



Blueprint for a Resilient Cascadia

A Transboundary Adaptation Plan for
Our Shared Natural Systems

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Title Page Photo: Golden Ears by Lukas Mann

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Photo: Canada Lynx by Federico Di Dio on Upsplash.



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Why do we need a Blueprint for a Resilient Cascadia?

Climate Change is having profound effects on the human and natural communities of Washington and British Columbia.

The landscapes that span our shared border have experienced increasing wildfires, floods and other climate-driven disturbances; shifts in the distributions of native species and changes in ecological communities; and a suite of other impacts, all expected to become more pronounced in coming decades. As public and private partners work to rapidly reduce greenhouse gas emissions to slow the pace of warming, we must also work to increase the climate resilience of the region's natural systems and human communities. A collaborative climate adaptation strategy that supports coordinated action across the region's many jurisdictional and institutional boundaries will be critical to ensuring its resilience into the future.

The Cascadia Partner Forum envisions a region where our environment is resilient to the impacts of climate change, where residents with diverse life experiences — rural and urban communities, landowners, Native Tribes and First Nations, policy-makers, natural resource and economic development decision-makers — understand the dynamic nature of the Cascadian landscape and are working together to conserve connected networks of lands and waters, their diversity, natural function, and ability to adapt, so that native fish, wildlife, and people have flexible options far into their future.

Photo: Okanagan by Kerry Wilson on Upplash.

The Blueprint for a Resilient Cascadia is a living document developed by the Cascadia Partner Forum and its many collaborators to meet this need. Formed by practitioners in Washington and British Columbia's Cascade mountains in the summer of 2012, the Forum fosters a network of natural resource practitioners working with partner entities to build the adaptive capacity of the landscape and species living within it. Such coordination is needed to bridge the many decision-making entities and jurisdictions that comprise Cascadia, defined by the Forum as a north-south corridor spanning the Cascade Range and surrounding lowlands on either side of the border of Washington State, USA and British Columbia, Canada (Fig. 1).

Figure 1. The Cascadia Region, defined by the Cascadia Partner Forum as a north-south corridor (outlined in blue) spanning the Cascade Range and surrounding lowlands on either side of the border of Washington State, USA and British Columbia, Canada.



From salmon recovery to regional land management plans, the Cascadia region has a long history of collaborative conservation across spatial and temporal scales. The Blueprint for a Resilient Cascadia draws from and builds on these efforts to provide a large-landscape, transboundary complement to the many smaller-scale adaptation plans and initiatives supporting the resilience of Cascadia’s natural systems.

The Cascadia Partner Forum recognizes that the primary barriers to climate resilience at the landscape scale are often socio-political rather than technical; even when the actions necessary for promoting ecological resilience are clear, decision-makers may lack the **capacity, motivation, coordination, authority or funding** necessary to implement them collaboratively at a landscape scale. Thus, the Blueprint focuses on the actions needed to achieve the socio-political enabling conditions for implementing adaptation at the scale of Cascadia (Fig. 2).



Figure 2. Theory of Change for a Climate Resilient Cascadia.

Transboundary, large-landscape resilience depends on a suite of enabling conditions spanning both the socio-political (left) and ecological (right) landscapes of Cascadia. This first phase of the Cascadia Climate Adaptation Strategy prioritizes the urgent need to address the socio-political barriers that prevent effective management toward ecological resilience.

This collaborative Blueprint was developed through a transparent and inclusive co-production process that engaged a wide range of land and wildlife decision-making entities and other conservation stakeholders from Washington and British Columbia (Fig. 3). Collectively, they identified strategies and supporting actions that address barriers and provide opportunities for promoting the socio-political enabling conditions needed to achieve a more resilient Cascadia. Three working groups approached the development of the Blueprint from three complementary angles. One group focused on the socio-political enabling conditions as structural conditions affecting the whole landscape. The other two groups identified additional actions needed to effectively achieve the enabling conditions for two priority conservation targets - **salmonids and carnivores**.

