

August 22, 2025

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Dear Directors Sixkiller and Nguyen:

On behalf of The Pew Charitable Trusts (Pew), please accept these comments on the draft Washington Comprehensive Climate Action Plan (CCAP). Pew's U.S. Conservation project advances commonsense solutions that address the impacts of a changing environment on nature and communities. We applied the state's commitment to harnessing natural and working lands, including submerged aquatic vegetation and coastal wetlands, to advance Washington's climate goals.

Pew's interest relative to the CCAP is to support protection and restoration of Washington's vital coastal ecosystems as key components of the state's climate response policies. These habitats are declining nationwide, directly impacting existing carbon stocks and essential co-benefits such as natural defense from flooding and erosion. The management of these landscapes requires coordination across local, state, and federal agencies, and Washington's CCAP is an important opportunity to spur action across agencies to stem the loss of carbon rich habitats and expand their recovery. While the CCAP spans the entire state economy, our feedback focuses on the following strategies and measures:

- Sector 1: Economy-wide strategies
  - Strategy 1.1 Guide climate action policies and projects through comprehensive climate planning
    - Measure 1.3.3: Support Ongoing Washington Climate Action Plan Updates
    - Measure 1.3.1: Continue Investing Cap-and-Invest Program Funds in Climate Projects
  - Strategy 1.3. Mobilize and scale clean energy and climate projects through climate financing
    - Measure 1.3.1: Continue Investing Cap-and-Invest Program Funds in Climate Projects
- Sector 7: Natural and working lands
  - Strategy 7.1. Protect carbon rich ecosystems
  - Strategy 7.2. Sequester carbon in ecosystems
    - Measure 7.2.1: Sustain and Build the Tribal Carbon Offset Program and CCA Offsets
    - Measure 7.2.5: Restore Blue Carbon and Coastal Ecosystems
  - Strategy 7.3: Enhance fire resilience

Detailed comments for each measure are listed below.

#### **Sector 1: Economy-wide Strategies**

## Strategy 1.1. Guide climate action policies and projects through comprehensive climate planning

Measure 1.1.2. Continue support for the growth management act climate element

The Climate Element within the Growth Management Act (GMA) presents an opportunity to integrate climate mitigation and adaptation priorities by explicitly recognizing the vital role of natural and working lands – including forests, wetlands, and agricultural landscapes – within county and city planning. The ecosystem services that wetlands provide are especially critical in the population-dense coastal ecosystems of the Puget Sound region. Flooding is the most prevalent and expensive climate-related disaster in the state, but deadly heat waves and projected longer fire seasons and the higher likelihood of drought show that state and local leaders must plan for a range of severe climate-related threats. 1,2

By aligning land use planning with climate goals, the GMA Climate Element can help local governments protect and restore carbon-rich habitats, reduce emissions from land conversion, and build resilience to climate impacts like sea level rise and increased flooding. Pew recommends that the state evaluate tools, like the U.S. Climate Alliance's "Climate and Land Use Planning: A Policy Guide for U.S. States and Territories" for further guidance on how to use and manage lands in ways that reduce pollution and build resilience to climate impacts. Prioritizing natural and working lands within planning will ensure that Washington's communities benefit from both immediate and long-term climate, ecological, and economic gains.

## Measure 1.1.3: Support Ongoing Washington Climate Action Plan Updates

The state proposes to update the CCAP on a consistent basis, providing a significant opportunity to incorporate explicit targets for natural and working lands. By integrating measurable goals for carbon stewardship, ecosystem restoration, and land-based emissions reductions into future CCAP iterations, the state can better track progress and adapt strategies in response to evolving science and climate impacts. Embedding natural and working lands targets will not only strengthen the state's ability to meet its statutory greenhouse gas limits, but also ensure that climate planning remains holistic, recognizing the vital role of natural and working lands as important climate mitigation and resilience measures. This approach will help align state policy with the latest science, support decision-making across agencies, and reinforce the urgency of protecting and restoring Washington's landscapes as part of a comprehensive climate solution.

Within the state's proposed goal of greater coordination of existing climate planning efforts, enhanced collaboration with budget entities in Washington, such as Washington's Office of Financial Management, could provide a more complete picture of current climate investments and help maximize funding opportunities. This coordination could also create opportunities to incorporate climate

<sup>&</sup>lt;sup>1</sup> Washington Coastal Hazards Resilience Network. *Riverine Flooding*. Accessed August 13, 2025. <a href="https://wacoastalnetwork.com/riverine-flooding/">https://wacoastalnetwork.com/riverine-flooding/</a>.

