



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. **Proposes conservation goals and actions that are grounded in the best available science.**
3. **Conducts on-the-ground implementation, not research or planning.**
4. **Focuses on the functionality of ecosystems, rather than conserving individual species.**
5. **Designed for long-term conservation impact.**
6. **Creates the potential for impact at a landscape scale.**
7. **Uses strategic, targeted communications activities to amplify adaptation outcomes.**

Notes:

See Section 8 for details on WCS's interest in urban adaptation projects.

See Section 9 for details on WCS's focus on joint mitigation and adaptation (JMA) work.

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 to address a specific climate change and its impact on wildlife and ecosystems, while working to achieve specific adaptation objectives. As a secondary objective, we are interested to know when these ecological outcomes may carry co-benefits for human communities, particularly for projects located in and around urban areas, and projects that have joint benefits for both climate mitigation and adaptation. See Section 9 for more detail on the Fund’s interest in JMA work. The application requires all applicants to explain how their project is different from a business-as-usual approach to conservation and is in fact a climate adaptation project. 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 climate change has resulted in an increased sense of URGENCY 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 you considered (e.g., vulnerability assessments, downscaled climate models, local expert-driven impact assessments), 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 the 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 an example). For particularly innovative or novel actions that have not been well-tested, it is important to discuss how you plan on balancing potential risks with expected benefits of those actions.

Table 1. Please see below an example of how to connect the dots between climate change impacts and proposed adaptation actions and outcomes.

Specific climate change impacts your project is designed to address	Adaptation actions delivered within this grant period (maximum 2 years)	Expected near-term conservation outcomes of proposed adaptation actions (3-10 years)	Expected long-term adaptation outcomes (10-50 years)
<ul style="list-style-type: none"> • Warmer and drier climate expected to result in decreased growth and survival of tree species at low elevations that provide habitat for target native birds. • Climate research suggests those tree species are likely to persist in higher elevation areas 	<ul style="list-style-type: none"> • Restore 525 acres of heavily grazed pasture in an area upslope from current native bird habitat. • Reforest the area with 20,000 native trees and understory plants. • Conduct two workshops that include field trips to the project site, 	<ul style="list-style-type: none"> • An ecologically functioning forest on 525 acres of degraded pasture that provides suitable nesting and forage habitat for at least 16 native bird species, that is located upslope from current habitat areas threatened by climate change, creating a link to protected forests at higher elevations. • At least 10 managers in the region express interest in 	<ul style="list-style-type: none"> • Creation of upslope habitat that provides connectivity to higher elevation forests that provide a climate refuge for forest birds that are expected to lose lower elevation habitat as the climate becomes too warm and arid to support suitable tree species. • Enough land managers adopt similar practices such that sufficient upslope habitat and linkage areas are created to support the upslope movements of native birds in

	<p><i>involving at least 20 private and public land managers from surrounding region.</i></p>	<p><i>targeting future restoration efforts in areas that will help enable native bird movements in response to climate change effects on low elevation forests.</i></p>	<p><i>response to climate change.</i></p> <ul style="list-style-type: none"> <i>• Reforested pasture provides co-benefits by improving soil stability and reducing erosion risks to downslope human communities during extreme storm events expected to be more common as climate changes.</i>
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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 mountain ranges in search of shifting resources.

2. 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 also explain how proposed project sites and construction activities are designed to remain resilient to expected climate-driven storm surge events.

3. 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 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. However, projects that have a minor amount of planning remaining that is needed to inform the final siting or design of implementation actions may be considered. If permits are required, it is critical that the appropriate amount of time is built into the implementation timeline to allow for deliverables to be completed within the granting period. Permitting increases risk for the ability to meet desired objectives, so please be sure to account for this risk in your project planning and preparatory work. Implementation work must begin before the third quarter of the second year in order to be considered.

Due to this singular focus on applied, “shovel ready” projects, the Fund is also unable to support applications for projects whose primary purpose is to undertake scientific research, data analyses, vulnerability assessments, or acquire permits. 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. A modest amount of grant funds can be used to 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 on the types of communications and outreach activities that the Fund will support.

4. 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.

See Section 8 below for information about expected impacts on ecosystem functionality for urban adaptation projects.

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 extremely vulnerable to climate impacts over time, unless there are compelling reasons why the project is able to overcome those vulnerabilities. These projects should address adaptation needs 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 on sea level rise above).