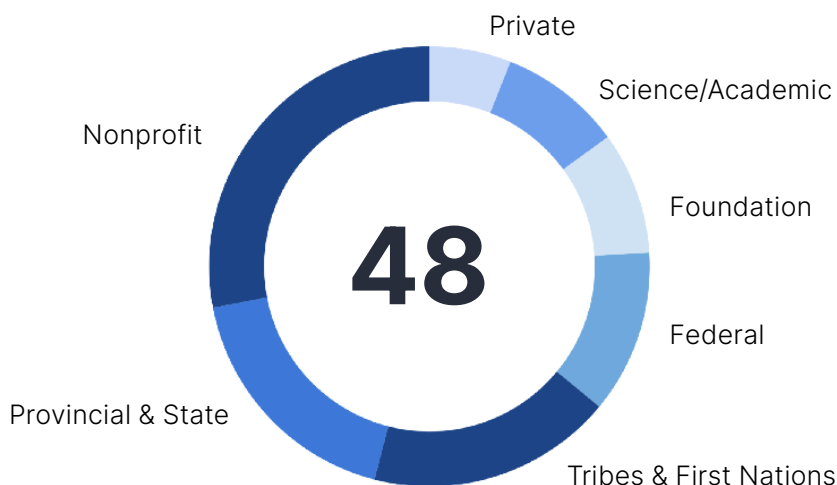


Figure 3. Blueprinting for a Resilient Cascadia - Working Group Participants.

The co-production process included approximately 48 individuals, representing a wide range of government agencies, non-government organizations (NGOs), and other entities involved in land and wildlife management across Washington and British Columbia.

Salmonids

Pacific salmonids are iconic fish species that are central to cultures and economies across Cascadia and also serve as indicator species of our watersheds, rivers, streams and oceans. Ensuring availability of coldwater and connectivity among systems is essential for not only anadromous Pacific salmon species, but also for freshwater residents whose persistence will depend on their ability to adjust their ranges to access cold water. Further, the anadromous life history of several salmonid species serves as a bridge between regional freshwater and marine ecosystems. Supporting Cascadia's salmonid populations into the future will require coordinated, transboundary management of not only their freshwater aquatic habitats but also the terrestrial and marine systems that influence salmonid resilience. While many watershed-scale and single species management plans exist for salmonids, a regional approach at the scale of Cascadia will help coordinate and scale activities and funding to improve salmonid resilience to a rapidly changing environment.

Carnivores

Since its inception, the Cascadia Partner Forum has also identified several carnivore species—the Canada lynx, wolverine, grizzly bear, fisher and Cascade fox—as priority conservation targets. These species have both ecological and cultural significance throughout Cascadia and, for many of them, conservation and recovery actions have been underway for many years. However, many of the conservation and recovery plans that target these species are dated and do not address ongoing and anticipated impacts of climate change. As wide-ranging species that require large tracts of high quality, connected habitat, their future resilience depends on coordinated action at the large-landscape scale.

Photos (Top to Bottom): Eggs by USFWS Pacific Region used under CC BY-NC 2.0 Salmon, by USFWS Pacific Region used under CC BY-NC 2.0 Bobcat by Lori Ayre on Unsplash.



The Blueprint for a Resilient Cascadia

is intended to be an iterative, living process, continuously shaped by the region's changing needs and capacities. The Forum will turn its focus over the coming year toward supporting implementation of this first phase of the Blueprint while beginning work to identify spatial priorities (i.e., areas on the landscape where adaptation action is expected to be particularly important). In future years, the Cascadia Partner Forum anticipates adding strategies and actions for additional conservation targets.

By supporting climate resilience goals that span jurisdictional and institutional boundaries and working together in ways that allow land and wildlife managers and other conservation stakeholders to see their role in a shared vision beyond their individual boundaries, we can increase the resilience of the Cascadia landscape and the people within it.

Indigenous Engagement Principles

The Cascadia Partner Forum has adopted the following principles for its engagement with Indigenous governments, organizations and community members throughout the development and implementation of the Blueprint for a Resilient Cascadia:



Responsibility

We are responsible for the content and character of our relationships, and we honor and meet our commitments.



Reciprocity

We ensure that we are always bringing value to Indigenous peoples.



Relevance

We continuously work on building collective relevance. Our work will be considered in relation to Indigenous priorities as well as our own.



Relationality

We commit long term to the development of mutually beneficial relationships.



Resources

We recognize and support that funding may be required to engage with Indigenous peoples from Tribes and First Nations.

How to read this document

The Blueprint for a Resilient Cascadia consists of six, overarching strategies, each of which is supported by a broad suite of actions.

These strategies include:

Each section below describes one of these strategies in greater detail, beginning with a summary of the existing barriers to large-landscape resilience that would be addressed by successful implementation of that strategy. We then provide a small number of representative actions to illustrate the types of activities required to support each strategy. In additional sub-sections, we describe the relevance of the focal strategy to salmonids and carnivores, respectively, along with additional supporting actions specific to each conservation target.

A complete list of supporting actions for each strategy can be found in the online database tool that complements this document. The tool allows the user to filter actions by strategy and/or by conservation target (e.g., whole landscape, salmonids or carnivores) and export summaries for later use. Over the coming year, the Cascadia Partner Forum will provide additional guidance and products aimed at supporting implementation of these actions.

