects: Include a monitoring plan to inform adaptive management decisions and evaluate progress towards project goals.

Projects must include a plan to gather data or other forms of evidence to evaluate their project's implementation work. The purpose of the Fund investing in monitoring and evaluation is to:

1. Inform adaptive management during project implementation, and
2. Assess effectiveness of project outcomes, or assess *progress towards* project outcomes in cases where changes are expected to occur over longer timelines.

We understand that it is not possible to fully measure adaptation outcomes during a 3-year grant period, especially those that are expected to play out over a longer time period. Requirements for the Fund therefore focus on monitoring activities during the grant period that will *enable* the measurement of outcomes in the longer term. For example, activities during the grant period might include those related to establishing a counterfactual (e.g., collecting baseline or pre-implementation data, establishing a control or reference site, etc.) or measuring indicators after the first year or two of implementation that are early proxies for longer-term changes (e.g., germination rates or seedling survival as an early indicator of the success of climate-informed planting activities).

The Climate Adaptation Fund conducted a comprehensive literature review of monitoring and evaluation in conservation. Of the best practices found in the literature, the Fund requires the following to be included in a monitoring plan. Note that only some of these are required in the pre-proposal application while others are only required if an applicant is invited to submit a full proposal.

- A question-driven approach.
- A Theory of Change that will enable project outcomes or progress towards long-term outcomes to be evaluated.
- A counterfactual to assess the benefits of the implemented actions compared to no intervention at all.
- Proactive plan for adaptively managing a project if collected data or evidence indicates that near-term benchmarks will not be met or a challenge disrupts implementation plans.
- A plan for sharing lessons and M&E results with key stakeholders and target audiences in order to facilitate knowledge exchange and expand the impact of your work beyond the project site.

Question-driven approach

Pre-proposal applicants will be required to describe the question(s) driving their monitoring efforts. Effective monitoring programs include well-defined questions. Good questions will aid in the selection of indicators to measure desired changes. What part of your adaptation goal/desired change will your monitoring efforts help to evaluate? What question do you want your monitoring efforts to help you answer? Consider consulting partners (including local communities if relevant) to inform what is important to measure and evaluate about your work.

Theory of Change

If invited to submit a Full Proposal, applicants will be asked to describe their theory of change – how the actions being taken are expected to lead to adaptation outcomes over time – and connect that theory of change to their monitoring efforts. When monitoring indicators are linked to a theory of change, the data or evidence collected can better help implementers determine whether interventions are working, and if not, what adjustments might be needed. Applicants will be asked to describe: 1) the outputs they expect to result from their applied interventions (e.g., increased surface water as a result of installing in-stream structures designed to mimic beaver activity); and 2) the outcomes that are expected to result from the project's outputs (e.g., improved water storage capacity). If applicable, applicants should describe outcomes in terms of short-term and long-term. In cases when the desired changes that will be measured are expected to occur over long timelines, near-term benchmarks or proxies of change will need to be included in the theory of change.

Counterfactual

If invited to submit a Full Proposal, applicants will need to describe their counterfactual. A strong evidence gathering plan will include some form of a counterfactual (i.e., what would have happened in the absence of your intervention). Depending on proposed work and what may be feasible in each project's context, this could include (but is not limited to):

- comparison of treated sites to control or reference sites,
- comparison of data collected at a site before and after implementation (also referred to as a before-after-control-impact (BACI) design),
- comparison with results from similar work from a literature review,
- comparison to a model that forecasts future changes based on a near-term change,
- comparison to baseline data, or other comparison and control approaches.

If a counterfactual relies on pre-implementation baseline data, please discuss whether that data is already available or what your plan is for collecting it during the grant period. Projects that are proposing less-well-tested and/or risky actions ought to consider more rigorous approaches to setting up controls and more intensive monitoring of potential undesired effects.