<sup>&</sup>lt;sup>2</sup> Raymond, Crystal L., Tessa P. Nadreau, Meade K. Rogers, and Zachary Kearl. *Biophysical Climate Risks and Economic Impacts for Washington State*. Seattle: Climate Impacts Group, University of Washington, December 2022. <a href="https://cig.uw.edu/wp-content/uploads/sites/2/2023/01/Biophysical-Climate-Risks-and-Economic-Impacts-for-Washington-State UW Climate Impacts Group Dec2022.pdf">https://cig.uw.edu/wp-content/uploads/sites/2/2023/01/Biophysical-Climate-Risks-and-Economic-Impacts-for-Washington-State UW Climate Impacts Group Dec2022.pdf</a>.

<sup>&</sup>lt;sup>3</sup> U.S. Climate Alliance. *Climate and Land Use Planning: A Policy Guide for U.S. States and Territories*. February 2025. <a href="https://usclimatealliance.org/guide/land-use-planning-guide-feb-2025/">https://usclimatealliance.org/guide/land-use-planning-guide-feb-2025/</a>.

considerations into the state's long-term fiscal planning. This type of alignment is already taking place in some states. For example, Massachusetts has integrated its climate and budget planning efforts by embedding statewide climate goals <sup>4</sup> into its five-year capital investment plan, <sup>5</sup> ensuring that public investments advance emissions reduction targets and resilience efforts. And Colorado has built coordination with fiscal entities into its climate agenda <sup>6</sup> by partnering with the Office of State Planning and Budgeting to incorporate climate-related data into its budget forecasts to enhance long-term fiscal planning.

# Strategy 1.3. Mobilize and scale clean energy and climate projects through climate financing

To further mobilize and scale climate projects, Washington should consider adopting an additional measure under Strategy 1.3 focused on natural and working lands. This measure would explore the development of public-private partnerships, environmental markets, and other innovative conservation finance tools to accelerate investment in land and coastal climate solutions. Leveraging these approaches can unlock new sources of capital and incentivize improved management across private and public lands. For example, the state of Virginia passed a bill in April 2020 to allow carbon offset credits for seagrass restoration. Now, the state is poised to enter the global carbon market, with revenue used to implement additional monitoring, restoration, and research. By piloting a similar model, Washington could enhance the resilience and carbon sequestration potential of its coastal habitats while delivering co-benefits for communities and biodiversity.

Measure 1.3.1: Continue Investing Cap-and-Invest Program Funds in Climate Projects

To sustain the ecological land climate resilience benefits of Washington's coastal ecosystems, it is critical that funding under the state's Cap-and-Invest Program continue to support restoration projects in these areas. Utilizing the state's Natural Climate Solutions account money under Cap-and-Invest to finance coastal projects can help maintain momentum in addressing both climate resilience and mitigation while simultaneously protecting coastal infrastructure and supporting local economies.

## **Sector 7: Natural and Working Lands**

Tribal Nations in Washington have stewarded the coastal and forested ecosystems in the state since time immemorial. Recognizing and integrating Indigenous Knowledge into climate planning not only honors Tribal Nations place-based knowledge but will help strengthen the state's ability to protect and restore its natural carbon sinks. Pew commends the state's approach to analyze Tribal Priority Climate Action Plans (PCAPs) to assess alignment between the state's CCAP and each Tribal PCAP. In addition, Table 2 (page 26) of the CCAP document indicates that the Land Use Land Use Change and Forestry (LULUCF) net CO2 flux in Washington state is declining, specifically in relation to increased wildfires. As LULUCF represents the state's sole net emissions sink, this trend underscores the critical need for measures to safeguard existing carbon sinks and to pursue ecosystem restoration wherever possible to increase carbon sequestration and storage, and for an iterative approach to climate action that recognizes Tribal sovereignty and aligns carbon sequestration efforts with Tribal values.

<sup>&</sup>lt;sup>4</sup> Commonwealth of Massachusetts. *ResilientMass Plan 2023: Massachusetts State Hazard Mitigation and Climate Adaptation Plan Executive Summary*. September 2023. <a href="https://www.mass.gov/doc/resilientmass-plan-2023-executive-summary/download">https://www.mass.gov/doc/resilientmass-plan-2023-executive-summary/download</a>
<sup>5</sup> Executive Office for Administration and Finance. *FY2026 Capital Investment Plan*. Commonwealth of Massachusetts, June 2025. <a href="https://budget.digital.mass.gov/capital/fy26/static/49d9ce42356c3a90f1478b565e2d9352/fy26capitalplanma.pdf">https://budget.digital.mass.gov/capital/fy26/static/49d9ce42356c3a90f1478b565e2d9352/fy26capitalplanma.pdf</a>
<sup>6</sup> Governor's Office of Climate Preparedness and Disaster Resilience. *Colorado Climate Preparedness Roadmap*. December 2023. <a href="https://www.colorado.gov/governor/sites/default/files/2023-">https://www.colorado.gov/governor/sites/default/files/2023-</a>