- 1. Establish a formal governance structure to facilitate strategic and coordinated large-landscape climate resilience across political boundaries.**
- 2. Center Indigenous leadership, sovereignty and values in all aspects of transboundary, large-landscape climate resilience efforts to promote reconciliation and long-term success.**
- 3. Mainstream transboundary connectivity conservation and climate adaptation into existing decision-making structures to ensure implementation.**
- 4. Conduct joint assessment, monitoring, and evaluation of transboundary large-landscape climate resilience to support coordinated adaptive management towards socio-ecological goals.**
- 5. Invest in the relationship-building required to build the social capital, political commitment and public support for transboundary large-landscape climate resilience.**
- 6. Establish a sustainable funding model to support the strategic coordination, planning, implementation and monitoring of timely transboundary climate resilience efforts at scale.**



Photo: Canada Lynx by Zdeněk Macháček on Upstash.



The Blueprint for a Resilient Cascadia

Key Strategies

Strategy 1

Establish a formal governance structure to facilitate strategic and coordinated large-landscape climate resilience across political boundaries.

The Challenge

The Cascadia landscape is divided into a patchwork of varied land ownerships, uses, tenures and jurisdictions. Conservation adaptation efforts to date have been piecemeal across the region, with legal and regulatory differences, as well as conflicting priorities between entities and sectors resulting in disjointed action. Additionally, existing transboundary governance structures — the formal or informal arrangements among entities defining their roles, responsibilities and procedures in working toward a shared goal or mandate — inadequately integrate Indigenous and local authorities in landscape-scale decision-making and lack measures for ensuring equity and accountability.

The Approach

Large-landscape, transboundary climate resilience will require a formal governance structure to ensure equitable and effective decision-making, resource-sharing and cooperative management across the Cascadia region. This governance structure should be representative of the diversity of decision-making entities within Cascadia and center the leadership of Tribes and First Nations while also enabling power-sharing with local communities. This governance structure should be codified within an appropriate transboundary agreement to increase the authority and legitimacy of cooperative governance efforts.



Strategy 1

Representative Actions

- Identify and implement appropriate transboundary agreements that can facilitate commitment to transboundary climate resilience. 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 partners that represent regional interests. Invest appropriate time and resources to facilitate the relationship-building required to garner commitment to new transboundary agreements.
- Identify existing Indigenous and local-level transboundary partnerships and highlight their leadership in proposed governance models.
- Ensure that agreements facilitate resource-sharing and address limits to agency or organizational capacity across all parties, with equity as a major consideration. The agreement should highlight the economic, coordination and relational benefits of resource-sharing, with the recognition that all involved parties may not have the same level of resources.
- Define appropriate pathways for engaging with other decision-making bodies, outside of the proposed governance model.

Salmonids

Federal, provincial and state, Tribal and First Nations and private lands and waters all play important roles for Cascadia's salmonid populations, yet current organizational structures do not provide sufficient coordination of management across jurisdictional boundaries and international waters. Integration of habitat connectivity and climate resilience into state and provincial authority structures and mandates can help provide clear and consistent direction to staff on the importance of working across boundaries and partnerships. The salmonid working group could play a key role in integrating these various efforts to help inform a Transboundary Agreement (see above). Such an agreement should reference the various efforts that are underway and inform if additional, formalized agreements are needed for salmonids.

- Build off existing transboundary engagements within different areas of salmon conservation and restoration, looking at other collaborative processes including those for the Salish Sea and Columbia River.
- Formalize the Blueprint for a Resilient Cascadia's salmonid working group as part of the Cascadia Partner Forum and create a space at annual meetings for discussion and potential for formalizing transboundary efforts.
- Coordinate implementation of the Blueprint for a Resilient Cascadia with work that will be done as part of Fisheries and Oceans Canada's "Pacific Salmon Strategy Initiative," which is focused on four key areas: (1) conservation and stewardship, (2) enhanced hatchery production, (3) harvest transformation, (4) integrated management and collaboration.

Carnivores

There are some transboundary governance structures in place for carnivores, including grizzly bear recovery teams (some of which have decision-making authorities and existing transboundary agreements) and the Cascadia Carnivore Workgroup (a non-decision making body). However, better coordination across species would help facilitate implementation of adaptation actions.

- When establishing a governance structure for transboundary resilience, include subgroups to focus on specific conservation targets and issues, such as carnivores.
- In developing a transboundary governance structure for carnivore resilience, build off of existing groups, such as the North Cascades Grizzly Bear Recovery Team, the Southwest British Columbia Grizzly Bear Recovery Working Group and the Cascadia Carnivore Workgroup.