Proactive Adaptive Management

If invited to submit a Full Proposal, applicants should discuss any adaptive management actions or decisions they anticipate arising during their project timeline. Strong monitoring plans include consultation of data and evidence *throughout* the project in order to adaptively manage. The monitoring plan should enable applicants to identify when an anticipated or unanticipated challenge is threatening the success of their work or when desired changes are not occurring as expected. Depending on the nature of the challenges, applicants should be prepared to ask themselves “are we taking the right actions in the right place?”.

Strategic Results Sharing & Communications

If invited to submit a Full Proposal, applicants will be required to describe their plan to share the results of what they learned from their monitoring and evaluation efforts after the grant timeline. Include who you think should learn from your work and how you will disseminate lessons (successes, failures, insight, technical know-how) to those audiences, communities, or stakeholders. Strong results sharing approaches are tailored to each target audience(s).

In the Full Proposal, applicants will also be required to describe their plan to share lessons learned acquired throughout the project and/or to share what they did and why in order to amplify the impact of their adaptation work beyond the physical project site. Strategic communications tactics (consult our Strategic Communication Guide), and other ways of facilitating peer-to-peer knowledge sharing and learning are strongly encouraged.

Other Considerations

Diverse forms and sources of knowledge are encouraged - both in the design of adaptation actions (see Section 2) and in the design of a monitoring plan. That includes, but is not limited to, Indigenous knowledge and science, other local knowledge, expert-based opinion, and including different kinds of stakeholders in designing monitoring plans and activities.

In cases where the lead applicant does not possess the capacity needed to conduct monitoring and evaluation work, we encourage partnerships with research expertise (e.g., universities/colleges, government research agencies or departments, or other science-based organizations). These applicants are also encouraged to indicate their interest in the technical assistance opportunity to receive WCS-funded monitoring and evaluation coaching (see the box on page 7 about this optional technical assistance opportunity).

Although grant recipients are not required to gather data/evidence after the grant period, we are interested in what your long-term plan is, assuming adequate funding, resources, and capacity were to be secured.

SECTION 3. REQUIREMENTS FOR ADAPTATION MAINSTREAMING PROJECTS

Requirements for Adaptation Mainstreaming projects:

- ⇒ Broaden the adoption of an adaptation approach with demonstrated benefits.
- ⇒ Include a mainstreaming plan to facilitate increased uptake of an adaptation approach.
- ⇒ Present a clear timeline of activities and goals and identify which phase of the mainstreaming plan will occur over the 2-year grant period.

➔ **Mainstreaming Projects: Broaden the adoption of an adaptation approach with demonstrated benefits.**

The Fund's second category of grants will support projects that increase the uptake of an adaptation approach by pursuing mainstreaming pathways and actions. By "mainstreaming", we mean projects that will enable a demonstrated adaptation approach to be adopted by others at a larger scale than it is currently practiced at. An "adaptation approach" in this case includes on-the-ground techniques or interventions. Proposals to mainstream a *planning* approach will only be considered if their plan identifies specific adopters or end users poised for uptake and execution of the results of the planning approach in a specific place or places. The Fund is interested in efforts to make the practice of adaptation work on the ground more feasible for others to replicate and more prevalent or practiced more widely.

Applicants will need to substantiate why the adaptation approach is ready and suitable for mainstreaming. Describe the evidence that grounds your case for the success of the approach or how its benefits were demonstrated.

Adaptation approaches previously funded by a Climate Adaptation Fund implementation grant are eligible to apply for a mainstreaming grant; also eligible are adaptation approaches and organizations that have not been previously supported by a grant from the Fund. Mainstreaming projects should enable others to replicate the focal adaptation approach(es); these grants are not intended for applicant organizations to directly replicate their own on-the-ground work at larger scales.

Consult the box below for experience from CAF grant partners to include or address in your mainstreaming plan or to target components of your plan to reinforce.

Common enabling factors to mainstreaming cited by CAF grant partners:

- Ability to demonstrate a proof-of-concept;
- Diverse partnerships and networking;
- Highlighting project co-benefits;
- Targeting cost-effective, simple interventions.