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, or conduct implementation activities across multiple states. 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, gaining support of decision-makers to catalyze similar actions, or leverage significant funding resources for additional implementation work. Please see section 7 below for more on the Fund's prioritization of communications activities designed to amplify the implementation of adaptation actions. The concept of having a landscape-scale impact applies in urban, rural, and wildland contexts.

Note that for approaches we have funded extensively in the past (e.g., beaver reintroductions/beaver mimicry, living shoreline/oyster-reef restoration, and coldwater fisheries conservation), we encourage proposals only if they include efforts to bring those approaches to new geographies

and/or increase the geographic scale of implementation.

Hypothetical example of a project with the potential for impact at a large geographic scale:

In partnership with at state Department of Fish and Game and the U.S. Forest Service, a non-profit conservation organization plans to reintroduce beavers on public and private lands across multiple states. Beavers will be introduced into stream segments identified by recent climate studies as likely to benefit from increased water storage to ensure flows for freshwater fish species that are vulnerable to climate impacts. This proposed project takes a method that has proven effective in work previously funded by the CAF (beaver reintroductions) and scales it to a larger geographic scale (across multiple states) through unique community and agency partnerships, and leveraged funding opportunities.

7. The proposal includes the use of strategic, targeted communications activities to engage other conservation practitioners and key audiences in amplifying the project's impact.

We are looking for strategic communications plans that go beyond simply informing key audiences about the project and provide messages crafted specifically to incite action that will amplify the on-the-ground impact of your project. We define “amplify” as raising more funds to conduct similar work, generating attention and momentum around project goals, scaling up the on-the-ground conservation impact by encouraging adoption by other practitioners, winning the support of key agencies, authorities, or constituencies, or catalyzing supportive regulatory or policy change.

Strategic communications are critical for normalizing climate adaptation in future conservation work and increasing a project's impact. Proposed communications activities should reach stakeholders who are key to the project's long-term success, organizations that have strong potential to replicate and/or fund the work, or decision-makers who are well-equipped to create policy or regulatory change. Applicants must articulate a strategic approach to communications that:

- Illustrates how communication efforts will help amplify or replicate the adaptation practices;
- Identifies the target audiences for communications activities; specifically, networks of practitioners, user groups, or organizations that are necessary to amplify or replicate the proposed adaptation practices and/or decision-makers in a position to bring about regulatory change or increased funding support.
- Describes key messages and means of delivering those key messages to target audiences; and
- Addresses why chosen methods are effective ways of reaching and motivating target audiences.

We allow each applicant to allocate up to \$25,000 of their grant request to communications activities. These funds can support a variety of strategic communications efforts aimed at informing other conservation practitioners, resource managers, and policymakers. Funds can be used to support communication consulting services or collaboration with partner organizations that specialize in

strategic communications. For more information, consult the Climate Adaptation Fund's [Strategic Communications Guide](#) and strategic communications [webpage](#).

Hypothetical 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 their traditional forest regeneration practices with a new climate adaptive species planting list. To scale up their work, their goal was to get the state forest service to adopt their new climate adaptive planting list to prepare state forest lands for projected warmer, drier conditions. They first established the simple, clear message of this work: by replanting using a slightly different species list, the forest service can ensure the ecosystem function of the future forest without drastically changing their management actions or their budget. With this promise they were able to convince forest service personnel to attend an introductory meeting to the new climate adaptive planting list. The non-profit learned which forest service staff make planting decisions and order seeds and nursery stock. The next step was a presentation and webinar with targeted invitations to these specific forest service staff with a new proposed planting list for them to use and a quick guide for how to use the best available climate science to update it in the future.

8. A special note about the Climate Adaptation Fund's urban adaptation project category.

WCS recognizes that adaptation work can yield important benefits to wildlife and ecosystems in urban settings. We have added an additional priority to support projects focused on wildlife adaptation in and around urban areas (i.e., cities and towns of all sizes) of the United States. This includes projects that may take place some distance away from urban areas, but that provide clear and compelling benefits to urban communities. Not every project applying to the Climate Adaptation Fund needs to draw a link to urban environments and communities or urban adaptation issues, but we are looking to grow our portfolio of projects occurring in and around urban environments.

Co-benefits to communities

While all of the projects supported by the Fund need to be designed to achieve adaptation outcomes for wildlife and ecosystems, we are interested in projects that provide additional benefits. These "co-benefits" could include outcomes that directly affect people, for example by positively impacting human health and welfare, safety, or livelihoods. Another critical co-benefit to adaptation that the Fund prioritizes is the mitigation of greenhouse gases, such as carbon dioxide. WCS views these Joint Mitigation and Adaptation (JMA) projects as an important pathway to help wildlife and ecosystems adapt to climate change while simultaneously providing emissions reductions through methods like carbon sequestration. Proposals are not required to provide co-benefits, but some of the available funding this year will be directed towards projects that conduct JMA approaches (see Section 9 on the JMA project category).