Strategy 2

Center Indigenous leadership, sovereignty and values in all aspects of transboundary, large-landscape climate resilience efforts to advance reconciliation and long-term success.

The Challenge

Tribes and First Nations within Cascadia are leaders in conservation and climate adaptation and have been the guardians of their lands since time immemorial, yet Indigenous leadership, sovereignty and values have not been sufficiently elevated into the governance of regional resilience efforts. In addition, international boundaries between the United States and Canada are colonial legacies that have limited the rights of Indigenous communities to act as the rightful stewards of their ancestral lands and waters. In some cases, Tribes and First Nations have been included as partners in conservation efforts across Cascadia, however, participation has not always translated into empowered leadership, self-determination or decision-making authority.

The Approach

Indigenous-led conservation has proven to be one of the most salient and equitable pathways to achieving climate-resilient landscapes. Thus, achieving transboundary, large-landscape resilience must prioritize the decolonization of conservation and ecological practice, while continuously striving for reconciliation with Indigenous communities. The development and implementation of this strategy will honor the rights of Tribes and First Nations to self-govern, both within and outside of treaty frameworks, by supporting the removal of restrictive processes for engagement and promoting Indigenous land use management. Further, this strategy will support the just compensation of Indigenous communities for their leadership and expertise in natural resource planning, management and conservation, as well as the redistribution of resources towards Indigenous stewardship as means of reparations. When appropriate, this strategy will pursue the ethical weaving of Indigenous Knowledge Systems with Western scientific practice and policy development in support of climate adaptation goals.

Strategy 2

Representative Actions

- Operationalize [Ethical Space](#) - a means of engagement that supports relational accountability and respect for different ways of knowing - as a process for co-developing Cascadia resilience efforts with Indigenous and non-Indigenous partners.
- Ensure that any new transboundary agreements are consistent with existing treaties, comprehensive land claims and self-government agreements. Recognize Tribes and First Nations which do not intend to enter into treaties and ensure that Aboriginal Title Rights and values are considered outside of treaty frameworks.
- Recognize and integrate the principles of the United Nations Declaration of Rights for Indigenous Peoples (UNDRIP) and Free, Informed and Prior Consent (FPIC) into relevant agreements, management decisions and in the implementation of these decisions.
- Align Cascadia resilience goals and activities with priorities identified in regional Tribal and First Nation Land Use Plans, Natural Resource Management Plans and Climate Adaptation Plans.
- Support the recognition and broader implementation of Indigenous Protected Conservation Areas (IPCAs) in Canada and explore the development of IPCAs within the US in a manner that supports the rights, responsibilities and priorities of Indigenous peoples.
- Support compensation of Indigenous nations and communities for their participation in the ongoing development and implementation of Cascadia resilience efforts.

Salmonids

Management and land-use practices that center reciprocity have been foundational to the resilient human-salmonid relationship that persisted in the Northwest for tens of thousands of years. Salmon populations are a central part of First Nations' and Tribes' identity, religion and sustenance and integral to the identities and values of the Pacific Northwest and its residents more broadly. A harvest and land management approach that integrates reciprocal relationships between humans and salmonids could help facilitate a cultural shift in fisheries management and land-use decisions to help ensure salmonid resilience across Cascadia.

- Provide platforms for Tribes, First Nations and other natural resource managers to co-define a culturally consistent management vision that includes the concept of reciprocity or coexistence between humans and salmonids across the freshwater and marine habitats that are central to salmonid survival.
- Leverage how salmon are central to the identity of the Northwest as a platform to articulate how a harvest and habitat management framework that centers reciprocal relationships between humans and salmonids is central to effective management under changing climate conditions.
- Develop policies or agreements that formalize the leadership structures needed to provide the necessary authority for First Nations and Tribes to effectively co-manage salmonid populations and the habitats these species rely upon in Washington and British Columbia.
- Consider the potential of a regional Climate Corps to invest in Indigenous youth as emerging stewards of salmonids and other priority species.

Carnivores

Because Indigenous leadership and participation are critical to successful carnivore conservation, focus on strengthening and maintaining Indigenous relationships and capacity in existing carnivore working groups. Establish a better understanding among non-Indigenous partners of the cultural role and importance of carnivores to Indigenous peoples.

- Promote opportunities for the application of Indigenous principles, protocols, language and ecosystem management strategies within carnivore conservation.
- Frame carnivore conservation actions through the lens of reconciliation by addressing historical injustices.
- Create Indigenous community-managed areas, such as conservancies, to promote Indigenous leadership of carnivore conservation efforts.
- Compensate Indigenous peoples and local communities in exchange for retaining conservation status of areas important to carnivore conservation.