<sup>12/</sup>Colorado%20Climate%20Preparedness%20Roadmap Low%20Resolution%20(1).pdf

<sup>&</sup>lt;sup>7</sup> Virginia General Assembly, Senate Bill 783, "Department of Environmental Quality; Carbon Market Participation; Submerged Aquatic Vegetation," 2020 Regular Session, <a href="https://legacylis.virginia.gov/cgi-bin/legp604.exe?201+sum+SB783">https://legacylis.virginia.gov/cgi-bin/legp604.exe?201+sum+SB783</a>

## Strategy 7.1. Protect carbon rich ecosystems

Pew recommends that Strategy 7.1 be further expanded to explicitly recognize the role of wetlands – both coastal and freshwater. The opening statistic<sup>8</sup> in this section is drawn from a study that includes wetlands as part of its analysis. That study highlights that measures to reduce land-use change – such as preventing peatland and coastal wetland conversion – offer some of the largest mitigation potentials globally. Further, the study indicates that the restoration of peatlands and coastal wetlands have among the largest sequestration potential per unit area, underscoring the need to protect the conversion of these ecosystems so that they can continue to sequester and store carbon.

To limit or even prohibit activities that cause the release of carbon and to support continued sequestration, diverse entities, such as land trusts, state and federal agencies, local governments, Tribes, and lawmakers, can pursue a variety of measures. These include:

- Protective designations and long-term stewardship for intact ecosystems.
- Voluntary conservation agreements with private landowners and other public/private partnerships.
- Land acquisition and other strategies to prevent development of parcels adjacent to blue carbon ecosystems to reduce pollution and other threats and to allow coastal habitats to migrate inland as sea levels rise.
- Formal withdrawal from commercial leasing programs for habitats such as seagrass on stateowned aquatic lands.
- Incorporate carbon sequestration and storage accounting into land use decisions impacting wetlands.

## Strategy 7.2. Sequester carbon in ecosystems

Pew commends Washington for noting that targeted climate-smart planning and other conservation efforts are essential to maintaining and restoring blue carbon ecosystems, especially with sea level rise. Recent research underscores the importance of restoring tidal exchange to impounded wetlands, particularly those that have been artificially freshened, which emit more methane than their saline counterparts.<sup>10</sup>

To build resilience in the state's coastal ecosystems, Pew recommends adding a strategic measure on the facilitation of marsh migration through landward expansion and removal of barriers to tidal flows, especially in areas adjacent to impounded wetlands. Adding these measures would help coastal wetlands adapt to rising sea levels and preserve and enhance carbon sequestration. We also recommend the inclusion of the Washington State Department of Transportation as an implementing entity, given their partnership with the Department of Ecology on the *Coastal Transportation Vulnerability and Planning Study*, which evaluates the state's transportation infrastructure for

<sup>&</sup>lt;sup>8</sup> "Globally, the land sector, including forestry and agriculture, is a net carbon sink, generating about 25% of annual anthropogenic emissions, but also sequestering about 30% of annual anthropogenic emissions."

<sup>&</sup>lt;sup>9</sup> Stephanie Roe et al., "Contribution of the Land Sector to a 1.5 °C World," *Nature Climate Change* 9, no. 11 (November 2019): 817–828, https://doi.org/10.1038/s41558-019-0591-9

<sup>&</sup>lt;sup>10</sup> Holmquist, James R., Meagan Eagle, Rebecca Lee Molinari, Sydney K. Nick, Liana C. Stachowicz, and Kevin D. Kroeger. "Mapping Methane Reduction Potential of Tidal Wetland Restoration in the United States." *Communications Earth* &

Environment 4, no. 353 (2023). https://doi.org/10.1038/s43247-023-00988-y

vulnerability to coastal hazards.<sup>11</sup> Aligning barrier removal projects to recommendations in the study could provide multiple benefits, including restoration of fish passage and tidal flow, while simultaneously reducing flood risk and improving transportation resilience.