Common barriers to mainstreaming cited by CAF grant partners:

- Lack of resources (expertise, time, funding);
- Lack of buy-in or support from key stakeholders;
- Scalability of the intervention;
- Cost of implementation;
- Regulatory barriers;
- Challenges in demonstrating outcomes;
- Lack of collaboratives and partners.

➔ Mainstreaming Projects: Include a mainstreaming plan to facilitate increased uptake of an adaptation approach.

Components of a competitive mainstreaming plan:

1. Defined goals or outcomes from mainstreaming efforts that will result in increased adoption of the adaptation approach.
2. Clear pathways to mainstreaming and specific actions identified (see examples below).
3. Engagement and outreach tailored to key audiences and stakeholders that are critical to success.

Mainstreaming Pathways

Policy, regulatory or legal pathways could be pursued to: remove constraints, create incentives, address a gap in funding, leverage existing frameworks etc., e.g. building exemptions or faster turnaround times into a permitting process for the focal adaptation approach, a Federal agency incorporates the focal adaptation approach into one of its programs and then provides funding for it to be applied more widely or creates a new program to replicate and execute the focal adaptation approach at a larger scale.

Collaboratives & Networking pathways such as coalition building, campaigning, movement building or peer-to-peer learning could be pursued to: address a gap in knowledge or awareness, establish key partnerships, deploy behavior change science, create a new community of practice or influence an existing one, create or change standards of practice/industry standards, amplify peer knowledge, implement wide-reaching training and outreach efforts, etc., e.g. a Federal agency, professional society or commission updates its best practices or manual for restoration or conservation to include the focal adaptation approach.


Market pathways could be pursued to: establish business partnerships, create a reward or penalty system, link consumers to suppliers, e.g. increase the supply and range of climate-adaptive seeds available to be procured by seed suppliers, create incentive programs for vendors or suppliers when they provide services or resources needed to implement the focal adaptation approach.

These examples offer just a few of the possible mainstreaming pathways and actions that exist. Other pathways and actions may be appropriate, depending on the nature of the approach to be mainstreamed, the opportunities and barriers at play, and the collective skills of your network. Consult the Mainstreaming Tools and Resources in Appendix C below, including many more examples of mainstreaming actions.

A mainstreaming plan is likely to include more than one type of pathway. For example, an adaptation approach that requires a policy change to increase its adoption might also require a Collaboratives and Networks pathway to fill a knowledge gap for decision makers or to mobilize support from within a decision maker's constituency, for example.

Mainstreaming proposals that have already built their partnerships and alliances will be more competitive than those that have not gathered and engaged with key parties by the time of application.

Identify who your audiences and stakeholders are. Make it clear why these audiences or stakeholders are important or relevant to your mainstreaming plan and what their specific roles are in moving it forward. Please also describe your outreach and engagement plan to activate these audiences and stakeholders to fulfill their roles or take the actions you need them to. If applicable, describe the strategic communications you will implement, including messaging tailored to each audience and communications products/outputs. Note, these groups differ from partners who are already bought-in and part of a collaborative.

 **Mainstreaming Projects: Present a clear timeline of activities and goals and identify which phase of the mainstreaming plan will occur over the 2-year grant period.**

We expect to see substantive progress towards the broader adoption of the adaptation approach at the end of the two-year grant period. Mainstreaming Adaptation applicants will need to describe what the key phases of their mainstreaming plan are, identify which phase they will be in at the start of the grant, and which phase they will be in by the end of the 2-year grant period. Your proposal should include the benchmarks or indicators that will be used to determine whether your mainstreaming plan is successfully progressing through the stages planned for the grant period. Mainstreaming plans that extend beyond the two-year grant period should explain what interim benchmarks will be achieved at the end of the two years and why they are critical steps toward achieving the ultimate goal of mainstreaming your adaptation approach to enable broader adoption of the focal adaptation approach. If applicable, summarize the work that has been done to date if your mainstreaming effort is already well under way.