Strategy 3

Mainstream transboundary, large-landscape resilience into existing decision-making structures at all levels of government and management to ensure implementation.

The Challenge

Regional actors throughout Cascadia generally operate within their own planning cycles, regulatory frameworks, policy development and budgeting processes. Decision-making entities typically already have the authority to implement conservation strategies within their respective jurisdictions but lack the foundation for coordinated action while simultaneously struggling with limited capacity and funding for transboundary, large-landscape climate resilience work. Resources are often stretched across a range of competing priorities, with connectivity conservation and climate adaptation often given less emphasis than economic development. In addition, existing policies and mandates often do not include provisions for integrating habitat connectivity and climate change, which may require regional actors to overcome legislative barriers to facilitate implementation.

The Approach

A successful transboundary, large-landscape resilience effort will require the full range of decision-making entities within Cascadia to adopt shared climate resilience goals and operationalize these within their own management and planning processes. The adoption of these shared goals is contingent on in-depth understanding of the distinctive decision-making context of each regional actor and how transboundary, large-landscape resilience might align with their specific organizational missions and mandates. This contextual understanding will inform the development of tailored guidance and technical training opportunities to support increased institutional capacity for implementation, while promoting the identification and leveraging of existing or emerging efforts relevant to large-landscape resilience. In some cases, there may be a need to advocate for the amendment of existing policy mechanisms or the development of new ones, to adapt to shifting climatic conditions and accommodate cross-jurisdictional collaboration.

Strategy 3

Representative Actions

- Provide technical guidance on how regional actors can adopt transboundary, large-landscape resilience strategies into their existing plans and policies. Illustrate the co-benefits of aligning the Blueprint with regional governments, NGOs and other organizations' strategic priorities.
- Strategically integrate and elevate large-landscape resilience into the development of new policies and plans relevant to Cascadia's natural systems.
- Allocate resources to a dedicated, interdisciplinary boundary spanner or organization who will serve as a liaison and coordinate resilience efforts among Cascadia decision-making entities.
- Identify and leverage existing forums that facilitate regional coordination of conservation and climate adaptation resilience efforts.
- Develop technical training opportunities related to large-landscape resilience for staff at all levels of government within Cascadia.

Salmonids

Conservation of salmonid populations in Cascadia will require protecting and restoring freshwater and marine habitats across large landscapes and seascapes, as well as corridors that cross multiple management jurisdictions. Federal, provincial and state, Tribal and First Nations and private lands all play important roles for salmonid populations. Current organizational structures fail to adequately allow for management across jurisdictional boundaries and international waters. Integration of salmonid habitat connectivity and climate resilience into state and provincial agency and ministry mandates and authority structures can help provide clear and consistent direction to staff on the importance of working across boundaries and partnerships.

- Coordinate and better integrate climate adaptation with the existing bull trout core area working groups in Washington and salmon and steelhead groups in British Columbia.
- Identify ongoing partnerships with a focus on salmonid resilience. Identify the priorities and on-going actions of existing institutions and organizations who are working on salmonid conservation in Washington and British Columbia.
- Build salmon strongholds into America the Beautiful efforts and other climate-focused conservation efforts that are occurring at the federal level in Canada and the United States.

Carnivores

Conservation and recovery actions for carnivores have been ongoing in Cascadia for many years. However, many of the existing management and recovery plans need to be updated and revised to include climate science and adaptations.

- Integrate climate adaptation into the creation of new, or updates to existing, management plans, species recovery plans, habitat conservation plans (HCP) and conservation strategies for carnivores. This will improve mainstreaming climate adaptation actions at operational levels for their implementation (e.g., [Washington Department of Natural Resources Canada lynx strategy](#))
- Prepare a status review for Cascade red fox (*Vulpes vulpes cascadenis*). The Cascade red fox has been identified as a Species of Greatest Conservation Need under the Washington State Wildlife Action Plan and as a Priority Species under Washington Department of Fish and Wildlife's Priority Habitat and Species Program.
- Integrate climate adaptation planning into the North Cascades Grizzly Bear Recovery initiative in British Columbia. Work closely with the tactical subcommittee to ensure stewardship measures and land management actions are developed in concordance with climate adaptations for transboundary carnivore conservation.
- Because there is a level of uncertainty associated with climate change impacts, design transboundary actions for carnivore resilience to be flexible in a manner that allows for evolution and adaptation. Prioritize flexibility in the approach to climate change adaptation, the design of new transboundary agreements and the implementation of existing agreements to improve their ability to adapt to future socio-ecological changes.