Measure 7.2.1: Sustain and Build the Tribal Carbon Offset Program and CCA Offsets

Pew recommends that the development of the blue carbon offset protocol incorporates the most up-to-date science, including carbon sequestration potential and habitat-specific emission factors, from the Pacific Northwest Blue Carbon Working Group. Forthcoming results from the state's blue carbon greenhouse gas inventory (expected late Spring 2026) will also provide regionally tailored data that can inform protocol development and implementation.

## Measure 7.2.5: Restore Blue Carbon and Coastal Ecosystems

With the blue carbon greenhouse gas inventory in development, Washington now has a key opportunity to strengthen its approach to blue carbon by incorporating the inventory into the next statewide greenhouse gas inventory update in 2026, providing a more comprehensive accounting of carbon dynamics in the state's coastal habitats. Further, the blue carbon inventory can help the state develop and assess the climate impacts of specific conservation and restoration goals for blue carbon habitats.

As Washington continues to bolster its blue carbon efforts, it can look at examples from other states that have increased their ambition in the natural and working lands sector, including:

- California: California released its Natural and Working Lands Climate Smart Strategy (Strategy) in 2022,<sup>13</sup> followed by Nature-based Solutions (NBS) targets in 2024.<sup>14</sup> The Strategy outlines major initiatives, while the NBS targets include specific actions and associated acreage amounts that provide a basis for the state to model, analyze, and measure climate action on its lands. For wetlands, the state established targets to protect, restore and build resilience on more than 233,000 acres of wetlands.
- New Jersey: In 2024, New Jersey released its Natural and Working Lands Strategy that includes conservation, restoration, and management targets across natural and working lands for 2030 and 2050, covering over 25,000 acres of wetlands.<sup>15</sup>
- Maine: In 2024, Maine released its updated "Maine Won't Wait" sector-wide climate plan, which includes a goal for the natural and working lands sector to increase the total acreage of conserved natural and working lands in the state to 30 percent by 2030.<sup>16</sup>

<sup>&</sup>lt;sup>11</sup> Washington Coastal Hazards Resilience Network. *Coastal Transportation Vulnerability Study*. Accessed August 13, 2025. <a href="https://wacoastalnetwork.com/transportation-vulnerability-study/">https://wacoastalnetwork.com/transportation-vulnerability-study/</a>

<sup>&</sup>lt;sup>12</sup> Pacific Northwest Blue Carbon Working Group. *PNW Blue Carbon*. Accessed August 13, 2025. https://www.pnwbluecarbon.org/.

<sup>&</sup>lt;sup>13</sup> California Natural Resources Agency. *Expanding Nature-Based Solutions: A Statewide Strategy for Climate Action*. 2022. <a href="https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/CNRA-Report-2022---Final Accessible Compressed.pdf">https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/CNRA-Report-2022---Final Accessible Compressed.pdf</a>

<sup>&</sup>lt;sup>14</sup> California Natural Resources Agency. California's Nature-Based Solutions Climate Targets: 2024. April 22,
2024. <a href="https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/Californias-NBS-Climate-Targets-2024.pdf">https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Expanding-Nature-Based-Solutions/Californias-NBS-Climate-Targets-2024.pdf</a>

<sup>&</sup>lt;sup>15</sup> New Jersey Department of Environmental Protection and Department of Agriculture. 2024. A Strategy to Advance Carbon Sequestration on New Jersey's Natural and Working Lands. Trenton, NJ. 69 pages. <a href="https://dep.nj.gov/wp-content/uploads/climatechange/nwls-final-2024">https://dep.nj.gov/wp-content/uploads/climatechange/nwls-final-2024</a> 09 19.pdf

<sup>16</sup> State of Maine Climate Council. Maine Won't Wait: A Four-Year Plan for Climate Action. November 2024. https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/2024-11/MWW 2024 Book 112124.pdf

 North Carolina: former Governor Roy Cooper issued Executive Order 305 in 2024 for the state's natural and working lands, including ambitious conservation and restoration targets for 1 million acres of forests and wetlands.<sup>17</sup>

In addition, Pew recommends a specific focus on forested tidal wetlands given their ability to hold large carbon stocks and importance to the salmon lifecycle. Forested tidal wetlands are among the most carbon-dense habitats in the Pacific Northwest. However, over 90 percent of forested tidal wetlands and 99 percent of scrub-shrub tidal wetlands have been lost from major river deltas of Puget Sound Basin, compared to 46 percent loss of tidal marsh. Forested tidal wetlands also provide critical rearing and refuge for juvenile Chinook salmon, supporting their growth and survival before they migrate to the ocean. The loss of forested wetlands has been directly linked to declines in salmon populations, which are vital to Tribal Nations and commercial fisheries in the state.