Communications around urban projects

Applicants proposing site-specific adaptation work in urban areas should describe the potential for replication of similar activities across that area or other similar urban environments, as well as the

potential adaptation benefits of such actions to species and the ecosystems upon which they depend. Section 7 describes the ways in which we would like to see communications efforts amplify the on-the-ground impact of a project. Urban projects present an added opportunity to amplify the impact of the project's work by reaching large and diverse audiences that are new to climate adaptation. Urban projects can increase their impact by raising the awareness of and motivating new and larger audiences to engage decision makers, and by informing civic change to enable more adaptation work or to expand the impact of the proposed project.

We are excited for the potential of urban-focused projects to influence a wide swath of citizens, local and national decision makers, public agency planners, developers, and other conservation practitioners to affect change across the broader urban landscape. We hope to use stories from these projects to demonstrate the importance of natural areas and ecosystems for increasing the safety and resilience of urban communities to climate-driven changes.

Diversity and inclusion of at-risk communities

The Climate Adaptation Fund recognizes that many communities of color and under-resourced communities are often disproportionately affected by climate change impacts. We therefore encourage applications to factor socio-economic demographics into site selection for adaptation work not just in urban areas, but from all regions across the country.

9. A special note about the Climate Adaptation Fund's joint mitigation and adaptation (JMA) project category.

WCS's goal for adding JMA projects as a portion of the Climate Adaptation Fund's portfolio is to recognize the dual importance of both climate adaptation and mitigation. If we do not adequately reduce the amount of greenhouse gases in the atmosphere (mitigation), it will become increasingly difficult or even impossible to help species and ecosystems respond to and cope with climate change (adaptation). Adaptation can also be a tool to assure that natural systems remain healthy into the future, thus protecting stored carbon and supporting future carbon sequestration. 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 options that simultaneously offer mitigation benefits. We do not expect that all applications to the Fund will address joint mitigation and adaptation priorities.

Hypothetical example of a Joint Mitigation and Adaptation 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.

Through our focus on JMA projects, we specifically 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.

To submit a JMA proposal to the Climate Adaptation Fund, applicants must comply with the program standards and priorities outlined above in sections 1 - 7 for adaptation project proposals, and in addition 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 (a non-exhaustive list of examples for forest ecosystems is included in Appendix I).
- Reference the science, tools, or resources that you used to inform the selection of practices that will result in carbon storage in your target system. Given the evolving methods for assessing carbon stocks and emissions reductions, WCS will consider a range of approaches. Please justify your assessment and/or quantification approach(es), by considering the best-available science and any limitations.
- Describe the expected carbon benefits/gains of the practices being proposed, based on the known carbon storage potential of your target system type or on carbon calculation tools. WCS encourages applicants with JMA proposals to use their own region- or system-specific carbon accounting tools and resources; or one of the resources provided at the end of this guidance document. Include citations and numerical values in your estimations or calculations.
- Discuss how your project balances the needs for wildlife adaptation and mitigation at your site - Note that maximizing carbon storage is favorable only if it does not compromise adaptation outcomes for wildlife and ecosystems.
- Connect mitigation outcomes to state level efforts to meet commitments made to the US Climate Alliance, if applicable.

A number of tools, resources, and papers on JMA are included in Appendices II and III.

Applications that can clearly demonstrate how the results or information learned from their WCS-supported project could inform future policy structures to programmatically incentivize and/or offset carbon will be ranked highly. If the state/territory where the project takes place is participating in the U.S. Climate Alliance, applicants are encouraged to demonstrate how they will report their results to the state's accounting system. Further, applicants are invited to discuss how they will use their results to encourage the Alliance to incorporate JMA or other adaptation approaches in meeting its commitments. If the state/territory does not participate in the U.S. Climate Alliance, the Fund values applications that plan to use their outcomes to engage decision-makers, either with the goal of joining the Alliance, or increasing JMA awareness and practice.