Strategy 4

Conduct joint assessment, monitoring and evaluation of transboundary large-landscape climate resilience to support coordinated adaptive management towards socio-ecological goals.

The Challenge

Monitoring and evaluation has been largely absent from state and provincial adaptation efforts within Cascadia, often due to the lack of legislative direction and technical guidance necessary for their implementation. Local entities may develop context-specific indicators of resilience, but such indicators may not consider broader transboundary goals. When mandates for evaluation are present, metrics tend to use historical conditions as a baseline for natural resource management and restoration success, which emphasizes preservation of species composition and habitat types rather than accommodating climate-driven changes over time. In addition, such metrics are often grounded in Western scientific knowledge, undermining the epistemological validity of local and Indigenous knowledge. Differing analytical methods and bureaucratic processes act as an obstacle to seamless information-sharing and coordinated assessments across boundaries.

The Approach

Effective assessment of socio-ecological outcomes in Cascadia will require a shared understanding of the best available science, while also considering relevant local indicators across the transboundary region. Transboundary assessments would enable joint actions and a consensus-based approach to understanding landscape-level climate risks and shifting ecological conditions. Results would inform the evidence-based decision-making, investments and adaptive management and planning that are key to supporting resilience. The mainstreaming of shared indicators into existing policy frameworks will also be critical to their adoption by various agencies, ministries and sectors. An analysis of existing adaptation plans within the region should be used to understand current priorities, informed by multiple ways of knowing. Lastly, building strong networks and inclusive, accessible platforms for communications will be critical to advancing regional coordination and successful adaptive management.

Strategy 4

Representative Actions

- Develop transboundary consensus on analytical and modeling approaches for mapping, monitoring and evaluating climate resilience indicators (e.g., ecological connectivity, landscape disturbance, species distributions), so observations are comparable across boundaries.
- Honor multiple knowledge systems - including Western science as well as local and Indigenous knowledge - when developing Cascadia resilience indicators.
- Evaluate the current status of socio-ecological resilience in Cascadia's terrestrial and freshwater ecosystems and identify priorities for action appropriate to each ecosystem in a regional and transboundary context.
- Leverage transboundary agreements to implement data-sharing across borders and jurisdictions and increase the efficacy of adaptive management. Data sharing can facilitate coherent and coordinated monitoring and evaluation, as well as identify key lessons learned through shared observations.
- Build transboundary teams 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.

Salmonids

There are a number of existing tools and processes that can provide relevant information on the status of salmonid populations or their habitats at varying scales; these can be leveraged to inform assessment, monitoring and evaluation of salmonid resilience across Cascadia.

- Identify the necessary landscape-level changes in Cascadia required for transboundary resilience of salmonid populations. Define how these are then incorporated into decision making for different management entities.
- Increase investment in funding programs that support planning, implementation and monitoring for salmonid adaptation projects.
- Devote time to understanding how to strike a balance between data-driven decisions and when we have enough information to act.
- Implement mechanisms that allow for flexibility to changing conditions, both related to climate change impacts and resilience uncertainty.

Carnivores

Monitoring that is well coordinated across all entities within Cascadia will be vital to assessing progress and efficacy of adaptation actions for carnivores. Such monitoring will also be key to adaptive management and will require a high level of communication and information sharing about carnivores and the factors that most influence their conservation.

- Develop agreement on a transboundary carnivore monitoring framework. Prioritize output from [TerrAdapt](#), a conservation planning tool developed in partnership with the Cascadia Partner Forum. For example, a climate resilience scorecard for carnivores could be developed with program- or entity-specific metrics implemented by TerrAdapt to track or measure progress.
- Create a map of important carnivore habitat functions that contributes to connectivity and habitat conservation that is approved by government and Indigenous entities.
- Use existing structures as a foundation for information sharing (e.g., Cascadia Partner Forum's Carnivore Workgroup). Implement data sharing through partnerships, credible third parties and joint data banks. Balance this effort with the free, prior and informed consent process (FPIC): the right of Indigenous peoples to give or withhold consent on a project that may affect them or their territories.
- Expand community science to engage the public in landscape monitoring and data collection, supporting research with on-the-ground observations while bolstering community awareness and engagement in conservation. For example, accurate documentation of human-carnivore conflict patterns helps target conflict resolution and provides a baseline against which to measure future conflict mitigation program success.

Strategy 5

Invest in the relationship-building required to build the social capital, political commitment and public support for transboundary large-landscape climate.