APPENDIX A: Guidance for Joint Mitigation Adaptation (JMA) Projects

Applicants proposing a JMA project that quantifies mitigation benefits should also consult the [JMA FAQ Document](#). While the Fund's primary focus remains on implementing strategies that build the adaptive capacity of wildlife and ecosystems to climate change, we also want to incentivize adaptation actions that simultaneously offer mitigation benefits.

Through our support of JMA projects, we aim to:

- Incentivize adaptation practitioners to take actions that foster carbon gains without compromising adaptation goals for target species and ecosystems.
- Encourage mitigation practitioners to incorporate adaptation considerations that enhance the wildlife and ecosystem benefits of their work, and make their carbon gains more robust to the effects of a changing climate.
- Optimize our Fund's investments to provide clear benefits for both adaptation and mitigation, given the urgent need for action in both arenas.

To submit a JMA proposal to the Climate Adaptation Fund, applicants must comply with all of the requirements for adaptation project proposals, and also should:

- Apply adaptation practices that are known to increase carbon storage and/or safeguard known carbon sinks while helping your system adapt to projected climate changes in your region.
- Reference the science used to inform the practices selected.
- Quantify the expected carbon benefits/gains of the practices being proposed, based on the known carbon storage potential of your target system type and/or on carbon calculation tools. WCS encourages applicants with JMA proposals to use region- or system-specific carbon accounting tools and resources. Include citations, numerical values, and timeframes in your estimations and calculations.
- Discuss how your project balances the needs for wildlife adaptation and mitigation at your site.
- Projects are encouraged to demonstrate how the results or information learned from their project could inform future policy at jurisdictional levels (federal, state, regional, local) and/or incentivize other practitioners to implement actions that target both adaptation and mitigation outcomes.

See the [JMA FAQ Document](#) for additional information.

WCS will not fund JMA projects that:

- Only focus on mitigation outcomes and do not include adaptation efforts.
- Include carbon mitigation work conducted at the expense of wildlife and ecosystem adaptation outcomes, or primarily for the sake of mitigation.
- Aim to develop carbon calculation tools.
- Use grant money directly for: carbon offset project design or verification efforts; creating or trading offsets; monetizing mitigation benefits or other ecosystem services during the grant period; or proving additionality to receive payments.
- Fail to attempt quantification of mitigation benefits.

Hypothetical and simplified example of a JMA project:

To meet adaptation and mitigation goals, a reforestation project could be conducted using novel adaptation strategies that address future climate vulnerabilities of the newly planted forest. For example, project implementers could select trees or genotypes for planting that are predicted to be well-adapted to future climate conditions. Such a project could achieve adaptation objectives by creating forested habitat that is more likely to persist as climate changes, while simultaneously increasing carbon capture through tree growth.

APPENDIX B: Terms and Definitions

5Ws Framework: A rapid-assessment approach to help define project goals, consider climate risks, and select climate-informed actions that will improve longer-term conservation outcomes in light of climate change. [Access the paper](#). See Figure 1 above.

Adaptation Approach/Focal Adaptation Approach: An on-the-ground technique or interventions designed to help a conservation target build sustainable resistance or resilience to climate change impacts or facilitate transformational change.

Benchmarks: A reference point or standard against which actual progress can be made; observations, changes or statuses expected in the interim prior to long-term outcomes being achieved.

Carbon Offset: The reduction in emissions or increase in sequestration of greenhouse gasses (GHG) by one entity that is used to compensate for emissions produced by another entity (Galik and Jackson 2009).

Climate Adaptation: The process of adjustment to actual or expected climate change and its effects (IPCC 2014).

Adaptation interventions may seek to moderate or avoid harms, facilitate adjustments to climate and its effects, or even benefit from changing conditions.