WCS's focus on JMA work does **not** include:

- Projects that only focus on mitigation outcomes and do not include adaptation efforts.
- Carbon mitigation work conducted at the expense of wildlife and ecosystem adaptation outcomes, or primarily for the sake of mitigation.
- The development of carbon calculation tools.
- Projects that use grant money directly for carbon offset project design or verification efforts, or for creating or trading offsets.
- Projects that use grant money directly for monetizing mitigation benefits or other ecosystem services during the grant period.
- Projects that use grant money directly for proving additionality to receive payments.

Terms and Definitions:

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

Climate Mitigation: A human intervention that reduces the sources or enhances the sinks of greenhouse gases (IPCC 2014). WCS supports “natural climate solutions” 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 (Griscom et al 2017).

Climate Adaptation: The process of adjustment to actual or expected climate 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.

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

Carbon Trading: The process of buying and selling permits, or credits, to emit carbon dioxide.

Co-Benefits: Refers to additional benefits provided by project interventions. For the Fund, co-benefits refers 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 to people (e.g., human health and livelihoods) through a variety of mechanisms.

Payment for Ecosystem Services: Financial incentives offered to voluntary participants (e.g., private landowners, farmers, governments) to provide some sort of ecosystem service. For example, a landowner may receive payments to avert deforestation in order for live trees to provide other people benefits.

APPENDIX I

**Adaptation and Carbon Mitigation Strategies Contributed by Todd Ontl and Chris Swanston
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Carbon cycling processes within natural ecosystems are sensitive to the effects of a changing climate. These same processes are also crucial for carbon sequestration and mitigating greenhouse gas emissions that drive climate change. Identifying and implementing actions that support both adaptation to a changing climate and carbon sequestration can promote synergies within land management to offer multiple ecosystem services. In particular, management practices that enhance ecosystem carbon stocks above current baseline levels or maintain stocks through avoiding future carbon losses can effectively address joint adaptation and mitigation goals. The table below includes several established practices as examples of forest management strategies that provide such synergies when applied in appropriate ecosystems.

Management action	Example adaptation benefit	Potential carbon benefit
Thinning to reduce tree density ^{2,5,8,15,21}	Reduce vulnerability to drought, wind damage, pests	Avoided C loss
Measures to maintain water levels in wetlands and/or floodplains ^{1,3,7}	Reduce vulnerability to drought, wildfire	Avoided C loss
Increasing tree species diversity ^{9,22}	Reduce vulnerability to drought, wind damage, pests	Avoided C loss, enhanced storage
Increasing structural complexity ^{4,14,16}	Reduce vulnerability to drought, wind damage, pests	Avoided C loss, enhanced storage
Reducing harvest levels (extended rotations, increased reserves) ^{8,11,12,13,17,18,23}	Maintain complex structure and reserves for at-risk species	Avoided C loss, enhanced storage
Reducing fuels to decrease potential fire severity ^{10,20}	Reduce vulnerability to fire	Avoided C loss from veg and soils
Planting future-adapted species ^{6,9,21}	Facilitating plant community transition	Enhanced storage
Enhancing tree growth (site preparation, fertilization) ^{8,18}	Increasing regeneration, seedling survival	Enhanced storage

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APPENDIX II

Climate Adaptation and Joint Mitigation-Adaptation (JMA) Resources

General adaptation knowledge 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 newest report with real world examples of the solutions that funded projects applied to specific climate change challenges: www.wcsclimateadaptationfund.org/resources

Beaver Mimicry communications case study:

<https://www.wcsclimateadaptationfund.org/strategic-communications>

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>

The Adaptation Workbook from the U.S. Forest Service's Northern Institute for Applied Climate Science offers an easy to use, interactive and self-guided tool that creates a custom adaptation plan for forest management and conservation: <http://adaptationworkbook.org>

Databasin houses numerous databases related to climate change vulnerability and impact assessment, and adaptation: <http://www.databasin.org>

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 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>

Tools and Resources for JMA

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/northwoods/>

TNC, DU and The Climate Trust developed this methodology for producers to calculate the carbon offsets and carbon storage benefits of avoided conversion of rangeland and grassland to cropland:

https://www.c-agg.org/wp-content/uploads/acr-acogs-methodology_v1-0_final.pdf

TNC and 15 other institutions published a paper and infographic describing 20 pathways to climate mitigation via natural climate solutions:

<https://www.nature.org/en-us/what-we-do/our-insights/perspectives/natures-make-or-break-potential-for-climate-change/>; <https://www.pnas.org/content/114/44/11645>to climate mitigation via natural climate solutions

“Mitigation & Adaptation Synergies in the NDCs,” a review of the synergies and tradeoffs between the two in the context of the Paris Agreement:

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