The Challenge

Cascadia is home to a diverse range of institutions, organizations and communities already contending with the impacts of climate change. The landscape's ecological diversity also underpins a rich array of socio-political conditions, economic priorities and cultural values. Conservation and climate adaptation initiatives that have failed to engage local interests (or align with broader political movements) have often faced increased tensions between decision-making entities, advocates and rights-holders. Additionally, an ever-changing political landscape can either give way to renewed momentum or obstruct progress to long-term endeavors. While local efforts are better positioned to respond to the distinctive needs of communities and deliver more immediate success, external recognition is still needed to elevate these efforts into broader public and political spheres. Finally, historic injustices and opposing perspectives on land use and natural resource management have cultivated mistrust between regional actors and can prevent the collaboration necessary for transboundary climate resilience.

The Approach

Concerted, collaborative action will be a critical component of building an equitable and inclusive approach to resilience at multiple scales. Engaging all concerned parties, from political leaders to local youth, helps build both the high-level and on-the-ground support required for landscape-scale conservation and climate action. Public education can encourage voluntary conservation and engage new or unlikely supporters. Investments in local and Indigenous stewardship create place-based relevance and support for Cascadia resilience efforts and can develop a pipeline for a new generation of climate-smart conservation leaders.

Strategy 5

Representative Actions

- Identify political champions interested in Cascadia resilience goals and develop a network of support across higher levels of government.
- Educate policy-makers on the value of large-landscape climate resilience, specifically its public health, economic and cultural benefits to their constituency.
- Develop robust partnerships with agencies and organizations, including land trusts and NGOs, to facilitate habitat connectivity and climate adaptation across private lands.
- Broaden the base for policy innovation by engaging issue networks and community groups historically not engaged in relevant decision-making spaces.
- Understand and align Cascadia resilience efforts with community-identified values, interests and livelihoods to elevate local support for large-landscape conservation and climate adaptation.
- Develop a communications strategy to bring external recognition to on-the-ground conservation efforts and illustrate successes.

Salmonids

Salmonids are a powerful and motivating force that can bring people together for collective action. There are a number of technical working groups for salmonids that could benefit from the opportunity to collaborate across the Cascadia geography. Public and legislative outreach can help generate the political will to support other strategies, such as increasing funding for resiliency efforts. Targeted outreach is also needed. Private landowner programs will, for example, be particularly important for habitat conservation and restoration for salmonids.

- Leverage the power of storytelling to build buy-in on salmonid issues.
- Use satellite data, regional conservation planning tools such as [TerrAdapt](#) and historical photographs to illustrate and tell the story of landscape change and loss of critical salmonid habitat across Cascadia.
- Communicate that building resilient salmonid populations across Cascadia can be achieved through local action.
- Provide technical assistance to private landowners (e.g., regarding land management options or conservation easements; Washington Department of Natural Resources' small forest landowners office; Washington Farm Forestry Association, Washington Forest Protection Association) and disseminate incentive based-programs that can help facilitate salmon habitat improvement on private lands.
- Focus conversations about coordination at the watershed scale, the middle ground between stream reach scale actions and the entire Cascadia region.

Carnivores

Establishing support, at a variety of levels, for carnivore conservation and recovery is critical to successful implementation of climate adaptations. Some of the carnivore species (e.g., grizzly bear) provoke strong responses from members of the public over concerns about human safety and impacts to local economies. Establishing strong communication strategies, accurate and effective information sharing and local engagement will be needed for successful implementation.

- Connect partner organizations who are implementing transboundary carnivore conservation actions with an effective communication strategy. Develop this strategy to have specific elements tailored to local contexts to acknowledge varying regional cultures, politics, strategic and management priorities, regulatory planning processes and planning cycles used by different government agencies and ministries.
- Raise awareness and broaden public understanding around transboundary carnivore conservation efforts and their benefits through a suite of online, print and in-person communication channels. Foster storytelling and sharing of carnivore conservation successes to validate and motivate continued work.
- Employ conferences (e.g. [Wildlinks](#)), workshops,) and informal public presentations (e.g. [Ghost Bears](#)) to boost relationships, information exchange and public engagement.
- Examine previous collaborative processes (e.g., Interdisciplinary problem-solving workshops for grizzly bear conservation in Banff National Park, Canada) and identify lessons learned that may be applicable to Cascadia.
- Develop a network of champions in the higher levels of federal, state and provincial and tribal and First Nation governments to facilitate and promote a shared vision around transboundary carnivore conservation.

Strategy 6

Establish a sustainable funding model to support the strategic coordination, planning, implementation and monitoring of timely transboundary climate resilience efforts at scale.