Climate Mitigation: An intervention that reduces the sources or enhances the sinks of greenhouse gasses (IPCC 2014). WCS supports “natural climate solutions” or “nature-based solutions for climate change” that increase carbon storage and/or avoid greenhouse gas emissions across forests, wetlands, grasslands, and agricultural areas through conservation, improved land management actions, restoration, or other interventions (see Griscom et al. 2017 reference in Appendix X).

Co-Benefits: Refers to additional benefits for people that are provided by project interventions. For the Fund, co-benefits refer to outcomes that are secondary to the primary adaptation benefits for wildlife and ecosystems. They could include mitigation benefits through carbon sequestration or avoided emissions, or benefits for people (e.g., human health, food security, water quality and/or quantity, livelihoods) through a variety of mechanisms.

Effectiveness: A measure of the extent to which planned actions resulted in desired outcomes.

Evidence: Data (quantitative or qualitative), information, expert accounts, or other observations that are measured, collected, examined or accounted for in order to evaluate outcomes of an action, technique, or approach. Bennet (2016) - Evidence is any information that can be used to come to a conclusion and support a judgment or, in this case, to make decisions that will improve conservation policies, actions, and outcomes.

Evidence Gathering: Compiling information that stakeholders and experts perceive as trustworthy and relevant for evaluating outcomes of an action, technique or approach. Evidence can be collected via a variety of gathering mechanisms ranging from Indigenous approaches to the scientific methods, etc.

Innovation: Introducing new techniques, tools, concepts, knowledge or partnerships that advance climate adaptation benefits and increase the pace of learning.

Inputs: Financial, human, material, organizational and regulatory means mobilized for the implementation of an intervention.

Joint Mitigation and Adaptation (JMA): Adaptation projects that also achieve objectives of mitigation activities to reduce the source or enhance the sinks of greenhouse gasses.

Learning: The process by which a community or field of practice iterates and improves itself over time through gaining experience and using that experience to create knowledge, insights or know-how; and by which knowledge, insights or know-how are transferred within the community or field of practice and established as standards, guidance and best practices.

Mainstreaming: Actions that will enable a demonstrated adaptation approach to be adopted by others at a larger scale than it is currently practiced

Peer-to-Peer Learning: A type of learning specifically among peers who are from similar social groupings. For example, all grantees are considered part of a peer community of climate adaptation practitioners with much to learn from and teach each other.

Outcomes: The effects of the changes or outputs that are the result of an intervention e.g. more foresters using climate adaptive planting palettes in their reforestation and restoration work.

Outputs: The direct results of an intervention e.g. more foresters trained on designing climate adaptive planting palettes.

Strategic Communications Tactics: Actions that expand a project's impact beyond the physical site by raising more funds, generating attention and momentum, engaging key agencies and authorities, inspiring supportive regulatory change, and expanding the scale of your work. These actions are aimed at audiences and stakeholders whose support or behavior is key to the long-term success of a project.

Resistance-Resilience-Transformation (RRT) Scale: A typology and tool to assess the degree to which conservation projects are applying transformative actions and articulate when resistance, resilience or transformative action are needed. [Access the paper](#). See figure 2 above.

APPENDIX C: Tools and Resources

Climate Adaptation Resources and Tools:

- The Climate Adaptation Fund's Resources Web Page includes downloadable guides for applicants on Strategic Communications, Monitoring and Evaluation in a Climate Change context and our learning reports with real world examples of the solutions that funded projects applied to specific climate change challenges: www.wcsclimateadaptationfund.org/resources
- The Adaptation Workbook from the U.S. Forest Service's Northern Institute for Applied Climate Science (NIACS) offers an easy to use, interactive and self-guided tool that creates a custom adaptation plan for forest management and conservation: <https://adaptationworkbook.org>
- Institute for Tribal Environmental Professionals (ITEP) Adaptation Planning Tool Kit: <http://www7.nau.edu/itep/main/tcc/Resources/adaptation>
- The U.S. National Climate Assessment summarizes the impacts of climate change on the United States: <http://nca2014.globalchange.gov/>; <https://science2017.globalchange.gov/>; <https://nca2018.globalchange.gov/>
- The Climate Adaptation Knowledge Exchange (CAKE) is a clearinghouse for a wide variety of information about climate adaptation: <http://www.cakex.org/>
- Through its Conservation Gateway portal, The Nature Conservancy provides datasets, analyses, and spatial mapping for the resilience of terrestrial landscapes in the Northeast and Southeast United States, 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>; including their Resilient Land Mapping Tool: <http://maps.tnc.org/resilientland/>
- Databasin houses numerous databases related to climate change vulnerability and impact assessment, and adaptation: <http://www.databasin.org>
- Strategic Communications case study: <https://www.wcsclimateadaptationfund.org/strategic-communications>
- America Adapts Podcast explores the challenges presenting by adapting to climate change and approaches that are already working. Episodes feature scientists, activists, policymakers and journalists. <https://www.americaadapts.org/episodes>

JMA Resources and Tools:

- Introductory video from The Nature Conservancy on carbon-based solutions to climate change: <https://global.nature.org/content/forgotten-climate-solution>
- Trust for Public Land's national carbon map shows the average amount of carbon per acre in forests by state: <https://web.tplgis.org/carbonmap/>
- Considering Forest and Grassland Carbon in Land Management, a publication by the USDA: https://www.fs.usda.gov/sites/default/files/fs_media/fs_document/wo-95-consideringforestandgrasslandcarboninlandmanagement-508-92517.pdf
- The Climate Action Reserve's Forest Protocol provides guidance for the development of forest carbon projects: <https://www.climateactionreserve.org/how/protocols/forest/>

- Seminal paper describing 20 pathways to climate mitigation via natural climate solutions: Griscom, B.W., et al. "Natural climate solutions." *Proceedings of the National Academy of Sciences* 114.44 (2017): 11645-11650: <http://forestclimateworkinggroup.org/wp-content/uploads/2018/09/Griscom-et-al-2017-PNAS-Natural-Climate-Solutions.pdf>
- Paper on the quantification of potential natural climate solutions in the United States: Fargione, J.E., et al. (2018) "Natural climate solutions for the United States." *Science Advances* 4:11:eaat1869.
- Recent article describing real-world forest-management planning projects that integrate climate change information to identify actions that simultaneously benefit forest carbon along with project goals: Ontl, T.A., et al. "Forest management for carbon sequestration and climate adaptation." *Journal of Forestry* 118.1 (2020): 86-101. (See supplementary materials for JMA examples)
- "Mitigation & Adaptation Synergies in the NDCs" - a review of the synergies and tradeoffs between mitigation and adaptation in the context of the Paris Agreement: <http://norden.diva-portal.org/smash/record.jsf?pid=diva2%3A1097909&dswid=9126>

Learning & Evidence Gathering Resources and Tools:

- <https://www.mdpi.com/2225-1154/10/2/13> Brown, M.B.; Morrison, J.C.; Schulz, T.T.; Cross, M.S.; Püschel-Hoeneisen, N.; Suresh, V.; Eguren, A. Using the Conservation Standards Framework to Address the Effects of Climate Change on Biodiversity and Ecosystem Services. *Climate* 2022, 10, 13.
- USAID Learning Lab:
 - Monitoring Toolkit: <https://usaidlearninglab.org/monitoring-toolkit>
 - <https://usaidlearninglab.org/program-cycle-component/collaborating-learning-and-adapting>
- Resilience Metrics: <https://resiliencemetrics.org/>
 - Successful Adaptation Indicators and Metrics Webinar brief: <https://nerrsciencecollaborative.org/resource/successful-adaptation-indicators-and-metrics-project-pilots-system-wide-benefit> (January 2018)
- Conservation Measures Partnership: <https://www.conservationmeasures.org/>
- The Climate Adaptation Fund's Guide: "Monitoring and Evaluation in Climate Change Projects": <https://www.wcsclimateadaptationfund.org/resources>
- A systematic review analyzing how adaptation activities have been documented as effective which also provides some helpful background on the many challenges of monitoring and evaluation and clearly identifies areas for innovation and improvement: Owen, Gigi. "What makes climate change adaptation effective? A systematic review of the literature." *Global Environmental Change* 62 (2020): 102071.
- <https://conbio.onlinelibrary.wiley.com/doi/10.1111/csp2.619>: A case study on conducting adaptive management while implementing)