We would like to call attention to the study "Coastal Blue Carbon Opportunity Assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration" for an overview of the scale of greenhouse gas emissions and removals associated with management of coastal lowlands under climate change. Findings support the hypothesis that the Snohomish Estuary is representative of typical West Coast estuaries, meaning it provides an excellent case study of the potential for carbon accretion and storage post-restoration.

#### Strategy 7.3: Enhance Fire Resilience

Freshwater wetlands, when healthy, provide numerous benefits, including better flood prevention, improved water quality, increased cultural and recreational opportunities, and a reduced risk of catastrophic wildfire. Fully or partially drained wetlands, including high carbon peatlands, are vulnerable to stressors such as drought and wildfire, which can increase carbon pollution, harm human health, and reduce communities' protection against floods and fires. The Wetland Intrinsic Potential Tool, which combines digital elevation models with satellite imagery, hydrology, and vegetation data, can be leveraged to identify vital freshwater wetlands that are often missing from outdated datasets, including high-carbon forested wetlands hidden beneath dense tree canopy. Information from this tool can help guide protection and restoration measures that maintain soil moisture and inform better forestry management that safeguard carbon stocks and strengthen fire resilience. Pew recommends the

<sup>&</sup>lt;sup>17</sup> North Carolina Office of the Governor. *Executive Order No. 305: An Order to Protect and Restore North Carolina's Critical Natural and Working Lands.* February 12, 2024. <a href="https://governor.nc.gov/executive-order-no-305/open">https://governor.nc.gov/executive-order-no-305/open</a>

<sup>&</sup>lt;sup>18</sup> Janousek, C. N., Krause, J. R., Drexler, J.Z., Buffington, K. J., Poppe, K. L., Peck, E., et al. (2025). Blue carbon stocks alongthe Pacific coast of North America aremainly driven by local rather than regional factors. Global Biogeochemical Cycles, 39, e2024GB008239. https://doi.org/10.1029/2024GB008239

<sup>&</sup>lt;sup>19</sup> Simenstad, Charles A., Craig D. Tanner, Robert M. Thom, and Amy C. E. Cordell. "Historical Change of Puget Sound Shorelines: Puget Sound Nearshore Ecosystem Restoration Project Change Analysis." Washington Department of Fish and Wildlife, 2011. https://wdfw.wa.gov/sites/default/files/publications/01134/wdfw01134.pdf.

<sup>&</sup>lt;sup>20</sup> David, A.T., Ellings, C.S., Woo, I., Simenstad, C.A., Takekawa, J.Y., Turner, K.L., Smith, A.L., & Takekawa, J.E. (2014). Foraging and Growth Potential of Juvenile Chinook Salmon after Tidal Restoration of a Large River Delta. Transactions of the American Fisheries Society, 143(6), 1515–1529. https://doi.org/10.1080/00028487.2014.945663

<sup>&</sup>lt;sup>21</sup> Crooks, S., Rybczyk, J., O'Connell, K., Devier, D.L., Poppe, K., Emmett-Mattox, S. 2014. Coastal Blue Carbon Opportunity Assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration. Report by Environmental Science Associates, Western Washington University, EarthCorps, and Restore America's Estuaries. February 2014.

<sup>&</sup>lt;sup>22</sup> Robert A. Mickler, David P. Welch, and Andrew D. Bailey, "Carbon Emissions During Wildland Fire on a North American Temperate Peatland," \*Fire Ecology\* 13, no. 1 (2017): 34-57, <a href="https://doi.org/10.4996/fireecology.1301034">https://doi.org/10.4996/fireecology.1301034</a>.

<sup>&</sup>lt;sup>23</sup> Meghan Halabisky, D. M. (2023). The Wetland Intrinsic Potential tool: mapping wetland intrinsic potential through machine learning of multi-scale remote sensing proxies of wetland indicators. *Hydrology and Earth Sciences*, 3687–3699, <a href="https://doi.org/10.5194/hess-27-3687-2023">https://doi.org/10.5194/hess-27-3687-2023</a>

inclusion of a measure in the CCAP that recognizes the critical role that freshwater wetlands can play in fire resilience across the state.

We applaud Washington for its comprehensive efforts to address the climate crisis, including elevating the role of natural and working lands in reducing and avoiding emissions and advancing community and ecological resiliency. We commend Washington for recognizing the critical role that coastal wetlands can play in this effort.

Pew welcomes the opportunity to help build knowledge and advance science-based policies in support of Washington's CCAP, and we look forward to continuing to engage as the CCAP is refined and finalized.

Sincerely,

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