The Challenge

Within Cascadia, funding for transboundary connectivity and climate adaptation work is often fragmented due to the number of actors involved and the various scales of engagement. Existing federal, state and provincial funding sources are often not structured to support large, multi-year, cross-jurisdictional efforts. Government funding applications are often siloed and encourage competition, making it difficult to leverage grants across entities for collaborative efforts. Mission-driven nonprofits, philanthropies and donor agencies better align with the values of transboundary climate resilience and have fewer restrictions than government funds but tend to operate on an annual, project-to-project basis. There has been growing interest in seeing the private sector finance conservation and climate adaptation activities, but the high investment risks and speculative financial returns of such projects can inhibit action. Overall, the majority of funding streams are insufficient on their own and largely inaccessible for operational, capacity-building and monitoring costs required for long-term, landscape-scale success.

The Approach

A sustainable transboundary, large-landscape resilience funding model will require a diverse combination of funding streams, strategically managed towards streamlined, multi-benefit investments. Blended finance will allow the application of funds to be flexible and adaptive, suited to support both on-the-ground adaptation and conservation activities, as well as the broader planning, implementation and monitoring of the Blueprint itself. Leveraging both public and private funding sources can mitigate financial risk and deliver climate resilience outcomes at scale. A sustainable funding model must also explore the use of innovative financial instruments that are adaptive to new scientific developments, shifting market conditions and emergent socio-ecological needs. Financial management will prioritize equitable outcomes, highlighting the value of transboundary, large-landscape, climate resilience that supports healthy regional and local economies throughout Cascadia.

Strategy 6

Representative Actions

- Develop a funding matrix that aligns existing and emergent federal, state and private funding programs to Blueprint strategies and supporting actions.
- Identify a coordinating entity to provide fiscal management support and administer shared funding streams to support transboundary, large-landscape resilience efforts.
- Propose a state, provincial and/or federal fund for transboundary, large-landscape resilience efforts.

Salmonids

There is a lack of capacity and coordination among agencies, ministries and programs that support and fund salmonid climate resilience across Cascadia. This has resulted in inefficiencies in resilience-building efforts from program redundancies and a failure to recognize and act on synergies. Further, existing funding sources are insufficient for supporting salmonid resilience efforts at the transboundary scale. A funding strategy could help identify key gaps, ensure coordination and efficient allocation of resources, help partners advocate for new funding and incentivize innovative and large-scale proposals for ecosystem-scale investments in salmonid resilience.

- Engage with the Washington State Align Grant Coordination workgroup to identify needs and gaps in salmonid funding across state agencies in Washington and the federal government.
- Evaluate the Capital grant programs in Washington State to identify gaps in funding areas.
- Leverage the Natural Climate Solutions Account in Washington's Climate Commitment Act which includes millions of dollars for new forest programs and community forest programs.
- Leverage the British Columbia Salmon Restoration and Innovation Fund jointly funded by the federal and provincial government, which supports protection and restoration activities for priority wild fish stocks (including salmon) and projects that will ensure the fish and seafood sector in British Columbia is well positioned for long-term environmental and economic sustainability.

Carnivores

A consistent and coordinated funding mechanism to support Cascadia carnivore resilience will be vital. Some of these funds will need to be used in more non-traditional ways, such as supporting revisions to outdated carnivore management plans and building capacity for involvement from agencies and organizations with limited resources.

- Fund and support participation of stakeholders who do not have the economic means to participate in broader carnivore resilience efforts.
- Develop an online portal to share funding opportunity information for transboundary carnivore initiatives.
- Develop a process for communicating opportunities for collaboration on Cascadia carnivore projects to leverage existing funds.
- Consider using centralized voluntary assurances, conservation easements and covenants to achieve carnivore resilience goals.

Conclusion

The Blueprint for a Resilient Cascadia provides a suite of strategies for addressing key socio-political barriers to effective climate adaptation for our region's shared natural systems. Its success will depend on the engaged participation of Cascadia's communities and decision-makers in its implementation and continued development. The Blueprint is thus intended to be a responsive, living document that will be revisited, refined and expanded on over time in an adaptive manner. By joining together across boundaries to take a collaborative approach to climate adaptation, we can help ensure a future in which Cascadia's natural and human communities thrive.



How to get involved with the Blueprint

Are there Blueprint strategies that align with your work or that of your organization or community? Are there actions that would transform your ability to carry out your mission or mandate? Over the coming year, the Cascadia Partner Forum will provide additional guidance, products and collaborative activities aimed at supporting implementation of the Blueprint. If you would like to be involved in Blueprint implementation and ongoing development, please go to www.cascadiapartnerforum.org to contact the Cascadia Partner Forum for more information.



The Blueprint for a Resilient Cascadia

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