Mainstreaming Tools and Resources:

Resilient Cascadia Action Library: <https://www.cascadiapartnerforum.org/searchable-tool>

Highlighted examples of actions adapted to the Climate Adaptation Fund include:

- Identify partners that represent regional interests (among research institutions, government agencies and ministries, Indigenous communities and organizations, non-governmental groups, and local knowledge holders and technical experts) to enable joint actions. Invest appropriate time and resources to facilitate the relationship-building required to garner commitment to the targeted adaptation approach.

- Identify and implement appropriate agreements that can facilitate increased adoption of the targeted adaptation approach. Some options include: Memoranda of Understanding, Joint Declarations, Statements of Cooperation, or Interlocal Agreements
- Establish clear leadership, roles and responsibilities amongst partners to the agreement(s).
- Identify existing Indigenous and local-level and regional partnerships, and highlight their leadership in proposed mainstreaming plan.
- Define appropriate pathways for engaging with other decision-making bodies.
- Integrate transboundary climate resilience objectives into existing authority structures.
- Provide technical guidance on how regional actors can adopt the targeted adaptation approach into their existing plans and policies. Illustrate the co-benefits.
- Strategically integrate the targeted adaptation approach into the development of new policies and plans relevant to the natural systems where it should be applied.
- Develop technical training opportunities. Invest in existing staff, networks, and programs to build and grow local and regional experts.
- Integrate the targeted adaptation approach into the creation of new, or updates to existing, management plans, species recovery plans, habitat conservation plans or other conservation strategies when relevant.
- Identify political champions interested in the targeted adaptation approach and develop a network of support across higher levels of government
- Develop a communications strategy to bring external recognition to on-the-ground adaptation approach, and illustrate successes.
- Leverage the power of storytelling to build buy-in.
- Examine previous collaborative processes relevant to the targeted adaptation approach and identify lessons learned that may be applicable.
- Provide technical assistance to stakeholders relevant to the adoption of the targeted adaptation approach e.g. landowners, agency personnel, nonprofits, etc.
- Identify a coordinating entity to provide fiscal management support and administer shared funding streams to support increased adoption of the targeted adaptation approach.
- Leverage existing market-based tools that fund climate resilience and conservation activities, and explore innovations in conservation finance that are relevant to the targeted adaptation approach.

APPENDIX D: Selected Climate Adaptation Literature

- Anderson, L., P. Glick, S. Heyck-Williams, and J. Murphy. (2016) Changing Tides: How Sea-Level Rise Harms Wildlife and Recreation Economies Along the U.S. Eastern Seaboard. National Wildlife Federation.
- Anderson, M.G., et al. (2016). Resilient and Connected Landscapes for Terrestrial Conservation. The Nature Conservancy, Eastern Conservation Science, Eastern Regional Office. Boston, MA.
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- Segan, D.B., et al. (2016). Considering the impact of climate change on human communities significantly alters the outcome of species and site-based vulnerability assessments. *Diversity and Distributions* 20 (9): 1101-1111.
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- St-Laurent, G. P., et al. (2021). R–R–T (resistance–resilience–transformation) typology reveals differential conservation approaches across ecosystems and time. *Communications biology*, 4(1), 1-9.
- Swanston, C.W., et al. (2016). *Forest Adaptation Resources: climate change tools and approaches for land managers*, 2nd ed. Gen. Tech. Rep. NRS-GTR-87-2. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 161 p. <http://dx.doi.org/10.2737/NRS-GTR-87-2>